



Shri Shivaji Education Society, Amravati's

Jijamata Mahavidyalaya, Buldhana

Chikhali Road, Buldhana - 443 001

NAAC Reaccredited with 'B' Grade - CGPA 2.88 (2013-18)

Affiliated to

Sant Gadge Baba Amravati University, Amravati

Website: www.jmvbuldhana.ac.in



SELF STUDY REPORT

FOR

NAAC REACCREDITATION 'CYCLE 3'





Shri Shivaji Education Society, Amravati's
Jijamata Mahavidyalaya, Buldhana

SELF STUDY REPORT

CRITERION - III

Research, Innovations and Extension

3.3 QnM

**Research Publication
and Awards**

3.3.2.1 QnM

**Total number of books and chapters in
edited volumes/books published and papers in
national/ international conference proceedings
(last 5 years)**



Criterion III:
Research, Innovations and Extension

DVV Clarification

3.2.2

- 1) In Calendar year 2021 seven books/chapters are published.
- 2) In Calendar year 2022 Ten Books/ Chapters are removed and corrected data provided.



Books/Chapters Published During the Year: 2017-2021

INDEX

Sr. No.	Name of The Author/s	Title of Book/Chapter	Department of The Teacher	Year of Publication	Page No.
00	Self-Declaration				7
01	Dr. Anant Sirsat	Book :- संत गाडगेबाबाचे जीवनमूल्यन व मराठी साहित्य	Marathi	2017	8
02	Dr. D. J. Kande	Book :- बुलडाणा जिल्ह्यातील नगर परिषदांच्या उत्पन्न प्रवृत्तीचा अभ्यास	Economics	2017	9
03	Dr. D. J. Kande	Book :- बुलडाणा जिल्ह्यातील नगर परिषदांच्या खर्च प्रवृत्तीचा अभ्यास	Economics	2017	12
04	Dr. S. N. Gawai	Chapter :- Impact of E-Commerce in Today's Business World	Commerce	2017	15
05	Dr. S. N. Gawai	Chapter :- Stress Management	Commerce	2017	21
06	Dr. S. N. Gawai	Chapter :- E-Commerce in India –A Game changer for the Economy	Commerce	2017	25
07	Dr. Anant Sirsat	Book :- धग आणि माणूस एक अन्वयार्थ	Marathi	2018	29
08	Dr. S. R. Ingle	Book :- Inorganic Chemistry	Chemistry	2019	33
09	Dr. S. R. Ingle	Book :- Modern trends in Inorganic Chemistry	Chemistry	2019	35



10	Mr. Subodh N. Chinchole	Chapter :- Role of Stakeholders in the Academic and Administrative Excellence of Higher Education Institution	English	2019	38
11	Dr. Namdeo W. Dhale	Chapter :- देशभक्त रामचंद्र अनंत कानिटर	History	2019	47
12	Dr. Eknath J. Helge	Book:- Company Law	Commerce	2020	51
13	Dr. Eknath J. Helge	Book:- विकासाचे अर्थशास्त्र	Commerce	2020	56
14	Dr. Vandana. R. Kakde	Chapter :- Diversity of Gekkonidae Species (wall lizards) in Buldhana Region (MS) India	Zoology	2020	60
15	Dr. Namdeo W. Dhale	Chapter :- इंदिरा गांधींच्या काळातील भारताचे रशिया व अमेरिकेशी असलेले संबंध	History	2020	67
16	Dr. Rajshree M. Yewale	Chapter :- Sea Snakes : Biology, Ecology & Diversity	Zoology	2021	77
17	Dr. Rajshree M. Yewale	Chapter :- Basic Concept of Intellectual Property Rights (IPR)	Zoology	2021	87
18	Mr. Ganesh S. Kiroche	Chapter :- Impact of Globalization on Indian Agriculture Sector	Commerce	2021	92
19	Dr. Yogesh S. Rode	Proceedings :- Early Detection of Cancer using Nano-Fabrication Technology MEMS Cantilever Sensor	Computer Sci.	2021	96
20	Dr. Yogesh S. Rode	Proceedings :- Comparative Analysis of Breast Cancer Detection	Computer Sci.	2021	101



		through Thermal Images Using K-Nearest Neighbor, Ad boost, Logistic Regression			
21	Dr. Yogesh S. Rode	Proceedings :- Breast Cancer Identification via Thermography Image with Naïve Bayes & Neural Network classifier	Computer Sci.	2021	103
22	Dr. Yogesh S. Rode	Proceedings :- Identification of Breast Cancer from Thermal Imaging using SVM and Random Forest Method	Computer Sci.	2021	106





Shri Shivaji Education Society, Amravati's
JIJAMATA MAHAVIDYALAYA, BULDHANA
CHIKHLI ROAD, BULDHANA -443001
NAAC Reaccredited 'B' (CGPA 2.88 | 2013-18
Website: www.jmvbuldhana.ac.in
E-mail : principaljmvbuldana@gmail.com



Dr. Panjabrao Deshmukh
Founder President

Hon'ble Shri Harshvardhan P. Deshmukh
President
Shri Shivaji Education Society, Amravati



Capt. Dr. Prashant P. Kothe
Principal
Mobile No. 9822461416

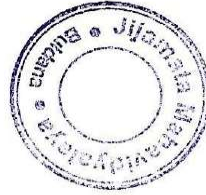
JMVBLD/2022-23


Date: 15/11/2022

Declaration

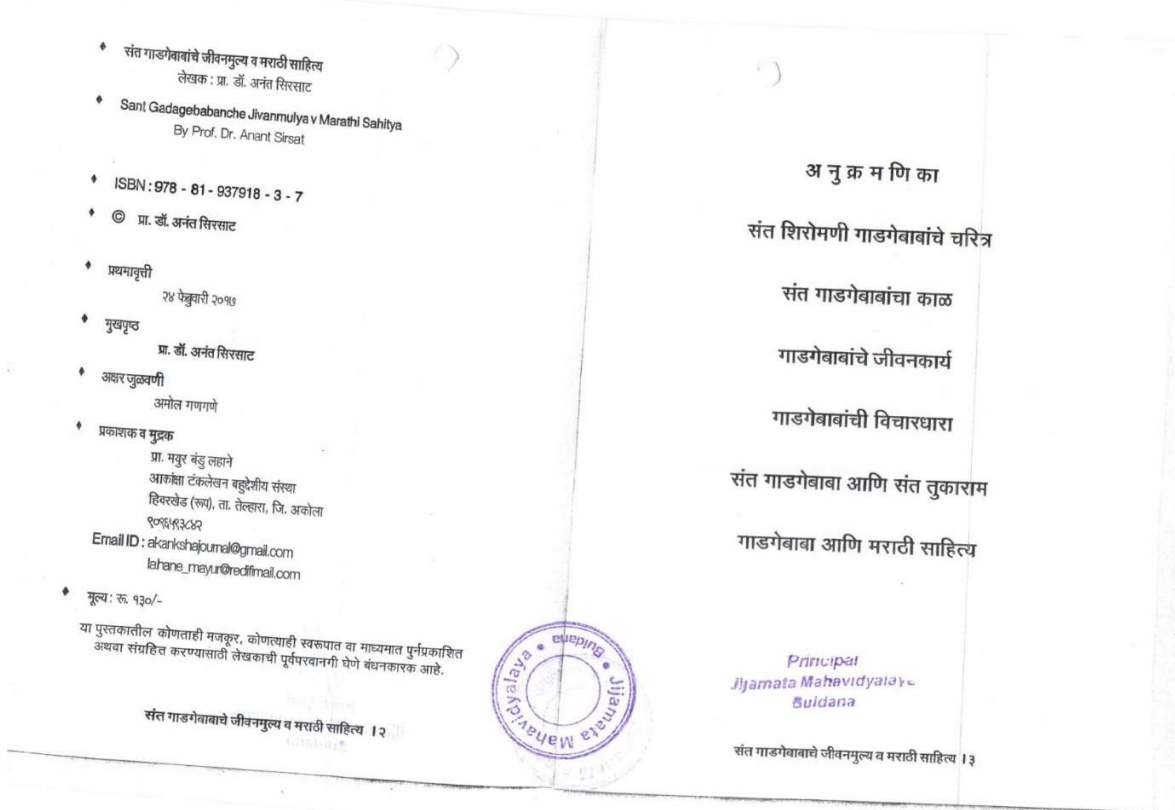
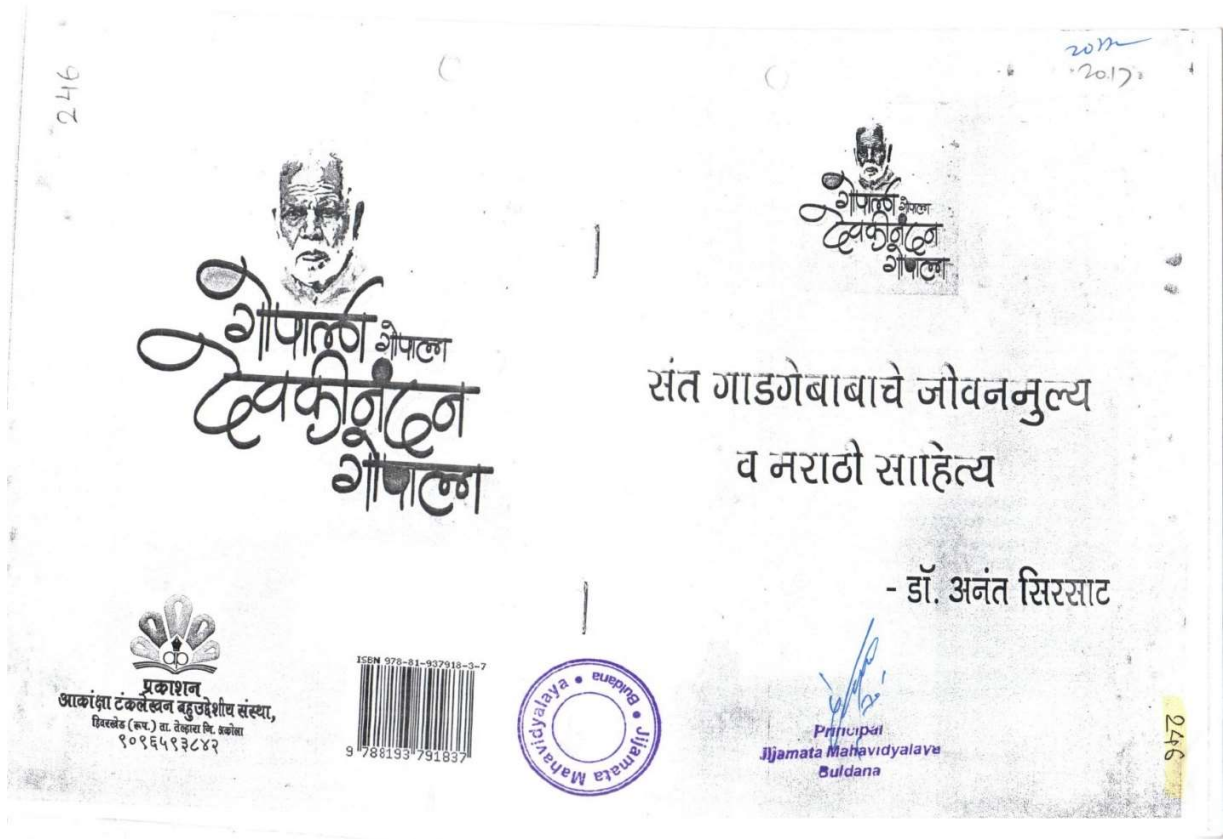
This is to declare that the information, reports, true copies, numerical data etc. furnished in this file as supporting documents are verified by the Internal Quality Assurance Cell and found correct.

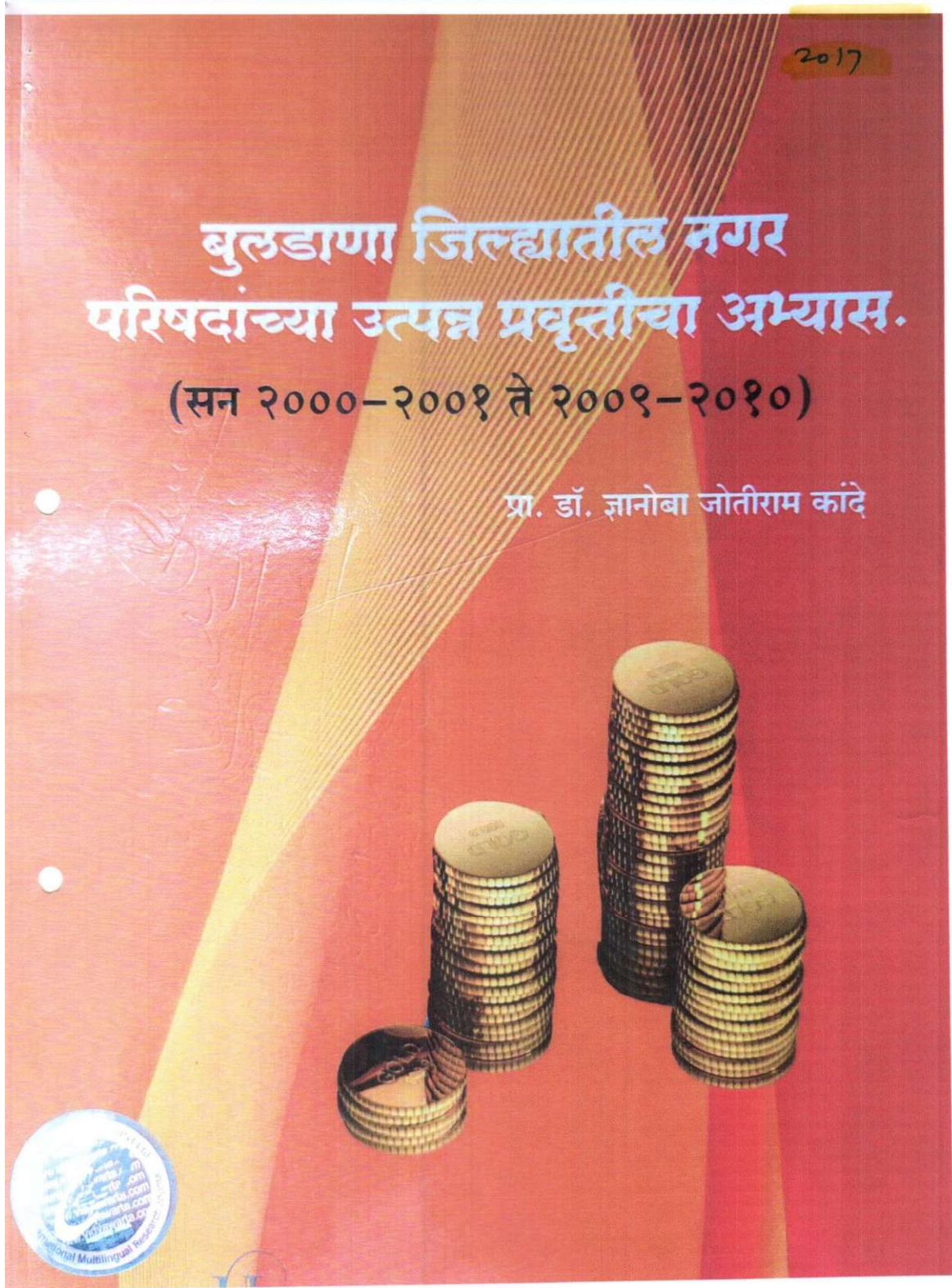

Subodh N. Chinhole
(IQAC Coordinator)
Coordinator
I.Q.A.C.
Jijamata Mahavidyalaya
Buldhana - 443001




Dr. Prashant P. Kothe
(Principal)
Principal
Jijamata Mahavidyalaya,
Buldhana







बुलढाणा जिल्हातील नगरपरिषदांच्या उत्पन्न प्रवृत्तीचा अभ्यास....

01

“बुलढाणा जिल्हातील नगरपरिषदांच्या
उत्पन्न प्रवृत्तीचा अभ्यास
(सन २०००-०१ ते २००९-१० या काळातील)”

◆लेखक◆

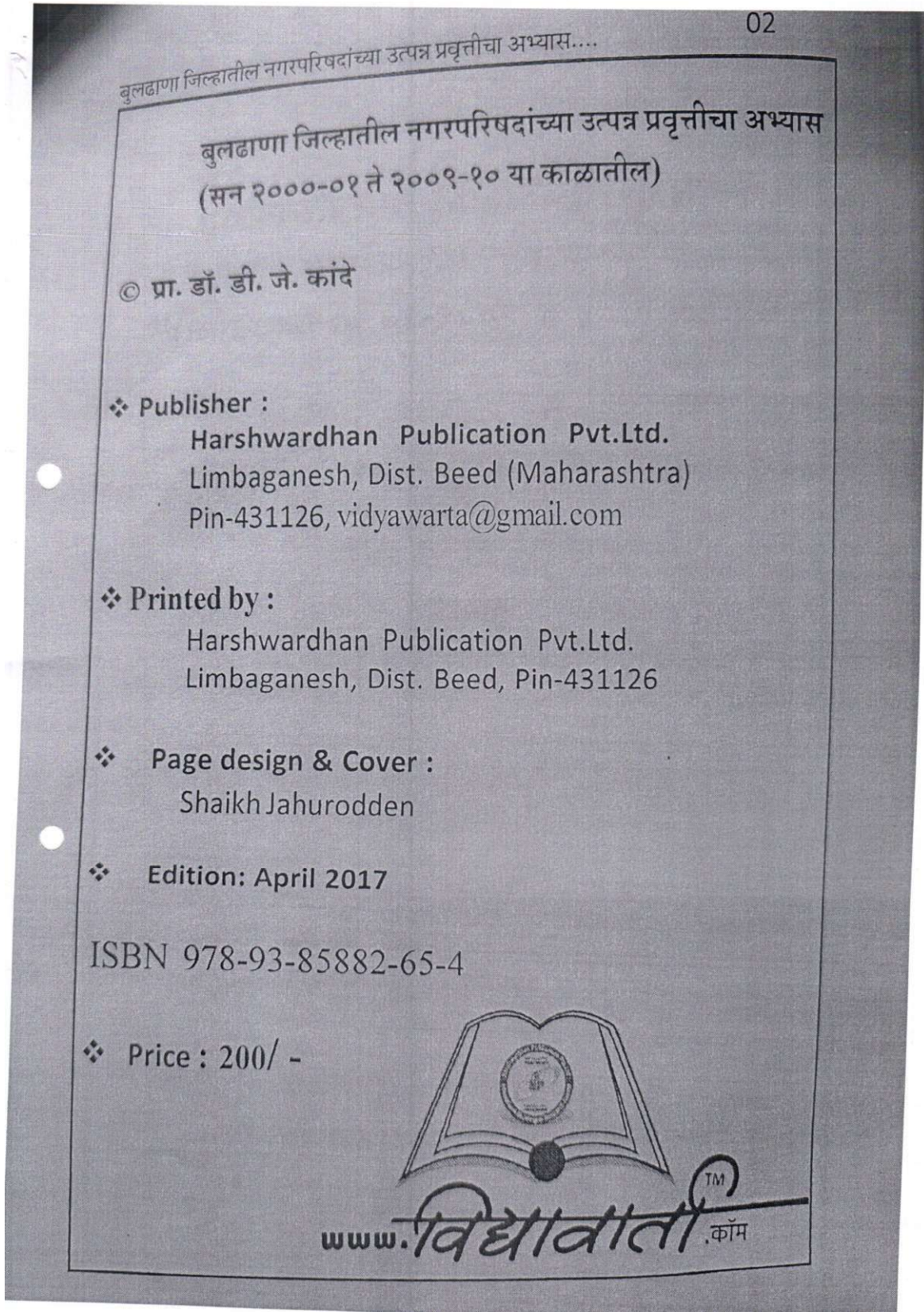
प्रा. डॉ. डी. जे. कांदे

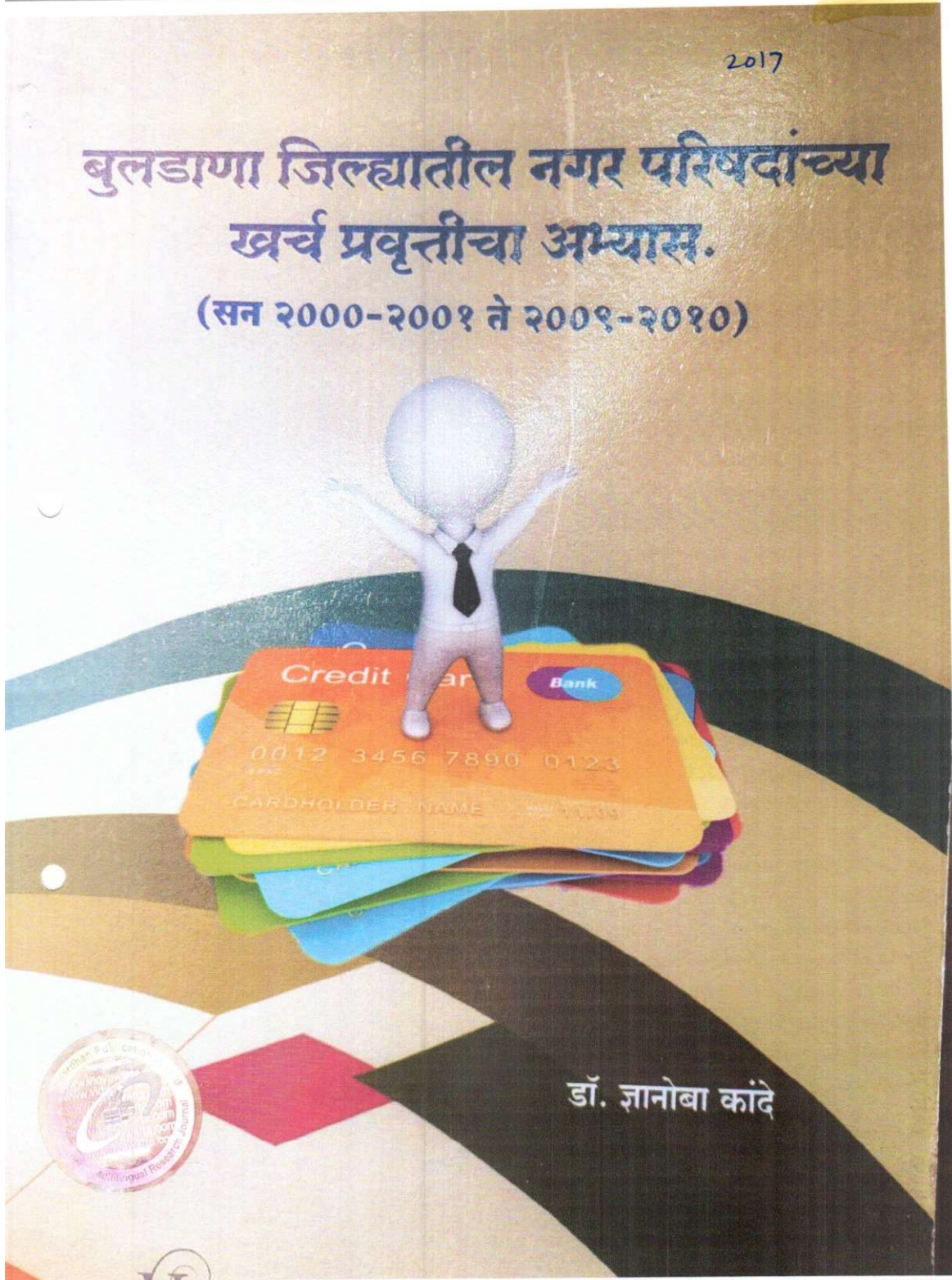
बुलढाणा



Harshwardhan Publication Pvt.Ltd.
Limbaganesh, Dist. Beed, Pin-431126
Mobi. 09850203295, 07588057695







बुलडाणा जिल्ह्यातील नगर परिषदांच्या
खर्च प्रवृत्तीचा अभ्यास
(सन २०००-२००१ ते २००९-२०१०)

◆लेखक◆

प्रा. डॉ. ज्ञानोबा जोतीराम कांदे
एम.ए. (अर्थ.), बी.एड., सेट, पीएच.डी.
सहाय्यक प्राध्यापक,
जिजामाता महाविद्यालय, बुलडाणा



Harshwardhan Publication Pvt.Ltd.
Limbaganesh, Dist. Beed, Pin-431126
Mobi. 09850203295, 07588057695



बुलडाणा जिल्ह्यातील नगर परिषदांच्या खर्च प्रवृत्ती..

02

बुलडाणा जिल्ह्यातील नगर परिषदांच्या खर्च प्रवृत्तीचा अभ्यास

© प्रा. डॉ. ज्ञानोबा जोतीराम कांदे

❖ Publisher :

Harshwardhan Publication Pvt.Ltd.
Limbaganesh, Dist. Beed (Maharashtra)
Pin-431126, vidyawarta@gmail.com

❖ Printed by :

Harshwardhan Publication Pvt.Ltd.
Limbaganesh, Dist. Beed, Pin-431126

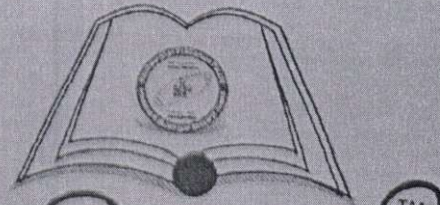
❖ Page design & Cover :

Shaikh Jahurodden

❖ Edition: April 2017

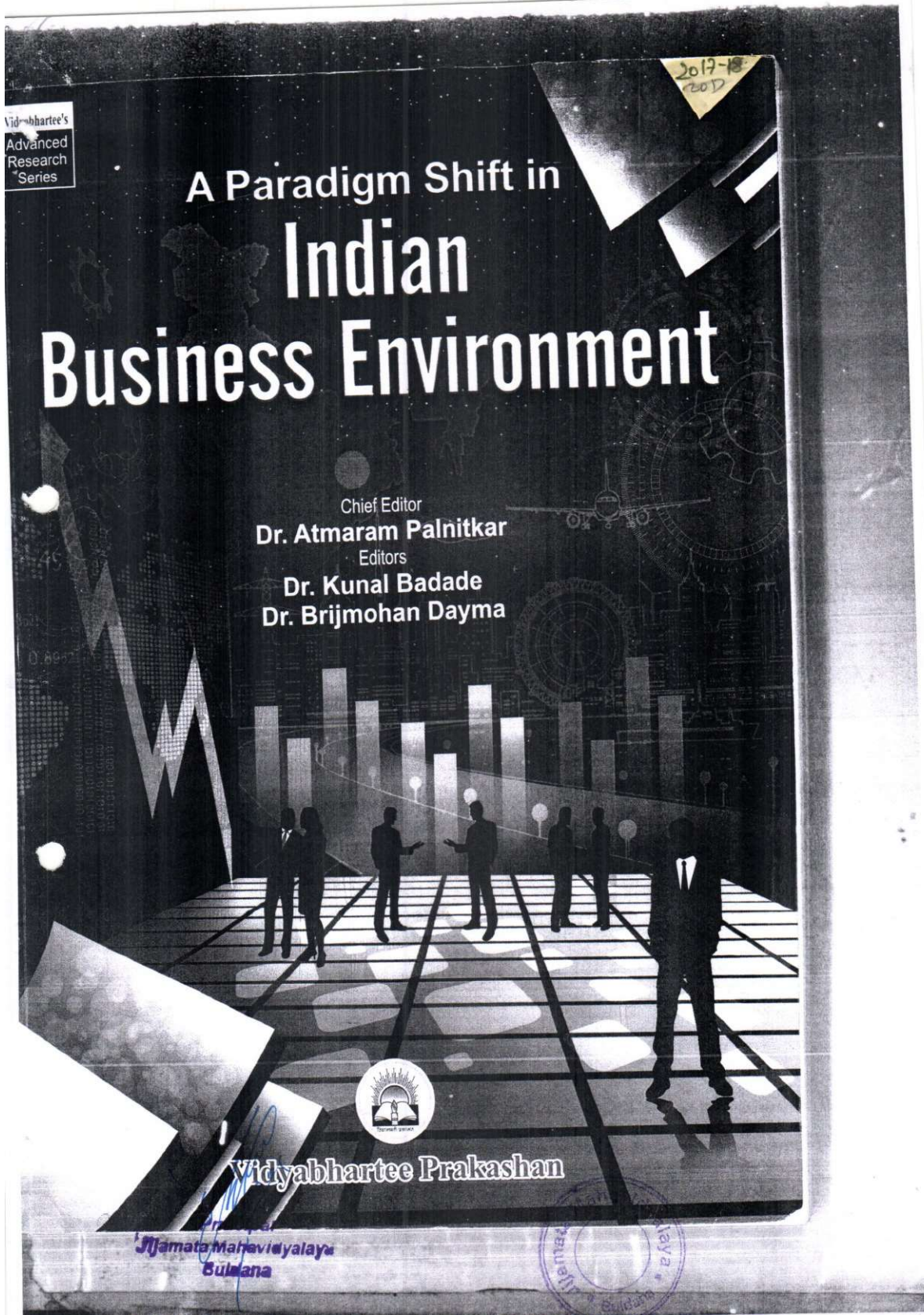
ISBN 978-93-85882-73-9

❖ Price : 200/ -



www.विद्यावाती.कॉम







46

Impact of E-Commerce in Today's Business World

Prof. Suresh N. Gawai

Associate Professor in Commerce,
Jijamata Mahavidyalaya, Buldana, E-mail id- sureshgawai@rediffmail.com

Introduction:

Virtual companies and the internet are changing traditionally accepted economic practices and making competition even fiercer than it has ever been in the past. As the internet opens up larger markets to take advantage of, more and more flexible competitors are entering your MARKET, all offering better priced value propositions in order to steal MARKET share.

e-Business: changing the landscape of your industry, the threat is real and it is here to stay!

Being an industry leader today is in no way a security blanket to confirm tomorrow's success. In order to maintain competitive advantage and emerge as an industry leader tomorrow, established old school companies must be ready to take on the challenge of some difficult and painful changes.

Not only in leveraging IT to its limit but also to change the way employees and administration think and work to a whole new level.

A new threat to traditional enterprise has arrived and established vertically integrated companies are caught off guard on how to defend successfully and win the war to retain exiting market share while expanding to new markets. Why has the world of e-Commerce caused such a problem to established enterprise? The reason being that most brick and mortar companies are still strategizing to win according to old rules that do not apply in today's e-Market. Today's truly successful companies must embrace Information Technology and leverage it in order to achieve great results. Traditional Economic truths are no longer applicable in the virtual world of the Internet and in e-Business, as accepted principles in Physics are not applicable with the inversed world of a black hole.

Following are some major changes to basic traditional economic thinking and business strategy that should be looked at carefully in order to adapt successfully into the future and experience growth.

Vertical Integration is the Way, or May be Not...

Vertical Integration was tried tested and true in the past. The idea being that if you want something done right, do it yourself. Companies as they grew larger decided to include more and more processes to be completed in house. The entire process from R&D all the way down the chain to the retail level was handled in house in order to ensure that it be done exactly according to the requirements set forth at the offset. However this mentality is costing companies large unnecessary overheads making them inefficient and inflexible. In today's marketplace there is an immergence of many smaller highly SPECIALIZED firms who can execute these processes much more efficiently.

Stick to your core activities. If you are not the absolute best in the industry for performing a function that can be bought from another provider, DO NOT DO IT YOURSELF.

Today's economy is a truly global one. Outsourcing to another company specializing in a given function can help reduce unnecessary overheads, capital costs and INVESTMENTS, allowing a lot more room to maneuver and focus on providing customers with a value product ensuring success.

Traditional companies proud of the costly infrastructure and processes implemented through years of painful implementation and careful thinking are finding themselves being out-matched by smaller,

Paradigm Shifts in e-Business / 211



leaner companies, even startups, based on the e-Commerce model. e-Commerce allows new startups to grab a hold of MARKET share previously held by traditional companies very quickly as, in most cases, they do not carry inventory and do not have to deal with large overheads. Most e-Commerce enterprises will sell items that are shipped directly to customers from distributors. This allows more fund allocation to finding out what the market is asking for and to ensuring superior customer service. Amazon.com is a good example of how a virtual company challenged traditional enterprise and grabbed a fair market segment, forcing tradition book stores to also offer their products online often at a reduced price to what they would be sold at in store.

This is easier said than done as major INVESTMENTS have been made in the past into the production and supply chain in order to add value to the process. Therefore the disintegration of an enterprise is an extremely scary thought; however, the alternative is even bleaker.

Careful thinking and forging of the right partnerships is a must in order to ensure success.

A classic economic theory is that of Decreasing Returns to Scale, which states that no enterprise can continue to grow forever profitably. However, this principle does not apply directly to e-Business, which has been shown to be able to sustain incredible growth extremely fast while increasing returns the whole way. The reason being that e-Commerce is based heavily on information and communication and travels light.

As most e-Businesses have minimal infrastructure and inventory, it is possible to minimize the effect of this classically accepted economic theory. The bulk of INVESTMENT can be allocated to R&D, IT Infrastructure (made upfront) and client relations/support. After which the cost per unit decreases dramatically compared to traditional models.

Increased returns to scale are also clearly evident for companies in the information based product industries; where distribution and SALE through e-Commerce can bring the cost per unit to almost zero. A good example of such enterprise would be software vendors who allow customers to research and purchase products and added licenses directly online. This allows a higher level of customer involvement, support and satisfaction. Most vendors allow clients to download a trial version of the latest release directly online after filling out a simple questionnaire that can be later used for R&D and marketing efforts. These trial versions are either limited time trials or with limited functionality, the former being more popular. The concept of try it before you buy it can truly be applied in this case.

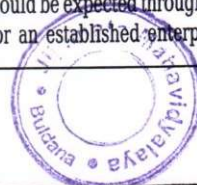
Other PRODUCTS can also experience what is known as network effects causing the value of each unit to go up as number of individuals using each unit increases. A good example is how the common use of flash as a medium to display videos online has caused most users to have the flash plug-in installed on their computer. There are other platforms for displaying videos online provided by competitors to Adobe; however, as the popularity of Flash grows it is becoming more and more of an industry standard and therefore benefiting from the network effect.

Another major factor resulting in Increased Returns to Scale is an industry locking in to a specific vendor's products. In any given industry, established standards are imperative for collaboration, therefore MARKETS will converge towards the technology that is most likely to win out; this effect allowing popular vendors to grab a strong hold of a given MARKET. In most markets there will be two or three top vendors who are enjoying such loyalty from clients. Microsoft products, for instance, have such a market share on commonly used software applications and EBAY is a good example of an online auction house.

Another example was in the case of Beta vs. VHS - VHS dominating the MARKET and never allowing BETA to gain popularity in the marketplace.

The flexibility and scalability of e-Commerce allows companies to grow rapidly and adapt quickly to satisfy the MARKET demands without suffering from Decreasing Returns to Scale.

Once vertical integration is re-assessed and quality partnerships are forged, a successful online initiative can result in much greater Increased Returns to Scale than could be expected through traditional methods. It is important to understand that the online venture for an established enterprise should



always be part of a complete business model and not always intended to replace existing methods of distribution and sales but rather to act as an additional venue to gain exposure and increase returns. Some vendors chose to abandon traditional storefront for a complete virtual storefront. DELL Computers are a good example of such a company that has experienced incredible growth while showing Increased Returns to Scale while focusing their efforts on customer service, customer specific solutions and made to measure PRODUCTS. However this is definitely not a solution for every company.

This is not to say that Decreasing Return to Scale is no longer applicable as it is still the case when DEALING with tangible physical assets. However this economical principle has less effect when it comes to intangible intellectual property and is only applicable to intangible value components of a business. In traditional business models it is almost impossible to think of such intangibles and customer service without the consideration of physical assets, capital as well as recurring costs. In e-Commerce it is possible to easily separate these components from the physical and therefore allow easy scalability and flexibility with minimal added cost. A good example is the outsourcing of customer service to offshore providers, driving the cost down dramatically while allowing easy scalability without added cost in infrastructure, HR and training.

The result being that in any given industry the choices are made early on by customers. First on the scene will always gain a stronghold on the market, giving it enough momentum to carry on successfully into the future. This trend can only be upset by either the vendor making serious strategic mistakes or a competitor OFFERING a revolutionary new solution with added value at a lower cost making the transition between vendors worthwhile.

Return on Intangibles:

The centrality of physical assets is becoming less important in today's commercial reality. In the past, the intangible assets helped businesses be competitive in their industry but strong emphasis was also put on their physical assets such as plants and equipment along with good management(HR), customer relations & support and IT infrastructure to achieve competitive advantage. However these intangibles have had little or no value when separated from a business's physical core. Intellectual property added value and was considered as part of the cost of doing business but not a source of revenue to the business in itself. Developers were not be able to effectively collaborate with manufacturers to produce the goods causing returns to be small and the manufacturers would eat into the developer's profits during the negotiations; the cost of collaborating between developers and manufacturers was too high.

The internet has allowed companies to give more emphasis to the intangibles and bring them to the front line and turn their value into revenue. Making communications and collaboration between companies easy and inexpensive, e-Commerce allows intangible assets to be leveraged across a much larger buyer base. As e-Commerce offers a model with no more time and space constraints, companies no longer have to co-locate with the tangible means of production.

A good example is eBay. With almost no physical assets, eBay was valued at \$1.88 billion dollars at the IPO, surpassing Sotheby's value of \$1.02 billion dollars. Physical assets are not important to businesses within the eEconomy as was in the Industrial age. But instead it is a company's intellectual property and customer relationships that drive e-Commerce businesses and result in positive cash flow and returns.

Once again a sour note to more established enterprises with large physical assets and overhead. Such businesses also have great intellectual property, loyal customer base and market insight gained through years of experience. However the profit margins that can be leveraged through these intangibles are all minimized by the inefficiency and high cost of their physical assets.

The Assumption of "Perfect" information:

One of the basic traditional assumptions in Economics is the assumption that actors in an economy have access to 'perfect' information. Meaning that vendors know what buyers want and the buyers know exactly what all the vendors are OFFERING. This assumption has never been truer than in



the internet era.

Information has never been perfect and accurate, as it is difficult and expensive to acquire quality information with some players having more than others. Not all vendors are equal and have access to the same quality of information. For instance, consumer goods manufacturers have spent large amounts of money in an attempt to gain insight into the likes, dislikes, needs and behaviors of their respective markets. In the past it was considered a breakthrough when MARKETING personnel were able to understand and dissect a large vague client base into smaller less vague customer bases.

Customers also had very little insight about the quality, price, availability and alternative sources before making a choice in purchasing a product or soliciting a service. A customer's primary source of information was advertising, provided directly by the manufacturers designed to entice a potential client to buy, and through word of mouth reference from a known party, both sources being not objective and/or accurate.

The introduction on the internet allows sellers to be able to get insight on their customer's habits and hopes, not only at a segment level, but an individual level, translating into quality targeted products and services being offered to clients. The web is having an enormous impact on how customer-driven businesses conduct R&D, service and MARKET their products to existing and potential clients. Having such information allows vendors to be able to offer clients exactly what they want, developing a loyal client base that is fully satisfied. A good example is Dell Computer Corporation. Before, clients would step into a retail storefront and purchase a pre-configured PC that had been designed to appeal to a given broad MARKET segment. In today's world of design your own PC, Dell offers clients the opportunity to purchase exactly the PC they are looking for, having 100% customer satisfaction.

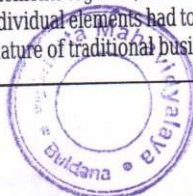
The other main aspect that the internet has revolutionized is the availability of an extensive array of resources about any given PRODUCT to the client. Comprehensive information regarding a vendor, their product lines and even reviews made by countless individuals and its price relative to almost all of its competitors are available online, usually free of charge. As a result, sellers have lost the power they have gained from the inequality of information, to the extent where price is no longer the main prerogative, but rather client satisfaction. Customers are always being bombarded with better propositions from competitors and vendors must always stay a step ahead to maintain their client base.

As a result the customers are always searching and finding great bargains. Priceline.com for instance, invites their clients to 'make on offer' to airlines and HOTELS FOR their air travel and accommodations at a desired destination, which airlines and hotels with otherwise empty seats or rooms can decide to take or leave.

Today's buyers and sellers are both living in an Information Age. We see companies offering clients more and more transparency in terms of their OFFERS vs. that of their competitors, with some even going as far as to provide this information within their own website. For instance, Progressive.com has made it the center of their marketing strategy to show their clients the offers they would get from competitors, something unheard of in the past.

The term 'Perfect' is still not applicable, but we are the closest today than we have ever been in the past. MARKETERS and strategists now must learn to make sense of the vast volume of information they are faced with on a daily basis and learn to read trends and filter garbage quickly enough to act faster than ever before.

The last revolutionary effect of e-Commerce on strategy stems directly from the fact of its very virtuality. In the past businesses wanting to enter the marketplace had to depend upon the design, means of production, marketing, planning and SALES being coordinated by a central vertical enterprise converging finally at a physical location; the storefront. This meant a daunting and expensive task for new sellers wishing to enter the market. If they did not have the right elements all in place and a proper vision of the future and were unable to bring all the necessary elements together, it meant that they would not be able to participate in the game and succeed. All these individual elements had to be performed under one roof, creating the vertical model thanks to the limiting nature of traditional business in terms of the high costs



of collaboration and poor communications between partners.

These classical restrictions do not apply in the e-Commerce business model as coordination can be achieved easily, virtually, at a very low cost. Entire supply chains can be created quickly through linking desktops together. The physical locations of the seller, the warehouse and the payment processor and whether it is three independent companies is a fact that is immaterial to the buyer of e-Commerce storefronts. All the buyer expects is that the quality, price and service are met according to their wants. This all looks like a great opportunity for any business person looking to carve out a small piece of the market. Unless you are an established enterprise, in which case the online e-Commerce sellers are a real dangerous threat. What is to prevent any random person from registering a URL and entering your market and stealing your share? Not much, and it is being done everyday, putting established businesses on their knees. On the other hand, with the industry experience and expertise that established firms have, along with their existing customer base, what is stopping these businesses from doing the same? The answer is fear of change and the costs involved in adapting. But unfortunately there is not much choice in the matter. If you want to survive you must adapt and evolve. Forward thinking CEO's will always maintain their competitive advantage and survive in an even fiercer marketplace.

Senior executives are notorious for not being proactive. Always being reactive and not willing to embrace the changes in the marketplace, especially in terms of the real threat posed by the online sellers. Always thinking in brick and mortar terms and being unable to process the virtual world of e-Commerce. Meeting the new challengers in the marketplace and emerging victorious can only be achieved by beating the new comers at their own game. It's time to start thinking outside the box and restructuring your business to adapt to the new market.

A prime example of an established enterprise having difficulty competing with the newly emerging e-Businesses is that of Blockbuster vs. Netflix. Blockbuster is an enterprise that has enjoyed many years of success within the MARKET, as one of the largest video rental and SALES franchises in the world. Netflix, being a new e-Commerce enterprise offering a value proposition to the customers of Blockbuster, has managed to steal a segment of their market. As the threat was perceived to be real and dangerous, Blockbuster has implemented a value added feature to their regular in store rentals by allowing customers to rent films online (which they receive in the mail) and exchange them at a physical storefront if they wish, giving them the added option of exchanging the viewed DVD for a new one at a local Blockbuster franchise. Whereas the clients of Netflix have no such option but to mail the DVDs back and eagerly wait for their newly selected films to arrive in the post.

The first step in such a frightening evolution is to re-evaluate your business model, putting less emphasis on the physical infrastructure. Keep in mind the golden rule : 'Stick to your core activities. If you are not the absolute best in the industry for performing a function that can be bought from another provider, DO NOT DO IT YOURSELF"

References:

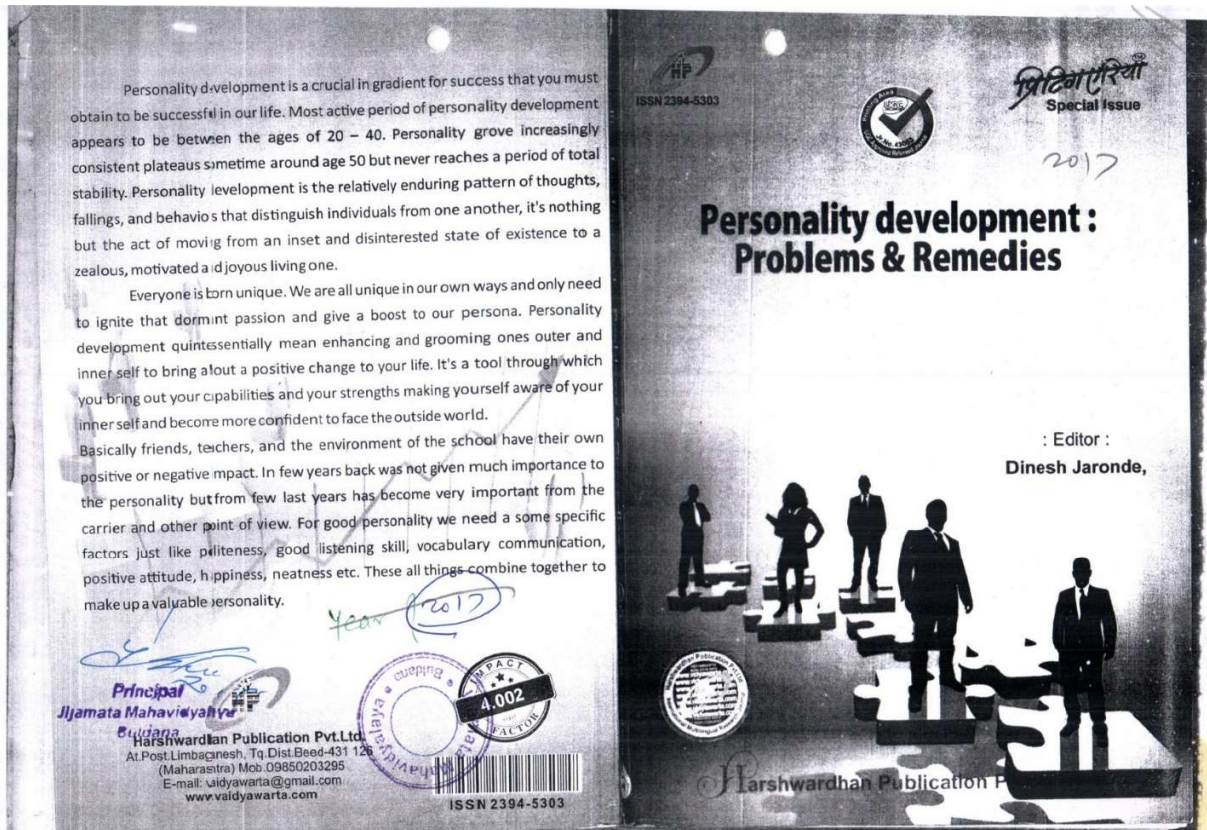
- 1 V. Zwass, 'Structure and macro-level impacts of electronic commerce: from technological infrastructure to electronic marketplaces', <http://www.mhhe.com/business/mis/zwass/ecpaper.html> (accessed May 2001).
- 2 T. Seideman, 'What Sam Walton learned from the Berlin airlift', *Audacity: The Magazine of Business Experience*, Spring 1996, 52-61.
- 3 E. Turban, J. Lee, D. King and H.M. Chung, *Electronic Commerce: A Managerial Perspective*. Prentice Hall, 1999.
- 4 www.whatis.com/e-Commerce (accessed September 2000).
- 5 P. Timmers, *Electronic Commerce - Strategies and Models for Business-to-Business Trading*. John Wiley & Sons, 2000.
- 6 http://www.straight-on.com/e-Commerce_definition.htm (accessed September 2000).


Principal
Jijamata Mahavidyalaya
Buldana



Paradigm Shifts in e-Business / 215





Personality development is a crucial ingredient for success that you must obtain to be successful in our life. Most active period of personality development appears to be between the ages of 20 – 40. Personality grows increasingly consistent plateaus sometime around age 50 but never reaches a period of total stability. Personality development is the relatively enduring pattern of thoughts, feelings, and behaviors that distinguish individuals from one another, it's nothing but the act of moving from an inert and disinterested state of existence to a zealous, motivated and joyous living one.

Everyone is born unique. We are all unique in our own ways and only need to ignite that dormant passion and give a boost to our persona. Personality development quintessentially means enhancing and grooming one's outer and inner self to bring about a positive change to your life. It's a tool through which you bring out your capabilities and your strengths making yourself aware of your inner self and become more confident to face the outside world.

Basically friends, teachers, and the environment of the school have their own positive or negative impact. In few years back was not given much importance to the personality but from few last years has become very important from the carrier and other point of view. For good personality we need some specific factors just like politeness, good listening skill, vocabulary communication, positive attitude, happiness, neatness etc. These all things combine together to make up a valuable personality.

Principal
Jijamata Mahavidyalaya
Buldhana
Harshwardhan Publication Pvt.Ltd.
At, Post Limbaganesh, Tq. Dist. Beed-431 126
(Maharashtra) Mob. 09850203295
E-mail: vaidyawarta@gmail.com
www.vaidyawarta.com

ISSN 2394-5303

Personality development : Problems & Remedies

Editor :
Dinesh Jaronde,

Harshwardhan Publication Pvt.Ltd.

Personality Development : Problems & Remedies 04
objectives and also helps us in our day to day life. Every person interact with a person having attractive personality A great overall personality is very important in the life of an individuals. Without influencing others you can't get success in today's competitive world. Competitive is increasing day by day and there no less of talent individual possession high all device results and willing to work hard to achieve their goals.

For the completion of this special issue, we have collected articles and research papers on "Personality development : Problems & Remedies" from students, teachers, professors, thinkers, and scholars and compiled selected ones in this special issue which, we hope, will prove useful and enlightening documents for all readers. The Editorial Board acknowledges the help, suggestions, and guidance received. Our special thanks go to article/paper writers and our publisher. All our well-wishers are worthy of gratefulness.

Prof. Dinesh Jaronde

Principal
Jijamata Mahavidyalaya
Buldhana



Personality Development : Problems & Remedies 05

INDEX

Sr. No.	Title	Page No.
01.	The Stress Relaxation Response Anil S.Purohit	07
02.	Disabled child and Adjustment of Personality Anupam Kumar	16
03.	A study of attitude of secondary school teachers and students towards inclusive education for the disabled at secondary stage in Aurangabad City Dr. Daimi Syed Firdos	24
04.	STRESS MANAGEMENT TECHNIQUES Dr. Kaneez Fatima	33
05.	Mobile phone use and effect on Personality - A Review Dr. Shaikh Tahemina Naaz	41
06.	Family and personality Development Dr. PRASHANT K. PATHAK, DR. REKHA M. BADODEKAR	50
07.	Information Technology and Personality Development : the 360 degree study Sachin Narayan Joshi, Aditya D. Adgokar	60
08.	Mass Media and personality development of Indian teenagers and Youth A case study of respondents from Marathwada region of Maharashtra Dr. Shahed G. Shaikh	66
09.	Stress Management Prof. Suresh N. Gawal	78
10.	संज्ञानशैली का वैयक्तिकता पर प्रभाव डॉ. अनिता बापुल सुर्वेशरी	89
11.	मूल्य-वैज्ञानिकता, व्यक्तिगत विकास आणि संज्ञानशैली का वैयक्तिकता पर प्रभाव योजना कार्यक्रम - ११ से १६ डॉ. संख्या एस. शेखे, डॉ. रेश सेनाये, प्रा. मुणालिनी वि. गुडबे	95
12.	उपनिषद्कालीन शिक्षणप्रक्रिया शिक्षकांच्या विकाससत गुरुत्वो भूमिका डॉ. जयश्री अनिलकांत सकळकांडे	107
13.	प्रसार माध्यमे व व्यक्तिगतता मालती सावकर	115
14.	व्यक्तिगत विकास आणि पाठ्यक्रमांची जाबाबदारी प्रा. मनोहर आ. गुडबे	125
15.	माध्यमिक स्तरवरील प्रयोग व शहरी भागातील शिक्षकांच्या समाजोपयोग व मतेचा तुलनात्मक अभ्यास प्रा. नुतन रमेशराव पाटील	132



09

Stress Management

Prof. Suresh N. Gawai,
M.Com.M.Phil., Associate Professor in Commerce,
Jijamata Mahavidyalaya, Buldana

Introduction

Stress is a fact of everyday life. When people reach out for help, they are often dealing with circumstances, situations, and stressors in their lives that leave them feeling emotionally and physically overwhelmed. Many people feel that they have very little resources or skills to deal with the high levels of stress they are experiencing. The information in this manual has been compiled to provide information and education about stress, the effects of stress, and the most popular stress management and relaxation techniques that are being used today. This information could be helpful for people who want to learn how to react to stress in a more constructive, proactive way. The basic premise of this manual is that the benefits of stress reduction and relaxation techniques can be best noticed after they have been practiced regularly over a period of time.

Stress: What is it?

Although we all talk about stress, it often isn't clear what stress is really about. Many people consider stress to be something that happens to them, an event such as an injury or a job loss. Others think that stress is what happens to our body, mind, and behavior in response to an event (E.g. heart pounding, anxiety, or nail biting). While stress does involve events and our response to them, these are not the most important factors. Our thoughts about the situations in which

Principal
Jijamata Mahavidyalaya
Buldana

is to learn about the mind-body connection and to the degree to which we can control our health in a positive sense.

Sources of Stress

We can experience stress from four basic sources:

The Environment – the environment can bombard you with intense and competing demands to adjust. Examples of environmental stressors include weather, noise, crowding, pollution, traffic, unsafe and substandard housing, and crime.

Social Stressors – we can experience multiple stressors arising from the demands of the different social roles we occupy, such as parent, spouse, caregiver, and employee. Some examples of social stressors include deadlines, financial problems, job interviews, presentations, disagreements, demands for your time and attention, loss of a loved one, divorce, and co-parenting.

Physiological – Situations and circumstances affecting our body can be experienced as Physiological stressors. Examples of physiological stressors include rapid growth of adolescence, menopause, illness, aging, giving birth, accidents, lack of exercise, poor nutrition, and sleep disturbances.

Thoughts – Your brain interprets and perceives situations as stressful, difficult, painful, or pleasant. Some situations in life are stress provoking, but it is our thoughts that determine whether they are a problem for us.

Types of Stressors

Situations that are considered stress provoking are known as stressors. Stress is not always a bad thing. Stress is simply the body's response to changes that create taxing demands. Many professionals suggest that there is a difference between what we perceive as positive stress, and distress, which refers to negative stress. In daily life, we often use the term "stress" to describe negative situations. This leads many people to believe that all stress is bad for you, which is not true. Positive stress has the following characteristics:

we find ourselves are the critical factor. When something happens to us, we automatically evaluate the situation mentally. We decide if it is threatening to us, how we need to deal with the situation, and what skills we can use. If we decide that the demands of the situation outweigh the skills we have, then we label the situation as "stressful" and react with the classic "stress response." If we decide that our coping skills outweigh the demands of the situation, then we don't see it as "stressful." Stress can come from any situation or thought that makes you feel frustrated, angry, or anxious. Everyone sees situations differently and has different coping skills. For this reason, no two people will respond exactly the same way to a given situation. Additionally, not all situations that are labeled "stressful" are negative. The birth of a child, being promoted at work or moving to a new home may not be perceived as threatening. However, we may feel that situations are "stressful" because we don't feel fully prepared to deal with them. Stress is a normal part of life. In small quantities, stress is good; it can motivate you and help you become more productive. However, too much stress, or a strong response to stress can be harmful. How we perceive a stress provoking event and how we react to it determines its impact on our health. We may be motivated and invigorated by the events in our lives, or we may see some as "stressful" and respond in a manner that may have a negative effect on our physical, mental, and social well-being. If we always respond in a negative way, our health and happiness may suffer. By understanding ourselves and our reaction to stress-provoking situations, we can learn to handle stress more effectively. In the most accurate meaning, stress management is not about learning how to avoid or escape the pressures and turbulence of modern living; it is about learning to appreciate how the body reacts to these pressures, and about learning how to develop skills which enhance the body's adjustment. To learn stress management

- Motivates, focuses energy
- is short-term
- Is perceived as within our coping abilities
- Feels exciting
- Improves performance

In contrast, negative stress has the following characteristics:

- Causes anxiety or concern
- Can be short or long-term
- Is perceived as outside of our coping abilities
- Feels unpleasant
- Decreases performance
- Can lead to mental and physical problems

It is somewhat hard to categorize stressors into objective lists of those that cause positive stress and those that cause negative stress, because different people will have different perceptions and reactions to particular situations. However, by generalizing, we can compile a list of stressors that are typically experienced as negative or positive to most people, most of the time.

Examples of negative personal stressors can include:

- The death of a partner
- Filing for divorce
- Losing contact with loved ones
- The death of a family member
- Hospitalization (oneself or a family member)
- Injury or illness (oneself or a family member)
- Being abused or neglected
- Separation from a spouse or committed relationship partner
- Conflict in interpersonal relationships
- Bankruptcy/money problems
- Unemployment
- Sleep problems
- Children's problems at school



Personality Development : Problems & Remedies 82

- Legal problems
- Inadequate or substandard housing
- Excessive job demands
- Job insecurity
- Conflicts with team mates and supervisors
- Lack of training necessary to do a job
- Making presentations in front of colleagues or clients
- Unproductive and time-consuming meetings
- Commuting and travel schedules

Examples of positive personal stressors might include:

- Receiving a promotion at work
- Starting a new job
- Marriage or commitment ceremony
- Buying a home
- Having a child
- Moving
- Taking or planning a vacation
- Holiday seasons
- Retiring
- Taking educational classes or learning a new hobby

Internal Sources of Stress and Anxiety

Stressors are not always limited to situations where some external situation is creating a problem. Internal events such as feelings, thoughts, and habitual behaviors can also cause negative stress.

Common internal sources of distress include:

- Fears (e.g., fears of flying, heights, public speaking, chatting with strangers at a party)
 - Repetitive thought patterns
 - Worrying about future events (e.g., waiting for medical test results or job restructuring)
 - Unrealistic or perfectionist expectations
- Habitual behavior patterns that can lead to stress include:
- Over scheduling
 - Failing to be assertive



Personality Development : Problems & Remedies 83

- Failing to set and maintain healthy boundaries
- Procrastination and/or failing to plan ahead

Cognitive Aspects of Stress and Anxiety

Anxiety is a feeling that we commonly experience when faced with stressful life events. Anxiety can be one of the most distressing emotions that people feel. It is sometimes called "fear or nervousness". Common reactions to anxiety include:

Physical Symptoms:

- Sweaty palms
- Muscle tension
- Racing heart
- Flushed cheeks
- Light headedness

Behaviors:

- Avoiding situations where experiencing anxiety might occur
- Leaving situations when feelings of anxiety begins to occur
- Trying to do things perfectly or trying to control events to prevent danger

Moods:

- Nervous
- Irritable
- Anxious
- Panicky

Thoughts:

- Overestimation of danger
- Underestimation of your ability to cope
- Underestimation of help available
- Worries and catastrophic thoughts

Stressors can contribute to our feelings of anxiety. Examples of stressors that contribute to feelings of anxiety might include trauma (being abused, being in an accident, war); illness or death, things we are taught ("snakes will bite you");

Personality Development : Problems & Remedies 84

things we observe (an article in the newspaper about a plane crash); and experiences that seem too much to handle (giving a speech, job promotion or termination, having a baby). The thoughts that accompany anxiety involve the perception that we are in danger or that we are threatened or vulnerable in some way. A threat of danger can be physical, mental, or social. A physical threat occurs when you believe that you will be physically hurt (e.g., a snake bite, a heart attack, being hit). A social threat occurs when you believe you will be rejected, humiliated, embarrassed, or put down. A mental threat occurs when something makes you worry that you are going crazy or losing your mind. The perception of the threats varies from person to person. Some people, because of their life experiences, may feel threatened very easily and will often feel anxious. Other people may feel a greater sense of safety or security. Certain life experiences such as growing up in a chaotic home with volatile surroundings may lead a person to conclude that the world and other people are dangerous. The perception of danger and sense of vulnerability may have helped a person survive as a child. Being able to recognize danger and its early warning signs are critical to one's emotional and physical survival. Some may have developed a very fine ability to spot and respond to dangerous situations. As an adult, it may become important to evaluate whether or not its possible that one is over-responding to danger and threat. Perhaps the people in their adult life are not as threatening as the people in their childhood. One might consider whether or not their resources and abilities to cope as an adult open new and creative ways of responding to threat and anxiety.

Signs and Symptoms of Stress Overload

It is important to learn how to recognize when your stress levels are "out of control" or having an adverse effect. The signs and symptoms of stress overload can be almost anything.



Personality Development : Problems & Remedies 85

Stress affects the mind, body, and behavior in many ways, and everyone experiences stress differently.

Three common ways that people respond when they are overwhelmed by stress are:

1. An angry or agitated stress response. You may feel heated, keyed-up, overly emotional, and unable to sit still.
2. A withdrawn or depressed stress response. You shut down, space out, and show very little energy or emotion.
3. Both a tense and frozen stress response. You "freeze" under pressure and feel like you can't do anything. You look paralyzed, but under the surface you may feel extremely agitated.

The following lists some of the common warning signs and symptoms of stress. The more signs and symptoms you notice in yourself, the closer you might be to feeling stress overload.

Cognitive Symptoms:

- Memory problems
- Inability or difficulty concentrating
- Poor judgment
- Seeing only the negative
- Anxious, racing, or ruminating thoughts
- Constant worrying

Emotional Symptoms:

- Moodiness
- Irritability or short-tempered
- Agitation, inability to relax
- Feeling overwhelmed
- Sense of loneliness or isolation
- Depression or general unhappiness

Physical Symptoms:

- Aches and pains, muscle tension
- Diarrhea or constipation
- Nausea, dizziness, or butterflies in the stomach



Personality Development : Problems & Remedies 86

- Chest pain or rapid heartbeat
- Loss of sex drive
- Frequent colds
- Shallow breathing and sweating

Behavioral Symptoms:

- Eating more or less
- Sleeping too much or too little
- Isolating yourself from others
- Procrastinating or neglecting responsibilities
- Using alcohol, cigarettes, or drugs to relax
- Nervous habits (nail biting, pacing)

Keep in mind that the signs and symptoms of stress also can be caused by other psycho-logical and medical problems. If you're experiencing any of the warning signs of stress, it's important to see a doctor for an evaluation. Your doctor can help you determine whether or not your symptoms are stress related.

50 Common Signs and Symptoms of Stress:-

1. Frequent headaches, jaw clenching or pain
2. Gritting, grinding teeth
3. Stuttering or stammering
4. Tremors, trembling of lips, hands
5. Neck ache, back pain, muscle spasms
6. Light headedness, faintness, dizziness
7. Ringing in the ears
8. Frequent blushing, sweating
9. Dry mouth, problems swallowing
10. Cold or sweaty hands, feet
11. Frequent colds, infections
12. Rashes, itching, hives, "goose bumps"
13. Unexplained or frequent allergy attacks
14. Heartburn, stomach pain, nausea
15. Excess belching, flatulence
16. Constipation, diarrhea



Personality Development : Problems & Remedies 87

17. Difficulty breathing, sighing
18. Sudden attacks of panic
19. Chest pain, palpitations
20. Frequent urination
21. Low sexual drive or performance
22. Excess anxiety, worry, guilt, nervousness
23. Increased anger, frustration, hostility
24. Depression, frequent or intense mood swings
25. Increased or decreased appetite
26. Insomnia, nightmares, disturbing dreams
27. Difficulty concentrating, racing thoughts
28. Trouble learning new information
29. Forgetfulness, disorganization, confusion
30. Difficulty in making decisions
31. Feeling overwhelmed
32. Frequent crying spells or suicidal thoughts
33. Feelings of loneliness or worthlessness
34. Little interest in appearance, punctuality
35. Nervous habits, feet tapping, fidgeting
36. Increased frustration, irritability
37. Overreaction to petty annoyances
38. Increased number of minor accidents
39. Obsessive/compulsive behaviors
40. Reduced work productivity
41. Lies or excuses to cover up poor work
42. Rapid or mumbled speech
43. Excessive defensiveness or suspiciousness
44. Problems with communication
45. Social withdrawal or isolation
46. Constant tiredness, weakness, fatigue
47. Frequent use of over-the-counter drugs
48. Weight gain or loss without diet
49. Increased smoking, alcohol, or drug use
50. Excessive gambling or impulse buying

Personality Development : Problems & Remedies 88

As demonstrated in the preceding list, stress can have wide ranging effects on emotion, mood, and behavior. Equally important but often less appreciated are effects on various systems, organs, and tissues all over the body, as illustrated in the following diagram.

References:

- <http://hydesmith.com/de-stress/files/StressMgt.pdf>
<http://www.cmha.ca>
<http://www.mentalhelp.net>
<http://helpguide.org>
<http://www.oprah.com>
<http://stress.about.com>
<http://www.psybersquare.com>
<http://www.k-state.edu/counseling/student/biofedbk/sample5.html>
<http://www.stress-relief-exercises.com>
<http://www.hypknowsis.com>
<http://www.info.med.yale.edu>

◆◆◆◆◆


Principal
Jijamata Mahavidyalaya
Buldhana



Personality Development : Problems & Remedies 89

10

सर्जनशीलता वाढविण्याचे उपाय

डॉ. अनिता बापूराव सुर्यवंशी

ए.फिल., संशोधक विद्यार्थिनी,

पालि एण्ड बुध्दिधम विभाग

डॉ. बाबासाहेब अंबेडकर मेराठवाडा विद्यापिठ, औरंगाबाद

• प्रस्तावना

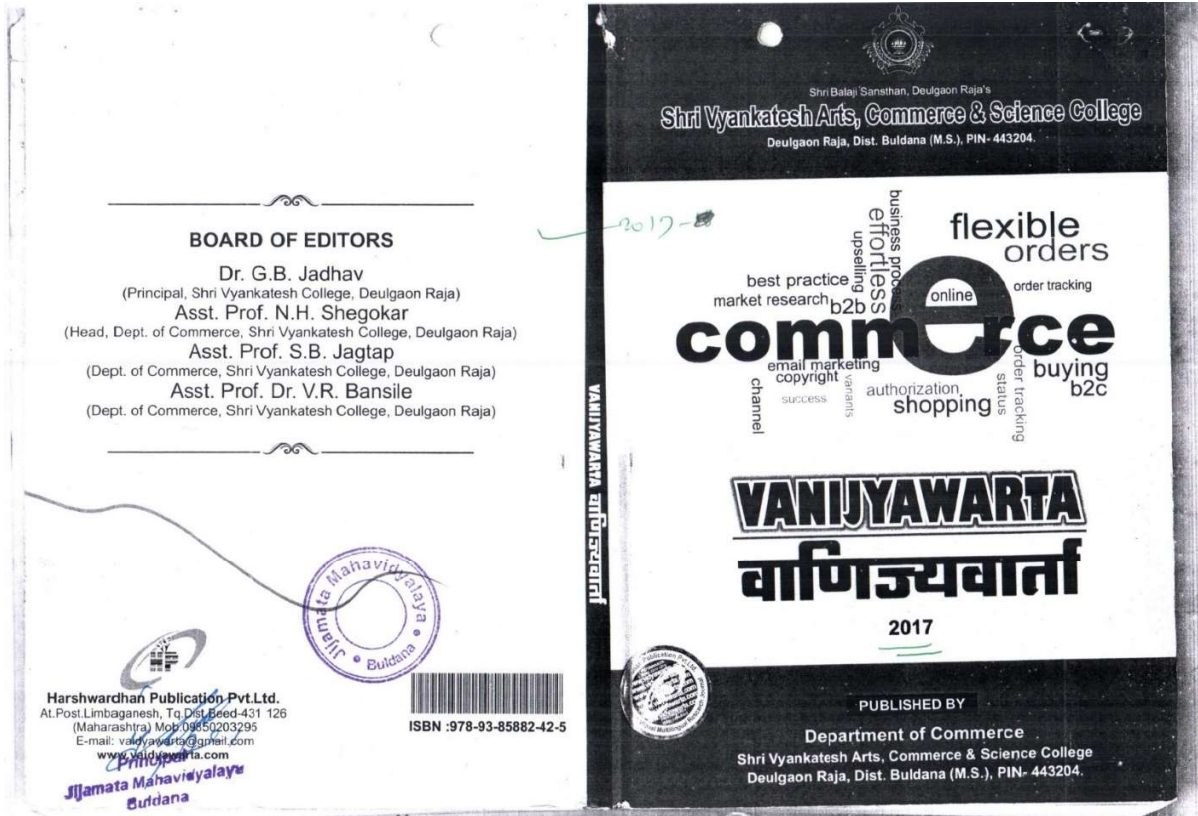
सर्जनशीलता या शब्दातील 'सर्जन' म्हणजे 'नवनिर्मिती' होय. यात नविन रचना, नवीन दृष्टीकोन, नविन अनुभवाला समोर जाणे, साचेबंद चौकट मोडण्याची वृत्ती, या सर्व स्वरूपाचे गुण प्रत्येक व्यक्तीत कमी अधिक प्रमाणात आपण पाहत असतो. समाजात कार्य करणारी व्यक्तीत कार्य आणि व्यवसाय यांच्यात एक वेगळी रचनात्मकता आपल्याला पाहण्यास मिळते. उदा. सूतार लोकांपासून वेगवेगळ्या वस्तू बनविता, चित्रकार आपल्या आवडत्या रंगाने एक नविन कलाकृती तयार करता, कवि कविता करता, गीतकार गीत तयार करता, सांगणे एवढेच की प्रत्येक व्यक्तीत सर्जनशीलता आपल्याला दिसून येते, पण आपल्याला ती सर्जनता ओळखून त्याचा विकास केला पाहिजे.

• सर्जनशीलतेची व्याख्या व स्वरूप

सर्जनशीलता काही व्याक्तीनाच प्राप्त होते किंवा सर्जनशीलतेची क्षमता निसर्गत: मोजक्याच व्यक्तीत असते असे नाही. तर ती सर्वांना प्राप्त होणारी संपादित असून तिचा आविष्कार फारच कमी व्यक्तींकडून होत असतो, असे एरिक फ्रॉम म्हणतो तसेच सर्जनशीलतेचे स्वरूप सांगताना लिहितो.

"creativity does not refer to a quality which particularly gifted persons of artists could achieve, but to attitude which every human being should and can achieve" – Erich fromm.





वाणिज्यवार्ता 06

♦INDEX♦

❖ English	
1. Impact of GST on Indian Economy & its challenges....	08-21
--- Dr. L. K. Karangale	
2. Progress of Kisan Credit Card in India	22-27
--- Dr. Jitendra Ahirrao-Yogesh Athave	
3. A financial study of Dr.Panjabrao Deshmukh....	28-32
--- Dr. Dinesh W. Nchit-Shri. Sandesh M. Patil	
4. AUTOMOBILE INDUSTRIES	33-40
--- DR. E. J. HELGE	
5. The Role of Human Resources in Uplifting....	41-51
--- Dr. U. Y. Memon	
6. Impact of Climate Change on Agriculture in India....	52-62
--- Dr. G. D. Kharat-Prof. Rajendra Borase	
7. Role of Banking Services in Current Service Market	63-71
--- Dr. Shivaji B. Yadav	
8. E-governance in India: Concept, Initiatives & Issues 72-80	
--- Dr. Sunil A. Gorde	
9. E-Commerce in India-A Game Changer for....	81-90
--- Prof. Suresh N. Gawai	
10. Bancassurance: A win-win Model	91-98
--- Dr. Prashant M. Pisolkar	
11. Information Technology In India	99-107
--- Ku. J. M. Bhagat	
12. A study of women Empowerment through SHG Bank....	108-116
--- Dr. S. S. Muley	
13. IMPORTANCE OF E-COMMERCE	117-122
--- Prof. Dr. Balkrishna S. Ingle	
14. MAKE IN INDIA - A REVIEW	123-128
--- Prof. Ramesh P. Deshmane	

Principal
Jijamata Mahavidyalaya
Buldana

Vanijyawarta 07

❖ English	
15. Indian Agricultural Marketing: An Overview	129-136
--- Dr. Ambadas B. Pande	
16. Challenges before Indian Education System	137-144
--- Dr. J. M. Kale	
17. A Study of Rural Women Empowerment in India	145-151
--- Dr. Mukund H. Khupse	
18. TRAVEL AND TOURISM INDUSTRY IN INDIA:....	152-161
--- Shri. Sandip Bhaskarrao Jagtap	
❖ Marathi	
19. ताण / तगावाचे व्यवस्थापन	162-168
--- प्रा. डॉ. एम बी. राठोड	
20. वित्तीय बाजारपेठा आणि वित्तीय संस्थांची महत्वाची कार्ये	169-172
--- प्रा. डॉ. एम. जे. सोनटक्के	
21. विदेशी व्यापारी धोरण २०१५-२०२०	173-177
--- प्रा. हरिदास मा. धुर्वे	
22. भारतीय शेतीची उत्पादकता	178-184
--- अमोल स. राऊत	
23. भारतीय कृषी क्षेत्रात ई-कॉमर्सचे योगदान	185-188
--- प्रा. संजय उल्ले	
24. ग्रामीण विकासात जलव्यवस्थापनाचे महत्त्व	189-195
--- प्रा. डॉ. सी. अलका अनिल मानकर	
25. भारतीय शेती : वर्तमान आणि भविष्य	196-200
--- विजय कुंडलिक वाकोडे	
	□□□




वाणिज्यवार्ता 80


A clear objective – to re-engineer processes and enhance judicial productivity both qualitatively and quantitatively to make the justice delivery system affordable, accessible, cost effective, transparent and accountable.

References:-

- www.google.co.in
- http://www.insightsonindia.com/2014/11/23/e-governance-india-concept-initiatives-issues/

□□□


Principal
Jijamata Mahavidyalaya
Buldana



Vanijyawarta 81

09

E-Commerce in India-A Game Changer for the Economy

Prof. Suresh N. Gawal
Associate Professor in Commerce
Jijamata Mahavidyalaya, Buldana

Introduction

E-Commerce has transformed the way business is done in India. With attractive and convenient shopping options at the core of the consumer facing business, the e-Commerce industry offers the power to create innovative, sustainable, consistent and seamless shopping experience across all channels. In the last 4years, while the e-Commerce B2C segment has grown significantly leading to creation of many Unicorns, the focus of the Investors going forward seems to have shifted to profitable growth to achieve a stabilization of the economic model. This seems to be resulting in collaborations and partnerships across the value chain with the aim to optimize the costs. Simultaneously, thee-Commerce B2B segment is showing signs of rapid digital adoption which is likely to feed the significant rise of MSMEs and entrepreneurs from the Indian hinterland. The growth of the e-Commerce industry has been triggered by increasing internet and Smartphone


Penetration in not only metro cities but also in tier two & three cities of India. Mobile devices are further expected to

वाणिज्यवार्ता 82

drive sales via e-Commerce platforms over the next 5 years. While the e-Commerce space has rapidly evolved, several challenges have surfaced primarily in areas of taxation, logistics, payments, internet penetration and skilled man power. In taxation, for example, the lack of a uniform tax structure leads to several issues such as double-taxation or impediments in the free flow of goods across the country. However, the ensuing Goods and Services Tax (GST) is expected to help in overcoming these challenges through a uniform tax structure. Clearly defined rules for e-Commerce transactions in GST and a consultative approach while framing these rules will be favorable to both, the Government of India as well as the e-Commerce companies.

Logistics lies at the heart of e-Commerce and a large number of third-party logistics service providers have entered this space to provide customized last-mile deliveries. In line with the trend for increased e-Commerce uptake in tier two and tier three cities, e-Commerce and third party logistics service providers are partnering with players with existing infrastructure in tier two and tier three cities (e.g. India Post) to facilitate deliveries in these cities. However, the increasing logistics costs related to last-mile delivery, especially on account of return orders, requires innovative and analytical driven models that will enhance operational efficiencies in the logistics value chain. This will help e-Commerce companies in their drive towards profitability. From a payment perspective, Cash-on-Delivery (CoD) continues to dominate the payments for e-Commerce sales in India which in turn presents its own set of unique challenges. Digital payments (eg. mobile wallets) are slowly gaining traction. The growing usage of mobile internet and the implementation of the UPI are expected to give further impetus to the growth of digital payments.

In the last 18 months, the Government of India has announced several flagship programs namely, Digital India, Make



Vanijyawarta 83

in India, Start-up India, Skill India and Innovation Fund. The timely and effective implementation of these programs will support the e-Commerce eco-system to overcome the challenges related to ineffective rural internet penetration and lack of skilled manpower. As the digital eco-system evolves in India, the e-Commerce companies on their part need to continually innovate embrace digitization and analytics to remain relevant. Further, to differentiate, the e-Commerce companies will have to in parallel, focus both, on business-as-usual and also on disruptive growth towards building legacy firms.

E-Commerce and the Indian economy The Indian economy has been consistently showing good signs of growth, with the average GDP growth rate at 7.5% in 2015-163. The retail sector is showing a promising trend of 11% CAGR, growing from an estimated size of USD 600 Billion now to USD 1 Trillion in 20204. Although, currently the total e-Commerce spend in India accounts for less than 2% of the total retail spending, e-Commerce has become a key driver to create new markets in erstwhile unreachable geographies. The Indian consumers are rapidly advancing towards adopting technology. While the overall tele-density is 81.8%, the mobile tele-density is also high at 79.8% as of November, 20155. Additionally, during the same time, India beat the United States of America to become the 2nd largest market after China6, for smart phones with 220 Million users – This was attributable to the availability of highly affordable smart phones and with easy-to-use features which helped first-time Smartphone users leapfrog from the desktop/laptop phase. Internet penetration is also significantly rising with the number of internet users at 354 Million as of September, 20157. In addition, there is a shift in mobile usage from voice to data. Mobile internet spend has risen from 54% to 64% from 2014 to 2015. This is due to an availability of high-speed 3G & 4G internet connectivity at affordable prices which has led to an increase in



वाणिज्यवार्ता 84

transactions done via mobile2.

India's rank for ease of doing business went up by 12 in just one year due to an improved regulatory framework thus creating a conducive business-friendly environment8. These factors have positively impacted Private Equity and Venture Capital investments into the country touching USD 20 Billion in 20159. Majority of these investments have been in e-Commerce industry. The e-Commerce industry is expected to form the largest part of the Indian Internet market with a value of approximately USD 100 Billion by 20208. In addition to transforming and revolutionizing the retail sector in India, it is also facilitating MSMEs to jump the evolution loop by providing means of financing, technology and training. Advent of technology enabled innovations such as Digital Payments, Hyper-local Logistics, Analytics driven Customer Engagement and Digital Advertisements have enabled the e-Commerce industry to grow at a much faster rate. Within the e-Commerce industry, the Gross Merchandise Value (GMV) is an important metric for valuations especially during the early stages of growth. The majority of B2C e-Commerce companies, globally, despite being operational for 5-20 years, report low profitability. The situation in India is no different i.e. a growing GMV but at an overall loss as the e-Commerce companies establish themselves. The GMV for B2C segment in India was approximately USD 16 Billion in 2015. This trend however does not hold true for the B2Be-Commerce companies which are profitable with greater GMV values. The Indian B2B e-Commerce market potential was valued at USD 300 Billion in 2014, and is expected to reach USD 700 Billion by 202011. The higher profitability in the B2B segment is attributed to reasons such as lack of heavy discounts, greater emphasis on quality rather than on price, and higher volumes of purchases.

Existing and Emerging e-Commerce business models

Globally, e-Commerce has been operating via various



Vanijyawarta 85

models such as B2B, B2C, C2C, Aggregators, and Hybrid.

In India, leading current e-Commerce companies under different business models are enumerated:

E-Commerce models	Leading companies*
B2C e-Commerce marketplace	Snapdeal.com, Amazon.com, Flipkart.com
B2C e-Commerce Inventory Led	BigBasket.com, FirstCry.com, Zovi.com
B2C e-Commerce Aggregator	Uber.com, olacabs.com
C2C e-Commerce	Cloudacac.com, quickr.com, olx.in
B2B e-Commerce	mjunction services limited (metajunction), coajunction, buyjunction,etc.), cloudBuy.com, tolexo.com, industrybuying.com, power2sme.com, Amazonbusiness.com Omni-channel Retailers Shopper Stop Ltd., Infiniti Retail Limited Croma, Raymond Limited

Table 1: Indicative list of current leading e-Commerce models in India

*Verticals	Leading companies
Online Travel	Makemytrip.com, yatra.com, clestrip.com, goibibo.com
Online Real Estate	Magicbricks.com, 99acres.com, commonfloor.com, Housing.com
Online Fashion	Jabong.com, Myntra.com, Zovi.com, yepme.com, lineroad.com
Online Furniture	Fabfurnish.com, Pepperfry.com, urbanladder.com
Online Education	Purple Squirrel Eduventures, Plancess.com
Online Food and grocery	Zomato.com, Foodpanda.in, TinyOwl.com, igBasket.com, Grofers.com

Table 2: Indicative list of emerging Vertical Specific e-Commerce companies in India

Source: Deloitte Research *Note: Domain names

The growth of the B2B e-Commerce segment is relatively slower compared to the B2C e-Commerce segment in India. This is because the entry barriers in the B2B e-Commerce are more than those in the B2C e-Commerce industry. A B2B e-Commerce company has to have a strong business model, long term logistical arrangements with rail, road and ports and also adhere to stringent regulatory and taxation governance. With an aim to tap the huge potential in the B2B e-Commerce market in India,

वाणिज्यवार्ता 86

apart from the existing B2B companies, leading B2C companies have also started to build their own platforms for small business owners and traders. This is expected to be supported by rising expectations among growing number of companies to conduct buying and selling online and a shift to conduct procurement transactions through internet rather than the erstwhile Electronic Data Interchange (EDI). Understanding this untapped potential of the B2B e-Commerce industry, the Government has allowed 100% FDI in B2B e-Commerce which has enabled global successful B2B e-Commerce companies such as Walmart and Alibaba to evince interest in the India B2B e-Commerce industry.

Online retailers going 'offline' and vice-versa

Several e-Commerce companies are opening physical offline stores. Such 'Experience Centres' offer online buyers the touch-and-feel experience, thus offering an integrated shopping experience especially for products with high-price points. Companies such as FirstCry, Pepperfry, Flipkart etc. have opened physical stores to complement the online sales and experience. Similar option of click-and-collect is extended by Amazon in India by providing physical locations for customers to pick up the products at a time convenient to them. On the other hand, various offline retailers have started their online ventures or partnered with leading e-Commerce companies to attract customers at all touch points. For example, Future Group inked an exclusive deal with Amazon while Tata Group owned Croma, partnered with Snapdeal to sell private brands online.

e-Commerce aggregators digitizing traditional offline businesses

Besides the conventional services for utilities, fashion & lifestyle, electronics, etc. there is a new trend of emerging e-Commerce aggregators that are aiming to digitalize several offline services and creating a convenient ecosystem for consumers. In areas such as truck booking, healthcare, real-estate to name a few which have been traditionally offline, there has



Vanijyawarta 87

been a rise of online aggregators.

Emerging verticals*	Leading Companies*
Online Health	Portea.com, Healthkart.com, Wassupondemand.com,
Online Laundry	DoorMint.in, LaundryWala.co.in
Online Entertainment	Netflix.com, ErosNow.com Hooq.com
Online Truck Booking	Trucksuvidha.com, TruckMandi.in, ThKarrier.com, Fortigo.com

Table 3: Indicative list of emerging Online Aggregator Models in India

*Note: Domain names

Online aggregators besides providing comparison of price and features across service providers are also connecting buyers directly with sellers, thus reducing costs to consumers by obviating middle-men.

Key developments in 2014

Mobile to be the most influential aspect of e-Commerce

With mobile apps being developed by most e-Commerce websites, smart phones are increasingly replacing PCs for online shopping. In 2013, only 10% of the mobile users used smart phones, and only 5% of the e-Commerce transactions were made through a mobile device. This figure has more than doubled, and more than 13% of all e-Commerce transactions today happen via mobile3. According to some industry players, over 50% of the orders are being placed through mobile apps, which is not only leading to substantial customer acquisition but also building customer loyalty for various brands. However, most mobile transactions so far are for entertainment, such as booking movie tickets and music downloads. This trend will change soon with more and more merchandise being ordered online.

More business coming from smaller towns

e-Commerce is increasingly attracting customers from Tier 2 and 3 cities, where people have limited access to brands

बाणिज्यवार्ता 88
 but have high aspirations. According to e-Commerce companies, these cities have seen a 30% to 50% rise in transactions.

Enhanced shopping experience

Besides general online shopping, customers are also shopping online for weddings and festivals, thanks to wider range of products being offered and aggressive advertisements. The free and quick shipment and wider choice of products, along with the ease of shopping online as compared to in-store shopping, is also helping e-Commerce gather momentum. Further, e-Commerce companies are doing rapid business due to sales. New concepts such as sales on weekends, holidays and festivals are attracting a lot of new customers and building customer loyalty among existing customers. Television and social media, particularly Facebook, are playing a proactive role in promoting e-Tailing through aggressive advertisements. This has helped several e-Commerce companies build substantial brand image.

Exclusive partnerships with leading brands

Over the year or so, there has been a trend of exclusive tie-ups between e-Tailers and established boutiques, designers, and high-end lifestyle and fashion brands. For instance, in 2014, Jabong added international fashion brands such as Dorothy Perkins, River Island, Blue saint and Miss Selfridge, along with local fashion brands through Jabong Boutiques. Similarly, Mynta benefited from exclusive tie-ups with brands such as Harvard Lifestyle, Desigual and WROGN from Virat Kohli.

Expanding the product basket

There is a recent trend of relatively newer products such as grocery, hygiene, and healthcare products being purchased online. Similarly, lingerie and Indian jewellery has also been in great demand among customers outside India. Export comprises 95% of cross-border e-Commerce, with the US, UK, Australia, Canada and Germany being the major markets.

[Signature]
 Principal
 Jijamata Mahavidyalaya
 Buldana



Vanijyawarta 89
Key market factors to be evaluated before entering a new e-Commerce business

To achieve their vision, e-Commerce companies will need to understand the intricate landscape of new markets in addition to their own internal capabilities and limitations. The following factors must be considered:

- **Market size:** Before moving too aggressively into a new market, it is important to consider how sizeable the overall opportunity is.
- **e-Commerce readiness:** It is essential to fully understand the payment and logistical infrastructure, consumer behavior, retail opportunity and technological developments.
- **Scope of growth:** It is also important to look at the internet penetration, demographics of the online buying population & understand which phase of development each market is in.
- **Barriers to entry:** Players should understand the regulatory environment and connect with solution providers, content distribution networks, and digital agencies.
- **Competition:** There is also a need to do an in-depth assessment of what competitors are doing, their online strategy and the nature of each offering.

Conclusion-

The e-Commerce industry in India may currently be behind its counter parts in a number of developed countries and even some emerging markets. However, with India's GDP growth pegged at 6.4% by the International Monetary Fund and the World Bank, it is expected to grow rapidly. Moreover, the Indian e-Commerce industry has access to funds from within the country and international investors. Overall, the e-Commerce sector is maturing and a number of serious players are entering the market. What differentiates the Indian e-Commerce market from that of a country like China is that while market concentration in China

बाणिज्यवार्ता 90
 is largely on account of Alibaba-owned Taobao and Tmall (with these players holding a higher percentage of market share than the top players in most of the other major markets), in India the market share is divided amongst several ecommerce companies, each coming up with its own business model. As a result, customers have a wide range of products and services to choose from. In our view, there is humongous potential for e-Commerce companies owing to the growing internet user base and advancements in technology. However, this will not be without its share of challenges, be it operational, regulatory, or digital. How a company prepares itself to meet these challenges will decide whether or not it succeeds.

[Signature]
 Principal
 Jijamata Mahavidyalaya
 Buldana



Vanijyawarta 91

10

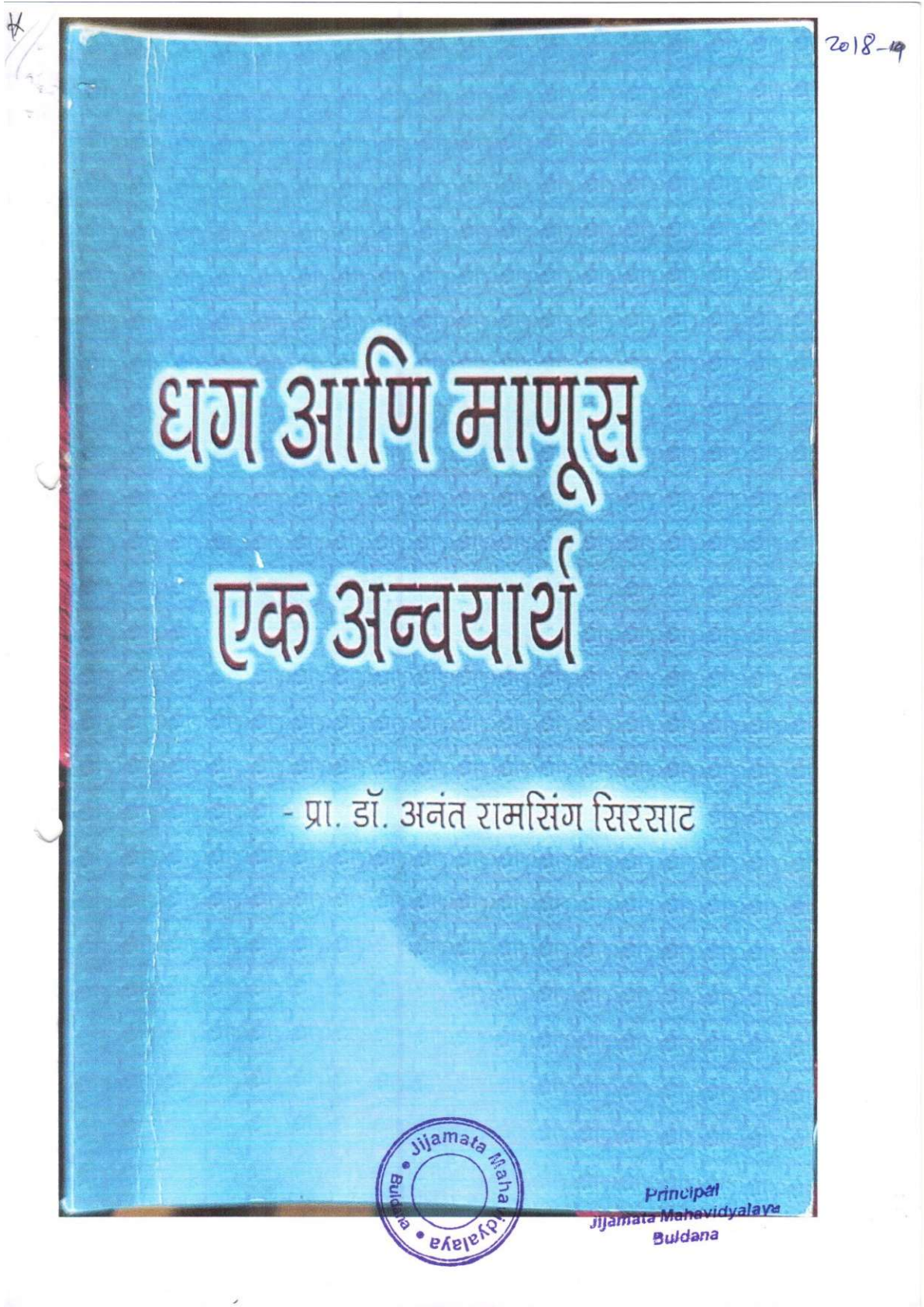
**Bancassurance:
 A win-win Model**

Dr. Prashant M. Pisolkar
 Asst. Professor & Head: Department of Commerce,
 Shankarlal Khandelwal Arts, Science & Comm. College, Akola (M.S.)

Introduction:

With the globalization and liberalization, the service sector has been witnessing a lot of changes. The life insurance industry in India has been progressing at a rapid pace since opening up of the sector in 2000. The size of the country, a diverse set of people combined with problems of connectivity in rural areas, makes insurance selling in India a very difficult proposition. The traditional distribution channels of insurance companies are costlier as the population of insurable over one billion in our country. Due to heavy competition among the insurers, they have to incur heavy distribution expenses. Life insurance companies require immense distribution strength and tremendous manpower to reach out to such a huge customer base. This distribution will undergo a sea change as various insurance companies are proposing to bring insurance products into the lives of the common man by making them available at the most basic financial point, the local bank branch, through "Bancassurance".





धग आणल माणूस : ँक अन्वयार्थ

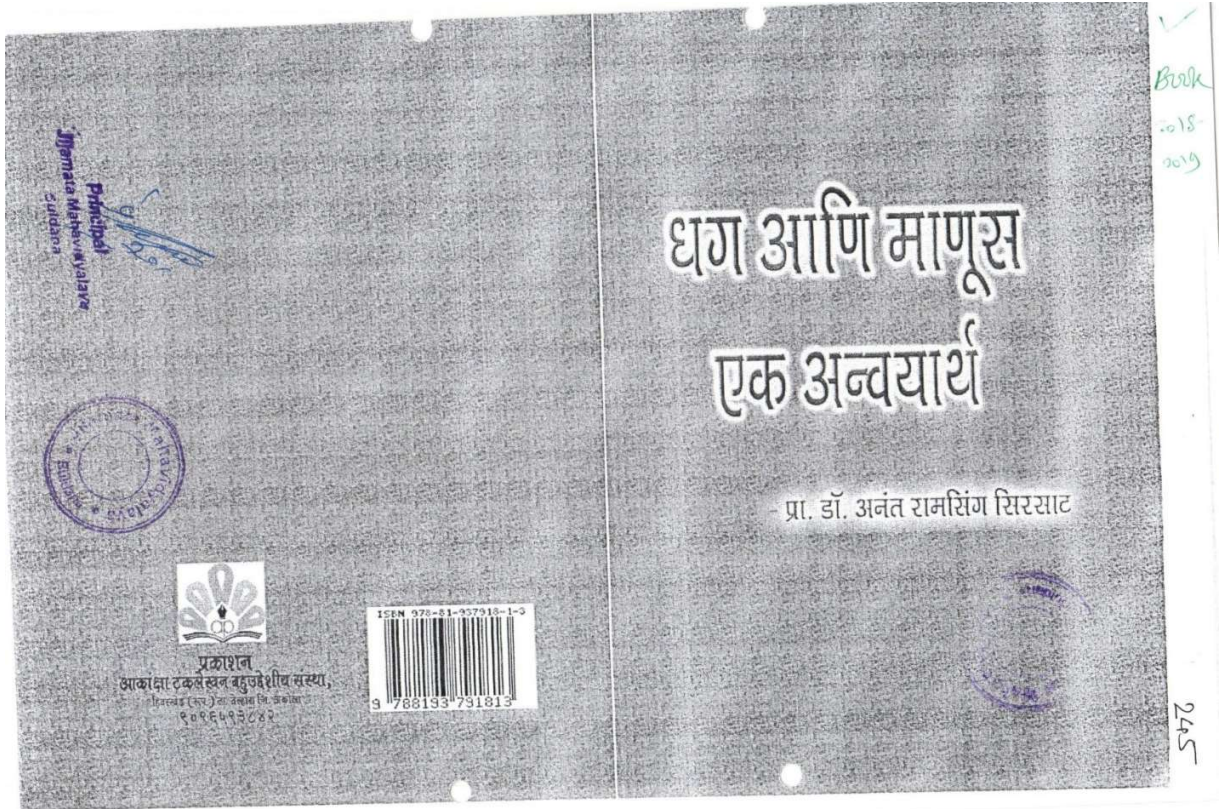
लेखक

प्रा. अनंत सलरसाट
सहयोगी प्राध्यापक, मराठी वलभाग
जलजामाता महावलद्यालय, बुलडाणा



पद्मश्री प्रकाशन
सावदा,
ता.रावेर, जल. जळगांव





धग आणि माणूस.: एक अन्वयार्थ

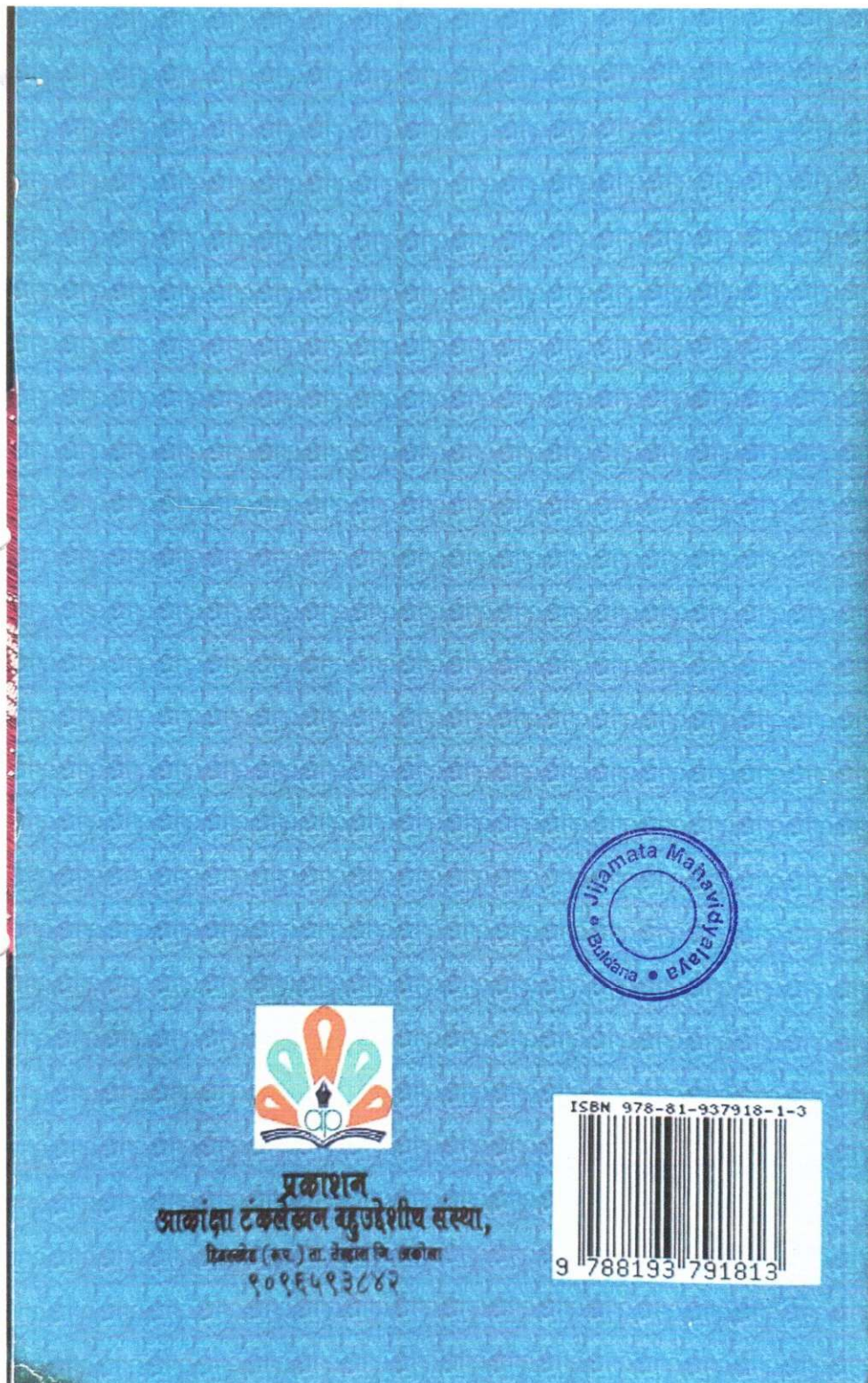
- ◆ लेखक
प्रा. डॉ. अनंत रायसिंग सिरसाट
राजमाता नगर,
सुंदरखेड
बुलढाणा - ४४३००१
९४२१४९५४०९.
- ◆ सर्वाधिकार
प्रा. डॉ. अनंत रायसिंग सिरसाट
- ◆ द्वितीय आवृत्ती २०१८
- ◆ ISBN : 978 - 81 - 937918 - 1 - 3
- ◆ मुखपृष्ठ
प्रा. डॉ. अनंत रायसिंग सिरसाट
- ◆ अक्षर जुळवणी
अमोल गणगणे
- ◆ प्रकाशक
प्रा. मयुर बंडु लहाने
आकांक्षा टंकलेखन बहुउद्देशीय संस्था
हिवरखेड (रूप), ता. तेल्लारा, जि. अकोला
९०९६५९३८४२
- ◆ मुद्रक
आकांक्षा टंकलेखन बहुउद्देशीय संस्था
हिवरखेड (रूप), ता. तेल्लारा, जि. अकोला
९०९६५९३८४२
- ◆ Email ID : akankhajournal@gmail.com
lahane.mayur@redimail.com
- ◆ मूल्य : १५०/-

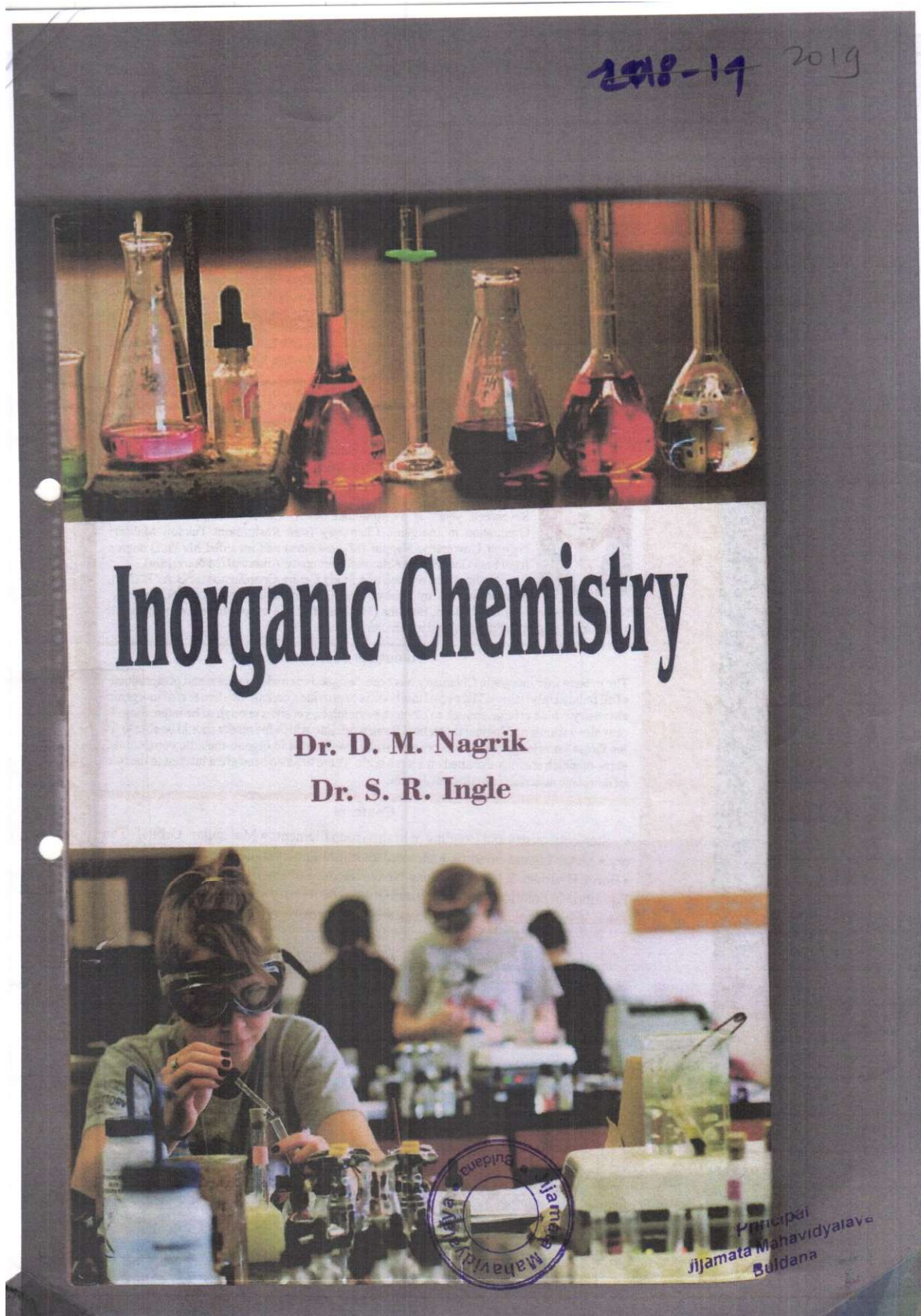
समाजजीवनाची नोंद करणारा वाङ्मयप्रकार म्हणून जन्माला आलेल्या कादंबरीत सामाजिक वास्तव हेच द्रव्य असते. सामाजिक वास्तव व व्यक्तिनिष्ठ वास्तव असे वास्तवाचे विभाजन होऊ शकत नाही. व्यक्ती आणि समाज यांच्यातले हे विभाजन सर्जनप्रक्रियेला परबडपारे नाही. समाजाला आधारभूत अशा प्रेरणावरच आजच्या सर्व सौंदर्यकृती निर्माण होतात. सौंदर्याचे निकषही प्रायः समूहनिष्ठ असतात. संपूर्ण मानवी व्यक्तिमत्त्व मांडणे म्हणजेच माणूस व समाज यांमध्ये असलेले एकजिनसी संबंध मांडणे होय.

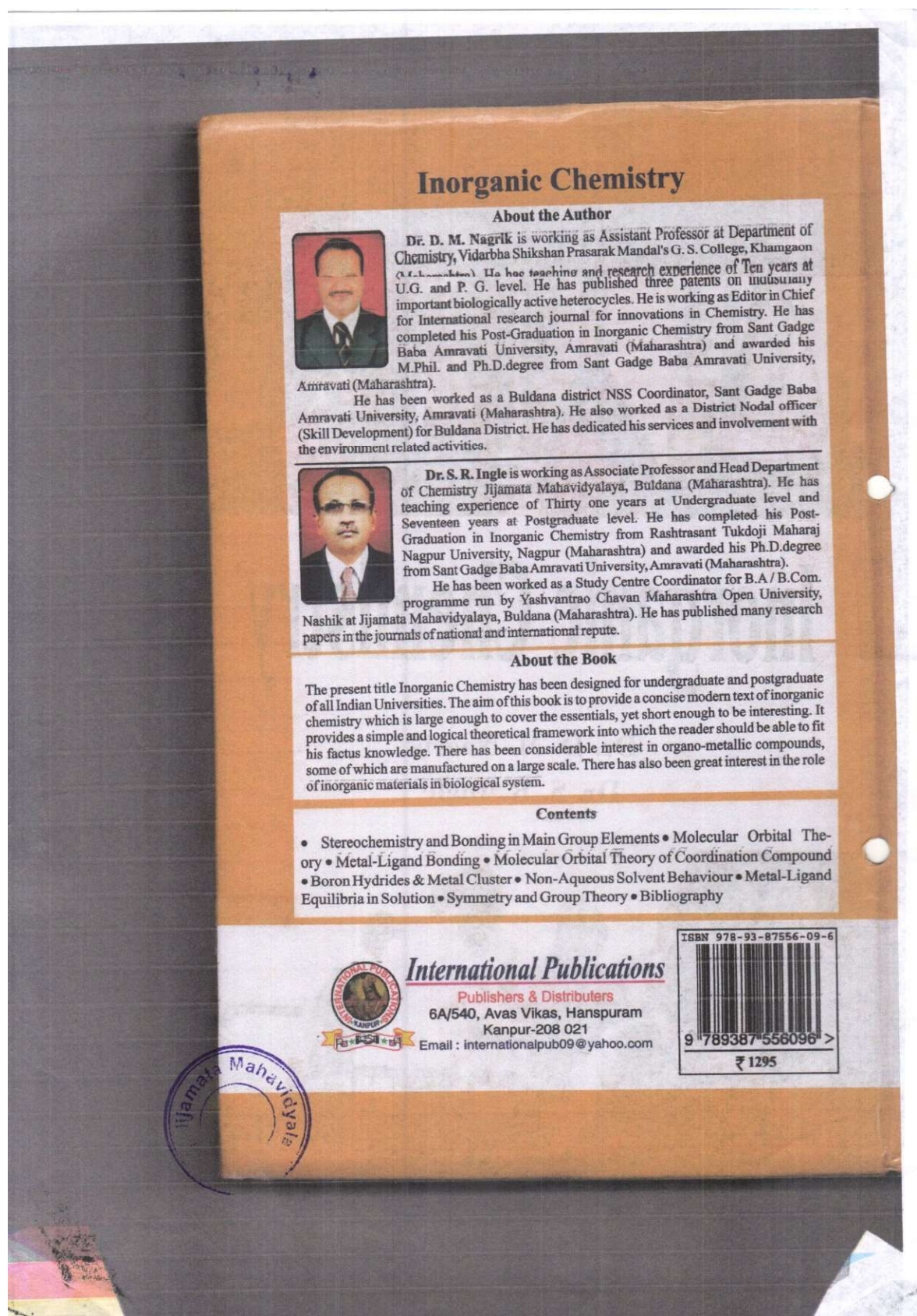
- मालचंद्र नेमाडे

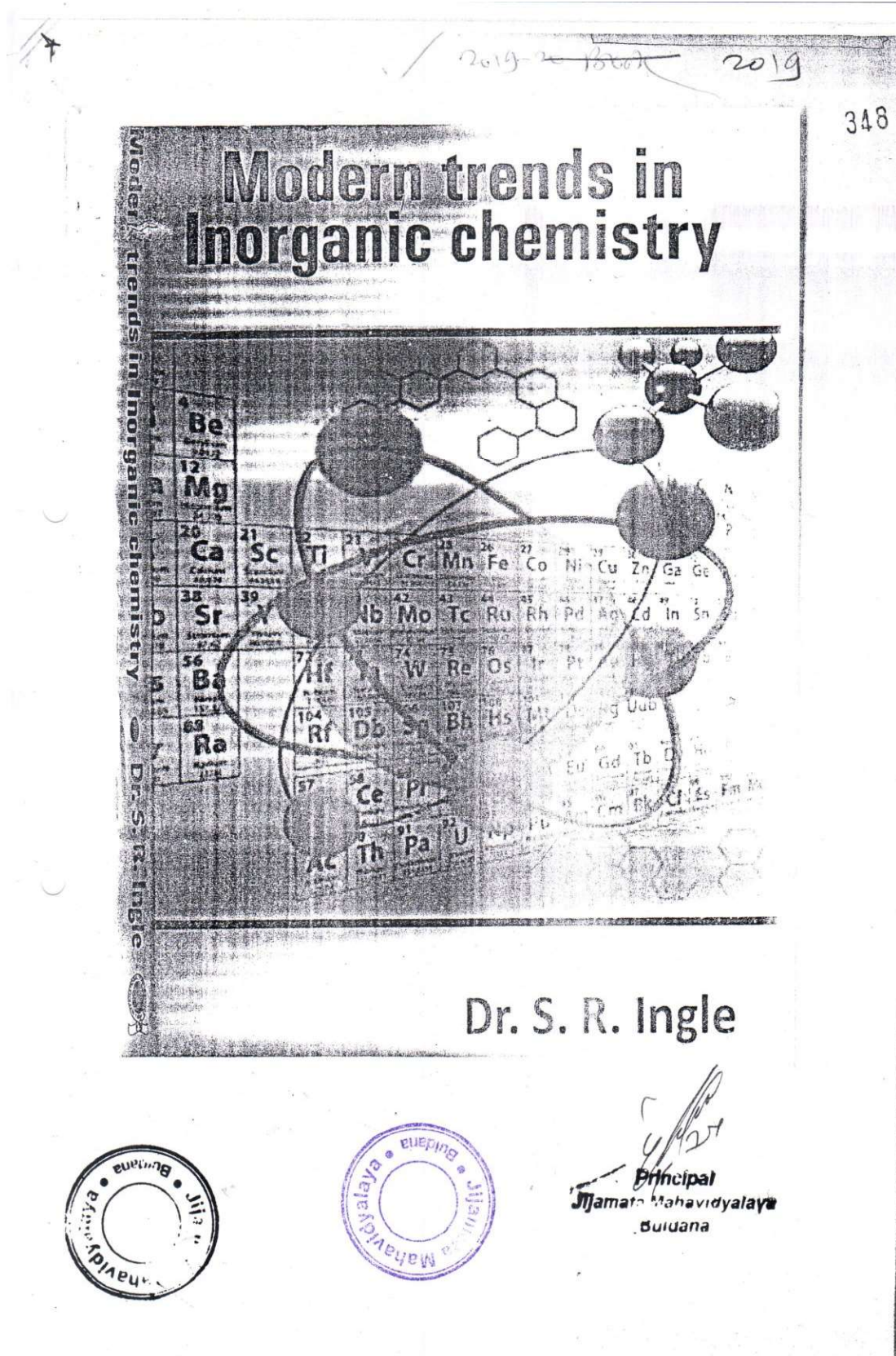
धग आणि माणूस : एक अन्वयार्थ / ३











349

Modern Trends in Inorganic Chemistry

© Reserved

First Edition : 2019

ISBN : 978-93-87556-54-6

[All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers]

*Published by***INTERNATIONAL PUBLICATIONS**

Publishers and Distributors

6A/540, Avas Vikas, Hanspuram

Kanpur-208021

E-mail: internationalpub09@yahoo.com

Website: www.internationalpublication.in

PRINTED IN INDIA

by, "Trident Enterprises", New Delhi



Modern trends in Inorganic chemistry

350



About the Author

Dr. S. R. Ingle is working as Associate Professor and Head of Post Graduate Department of Chemistry at Shri Shivaji Education Society Amravati's, Jijamata Mahavidyalaya, Buldana (Maharashtra). He has teaching experience of Thirty two years at Undergraduate level and eighteen years at Postgraduate level. He took his undergraduate education from Shri Shivaji Arts, Commerce and Science College, Chikhli, District-Buldana. (Maharashtra). He has completed his Post- Graduation in Inorganic Chemistry from Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur (Maharashtra) and was awarded Ph.D.degree from Sant Gadge Baba Amravati University, Amravati (Maharashtra). He has been worked as a Study Centre Coordinator for B.A /

B.Com. programme run by Yashvantrao Chavan Maharashtra Open University, Nashik at Jijamata Mahavidyalaya, Buldana from July 1997 to Oct 2012. He also worked as a District Director for Buldana District as per appointment by Registrar, Yashwantrao Chavan Maharashtra Open University, Nashik (Maharashtra) from July 2012 to Dec 2013. He has dedicated his services and involvement with the Maharashtra Talent Search project conducted by Nowrosjee Wadia College, Pune (Maharashtra), for identifying potential youth and promoting them to achieve excellence in every walk of life. As mark of respect Nowrosjee Wadia College, Pune (Maharashtra) honored his contribution by awarding him a MTS Badge, Symbolizing as an Ideal Teacher.

About the Book

Inorganic chemistry, the study of all the elements and their compounds with the exception of carbon and its compounds, which fall under the category of organic chemistry. Inorganic chemistry is significant in all modern areas of life and science. It represents one of the fastest growing and exciting areas of scientific research. The impetus for this research is the practical essential role inorganic chemistry plays in biology, pharmaceuticals, and advanced materials. Inorganic compounds can be formally defined with reference to what they are not organic compounds. They may be classified by the elements or groups they contain. The major classes of inorganic polymers are silicones, silanes, silicates and borates. Today, industries such as microelectronics depends on inorganic chemical techniques for producing high purity films on single crystal chips. Their is just the tip of the iceberg. With intensified funding in research and improving tools and techniques, the scope of inorganic chemistry is continually widening to bring within purview such issues such as understanding the role of transition metals in the biochemical catalysts called enzymes. The purpose of this book is to make career aspirants well-informed well considered decision from among the available choices. Not primarily a do it yourself like career manual but nevertheless the book contains much that will assist people to manage their own careers better.

Contents

• Introduction • Classification of the Elements • Coordination Compounds • The Gas Phase • Chemistry of Elements • X-rays and Crystals • Electromagnetic Radiations • Polymers in Inorganic Chemistry • Atomic Force Spectroscopy • Covalent Bond



International Publications

Publishers & Distributors
6A/540, Avs Vikas, Hanspuram
Kanpur-208 021

Email : internationalpub09@yahoo.com
Website : www.internationalpublication.in



S. R. Ingle
Principal
Jijamata Mahavidyalaya
Buldana



2019 Book
2019-20

ACADEMIC AND ADMINISTRATIVE AUDIT

Editors

Dr. B. U. Jadhav
Dr. Rohidas Nitonde
Mr. Vijay More



[Signature]
Principal
Jijamata Mahavidyalaya
Buldana

**MAHATMA GANDHI EDUCATION
AND WELFARE SOCIETY, PARBHANI**

www.mgsociety.in +91 8329000732 Email: chcskalyan@



ISBN: 978-93-87377-09-7

Academic and Administrative Audit

Edited by Dr. B.U.Jadhav, Dr. Rohidas Nitonde and Dr. Vijay More

First Published: 2019

© Editors

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without written permission of the copyright owner.

Printed at

Snehal Printers and Book Binders,
66, Ramdas Nagar, Parbhani -431401

Jointly Published by

Mahatma Gandhi

Education and Welfare Society, Parbhani

&

New Man Publication,

66, Ramdas Nagar, Parbhani -431401

Email: nmpublication@gmail.com

www.newmanpublication.com

Mob. + 91 9730721393, +91 9420079975

Typesetting and Cover Designing: Kalyan Gangarde

Price: ₹ 155/-

Disclaimer: Academic facts, views and opinions published by author in the book express solely the opinions of the author. Author is responsible for their content, citation of sources and the accuracy of their references. The publisher/printer/editor cannot be held responsible for any lacks or possible violations of third parties' rights



15. Academic Audit: the Need of the Time
Dr. S.M.Kolhe & Dr. S. G. Bhombe 120
16. Role of NAAC in Enhancing Quality of Higher Education in India
Vijaykumar R. Soni 125
17. Role of Stakeholders in the Academic and Administrative Excellence of Higher Education Institution
Subodh N. Chinchole 129
18. The role of Academic and Administrative Audit in Quality Education
Dr.Sudhir Ingle 135
19. The Role of IoT in Academic and Administrative Audit for Quality Enhancement
Dr Vaibhav M Pathak 141
20. NAAC as A National Agency for AAA: An Overview
Dr. Pandit. B. Nirmal 147
21. Academic and Administrative Audit: A Healthy Practice in Higher Education Institutions
Dr. L. V. Padmarani Rao & Dr. S. S. Nanware 151



17.

Role of Stakeholders in the Academic and Administrative Excellence of Higher Education Institution

Subodh N. Chinchole,

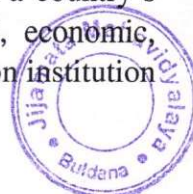
Asst. Professor, Jijamata Mahavidyalaya, Buldana (MS)

Abstract: The higher education institutions, as human resource centres, have to register a very significant contribution to a country's all-round and sustainable development. Therefore, the issues of quality and excellence in higher education need to be regularly addressed by the policy makers and reviewed frequently to assure a continuous enhancement in them. Academic and Administrative Audit (AAA) is one such measure globally accepted to ensure quality enhancement and proper execution of policies in higher education. However, implementation and execution of quality initiatives is not a simple job and as such it calls upon diverse elements to join hands and engage them in this herculean task. The various stakeholders of a higher education institution need to be motivated, organized and then actively engaged in various quality measures. So done, they can play a very vital and significant role in materializing the sustainable and result oriented development of the HEIs.

Key words/phrases: Higher Education Institution (HEI), Academic and Administrative Audit (AAA), sustainable development, stakeholders.

Introduction: Higher education institutions (HEIs) in any country are the main centres of human resource development and as such they are also the main vehicle of a country's sustainable and properly directed educational, economic, socio-political change. Therefore, if an education institution

129



has to significantly contribute to the overall growth and development of the country, it must prepare itself to adequately cater to the diverse and changing needs of the learners. The students and parents as the direct stakeholders of an educational institution are the beneficiaries of institutional quality whereas the management, teachers, society and the nation too are benefitted with the quality enhancement initiatives and development of their institution. All these stakeholders, external and internal, have to be aware of their significant roles in the development of the higher education institutions and feel called upon to take initiatives and join hands to enhance the academic and administrative quality of the HEIs.

Today the rapidly changing overall global scenario is posing new challenges and newer demands before the higher education system of every country. These are accelerated day by day owing to the rapid technological progress, development of globalization and internationalism and the dwindling of the state and international borders. HEIs are being pressured to switch to the global market conditions and are expected to stand the highly competitive demands of the present era. In such situations they must search for adequate solutions and means of quality enhancement in terms of teaching-learning activities, research as well as execution of academic and administrative policies. This reiterates and underlines the growing need of proper benchmarking on the part of HEI with due focus on knowledge acquisition, capacity building, intellectual skill development, and progression of students to higher education and employment etc. This won't suffice again without a regular and systematic Academic and Administrative Audits (AAA) of the HEI so as to ensure its continuous progress towards excellence.

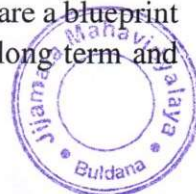


Defining the Objectives: For a fruitful engagement of its stakeholders, the HEI may design and clearly state its academic and administrative objectives and predefine the expected outcomes in terms of quality and excellence. In its brief advisory note NAAC has stated four major objectives of AAA-

- To understand the existing system and assess the strengths and weaknesses of the Departments and Administrative Units and to suggest the methods for improvement and for overcoming the weaknesses.
- To identify the bottlenecks in the existing administrative mechanisms and to identify the opportunities for academic reforms, administrative reforms and examination reforms etc.
- To evaluate the optimum utilization of financial and other resources.
- To suggest the methods for continuous improvement of quality keeping in mind criteria and reports by NAAC and other bodies. (A Brief Advisory Note, NAAC, Bengaluru)

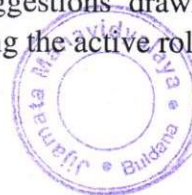
It has also been made that there has been no specific methodology or guidelines prescribed for conducting AAA, rather HEIs shall study the good practices followed by leading institutions in India and abroad and evolve their own methodology keeping in view the national and institutional objectives. Here the HEIs are called upon to determine their own objectives conforming to the national objectives of higher education and evolve a methodology to serve their purpose.

Systematic Engagement of Stakeholders: Having clearly defined its objectives, the HEI is needs to prepare a blueprint of its plan of action for both short term and long term and



then systematically work on its implementation and execution with the view to achieve the set goals and output. At the same time a due attention is to be paid towards seeking frequent feedbacks from the concerned and reviewed by the experts for appropriate and necessary changes, if needed or suggested. Like any organization a HEI too consists of various interdependent and interrelated elements and sub-units either reciprocating or going contradictory to each other. “The importance attributed to stakeholder issues in contemporary higher education affairs across the globe is a reflection of the changing nature of the social pact between higher education and society”, opines Pinheiro in his article on ‘*The Role of Internal and External Stakeholders*’ (2015).

It comes here how the HEI manages and organizes all these factors synchronizing and directing them towards a common set goal or objectives. A systematic engagement of all its stakeholders is up to the institution and its administration. R. E. Freeman in his seminal book ‘*Strategic Management: A Stakeholder Approach*’ has stated as early as in 1984 that “an organization, which manages stakeholder relationships effectively will survive longer and perform better than an organization that does not” (Freeman, 1984). Different categories of the stakeholders of an educational institution generally consists a) Students, b) Ex-students or Alumni Association, c) Parents, d) Society and other Social organizations working in the vicinity of the institution. All of these groups of stakeholders have their own different capacities and potentials and may contribute to the institutional development by shouldering different responsibilities. Following are a few suggestions drawn from observations and experiences regarding the active role



played by stakeholders in the development of the higher education institution.

i) Financial support: A well organized and strong Association of the prominent Alumni is a great asset for any institution and may extend help in many ways including generous financial support volunteered to raise funds or create facilities for the students of the institution. Parents and other social groups may also share responsibilities by extending their generous hands of help.

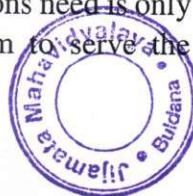
ii) Administrative support: Students, Alumni members and a few parents may be engaged in various administrative activities nominating them on different committees, organization of various academic, researches, extension activities and projects.

iii) Expertise: a well planned and systematic use of the expertise of stakeholders may also be of great benefit for the developmental initiatives of the HEI as such expertise may be made available without or with least financial burden on the institution.

iv) Collaborations and MOUs: It is often seen that alumni and parents are having distinctive positions in various Industries, GOs and NGOs and may help the institution in initiating more result-oriented or job oriented collaborations or MOUs.

v) Extension Activities/Projects: Stakeholder engagement in extension activities is one area where an institution can achieve excellence by satisfactorily discharging its duties as motivators and agents of wider societal change.

Apart from these innovative projects and activities may be designed and undertaken by resourceful and efficient faculties and stakeholders. What the institutions need is only to systematically and tactfully engage them to serve the




purpose of sustainable and more output oriented development of the higher education institutions.

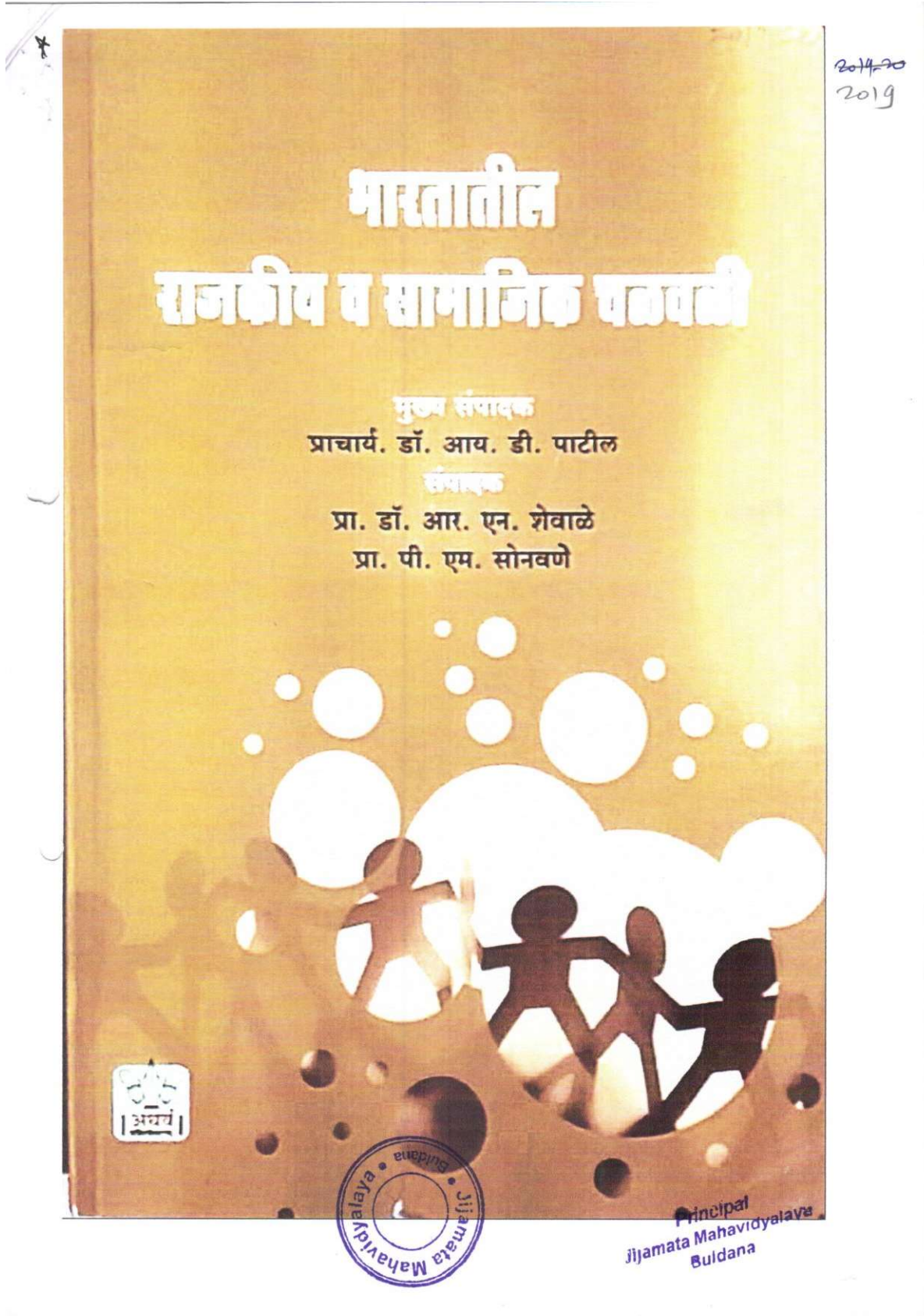
Works cited:

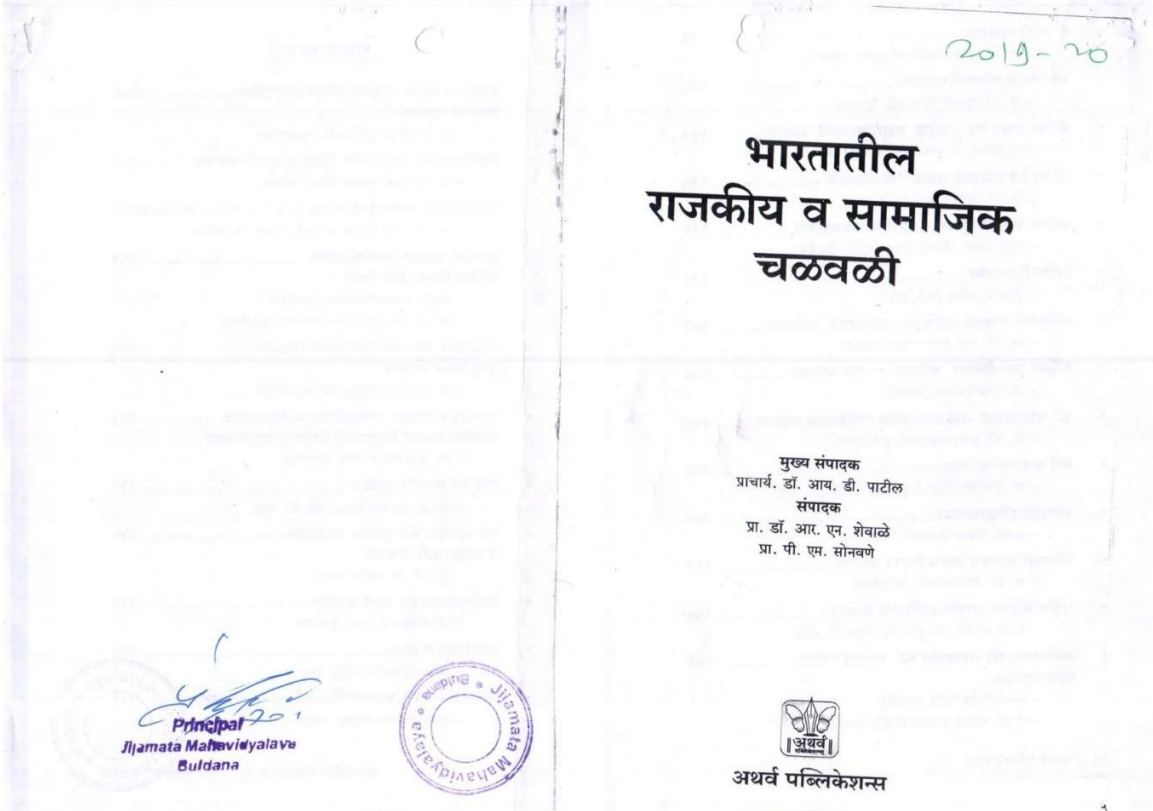
- A Brief Advisory Note on Academic and Administrative Audit (AAA)
http://www.naac.gov.in/docs/Miscellaneous/NAAC_AAA_Note.pdf
- Freeman, R. E. *Strategic Management: A Stakeholder Approach*. Pitman, Boston, USA, 1984.
- Pinheiro, Romulo. The Role of Internal and External Stakeholders. Schwartzman S., Pinheiro R., Pillay P. (eds) *Higher Education in BRICS Countries, Higher Education Dynamics*, Springer, Vol. 44, March 2015.

□□□




Principal
Jijamata Mahavidyalaya
Buldhana





<ul style="list-style-type: none"> • स्त्रीवादी चळवळ ११ - प्रा. डॉ. अलका काशिराव जाधव, मलकापूर • भारतातील स्त्रीवादी चळवळ १०४ - प्रा. डॉ. शुभांगी दिनेश राठी, भुसावळ • महिला बचत गट : महिला सक्षमीकरणाची चळवळ १११ - डॉ. रामचंद्र जे. गायकवाड, अजोर्पूर, जि. नांदेड • भारतातील स्त्रीवादी चळवळीची वाटचाल ११६ - प्रा. डॉ. कल्पना आर. टेकाडे, नागपूर • महिला चळवळीपुढील आव्हाने व उपाययोजना १२२ - सहा. प्राध्या. बोयेवार यादव बाबुराव, टोंडाईचा • स्त्रीवादी चळवळ १२७ - निकिता अनिल शेंको, पुणे • स्त्रीमुक्ती चळवळ आणि डॉ. बाबासाहेब आंबेडकर १३१ - प्रा. डॉ. रत्ना लाला जवामस, बोदवड • महिला सवलीकरण चळवळ - एक अध्ययन १३७ - डॉ. सुखनंदन ढाले, हिंगोली • डॉ. बाबासाहेब आंबेडकर आणि स्त्रीविषयक चळवळ १४६ - प्रा. डॉ. संदीप कडू माळी, मुक्ताईनगर • स्त्री चळवळीचा उदय १५० - प्रा. हंगरकर विठ्ठल निवृत्तीराव, हनेगाव, जि. नांदेड • स्त्रीवादी इतिहासलेखन १५५ - वळवी विद्यास गोरखनाथ, जळगाव • स्त्रीवादी चळवळ आणि विज्ञान साहित्य १६१ - प्रा. डॉ. वंदना लव्हाळे, मुक्ताईनगर • राष्ट्रीय महिला आयोग आणि स्त्री विकास १६७ - प्रा. डॉ. मानवते उत्तम हुसनाबी, हनेगाव जि. नांदेड • आदिवासी स्त्री चळवळीत कां. नजूबाई गावित यांचे योगदान १७१ - शंकर दिलीप यशोद, अमळनेर - प्रा. डॉ. धनंजय रमाकांत चौधरी, अमळनेर 	<p style="text-align: center;">स्वातंत्र्य चळवळ</p> <ul style="list-style-type: none"> • भारतीय स्वातंत्र्य आंदोलनातील महाराष्ट्रातील स्त्रियांचा सहभाग १७६ - प्रा. भिक्कन रामदास मिस्त्री, मुक्ताईनगर • स्वामी रामानंद तीर्थ आणि हैदराबाद मुक्ती चळवळ १८२ - डॉ. प्रा. चित्रा मुकुंदेव पाटील, भडगाव • महाराष्ट्रातील स्वाबलटर्न लोकलढा (इ. स. १८१८ ते १८५७ च्या संदर्भाने) १८७ - प्रा. डॉ. श्रीहरी गानाधराव पितळे, रिसोड, जि. वाशिम • भारतीय स्वातंत्र्य चळवळ आणि नाशिक जिल्हातील स्त्रिया १९२ - मंत्रुश्री आप्पासाहेब जाधव, मुक्ताईनगर - प्रा. डॉ. पंकजकुमार शंकर प्रेमसागर, मुक्ताईनगर • असहकार चळवळीत मुक्ताईनगर (एदलाबाद) तालुक्याचे योगदान १९९ - प्रा. डॉ. दिनेश रामदास महाजन, भालेद • भारतीय क्रांतीकारी चळवळीतील क्रांतीकारकांचे भारतीय स्वातंत्र्य लढ्यासाठी विदेशात केलेले कार्य २०३ - प्रा. उमेश मनोहर एकत, मलकापूर • भारतीय स्वातंत्र्य चळवळ २१० - डॉ. डी. डी. कोल्हेकर, उमरी, जि. नांदेड • पुर्व खानदेशातील भूमिगत चळवळीत जनसमुदायाचे योगदान २१५ - प्रा. व्ही. बी. पाटील, बावल • देशभक्त रामचंद्र अनंत कानिटर २१८ - डॉ. नामदेव वा. ढाले, बुलडाणा • क्रांतीकारी चळवळ २२५ - रुसिंग दाराधराव राठोड, अकोला • भारतीय स्वातंत्र्य चळवळीतील पुर्व खानदेशाचा सहभाग २३१ - हितेश लिलाधर मोरठके, रावेर
--	--



देशभक्त रामचंद्र अनंत कानिटर

— डॉ. नामदेव वा. डाबले
इतिहास विभाग प्रमुख
जिजामता महाविद्यालय, बुलढाना

रौलेट अ‍ॅक्ट, जालीयनवाला बाग हत्याकांड या घटना देशाच्या राजकीय व सामाजिक दृष्टीकोनातून ऐतिहासिक मानल्या जातात. ब्रिटीश सरकारच्या अदाभुद व अमानुष राजवटीने देश पिचल्या जात असताना संपूर्ण देशभर संपटीतपणे लढा देण्यासाठी सर्व जातीधर्मातून एकसंध भावनेने जनता एकत्रित आली. ती फक्त म. गांधींच्या कणखर नेतृत्वाने. हा स्वातंत्र्य लढयातील एक महत्त्वपूर्ण कलांगी देणारा पैलू ठरला.

जेव्हा म. गांधींनी असहकार आंदोलनाला सुरुवात केली तेव्हा बुलढाणा जिल्हयात मोठ्या प्रमाणात जनजागृती झाली. या चळवळीत वकील, डॉक्टर, व्यापारी, इ. वर्गीतील तसेच सर्व जाती-जमातीतील सर्व सामान्य जनतेने सहभाग दर्शविला. यातूनच डॉ. म. ना. पारसनीस, या. मा. काळे, रा. अं. कानिटकर, पंढरीनाथ पाटील, जादेहराव पाटील, विठ्ठल गोपाल कोर्डे गुरुजी, पंढरीनाथ अंबुलकर गुरुजी, लक्ष्मणराव देशमुख, वि. ना. उदासी, लक्ष्मणराव भटकर, सैयद अब्दुल रौफ, इ. सारख्या कर्तृत्वाने नेतृत्वाचा उदय १९२० नंतर म्हणजे गांधी युगात झाला. या सर्वांनी बुलढाणा जिल्हयात झंझावती तौराने कर्तृत्व दर्शविले व सामाजिक क्षेत्रात भरीव कामगिरी केली. आपले विचार सामान्य जनतेपर्यंत पोहचविले. यातीलच एक प्रमुख नेतृत्व म्हणजे रामचंद्र अनंत कानिटकर हे होय.

रामचंद्र अनंत कानिटकर यांचा जन्म दि. १७ जानेवारी १८८१ रोजी पुणे येथील शुक्रावर पेठेत झाला. त्यांचे बी. ए. व एम. ए. संस्कृतचे शिक्षण फर्ग्युसन कॉलेज, पुणे येथे झाले. लॉ कॉलेज, मुंबई येथे त्यांनी एल.एल.बी. पदवी दुसऱ्या क्रमांकात पास केली. पुणे येथे फर्ग्युसन कॉलेजमध्ये शिकत असताना स्वातंत्र्यवीर सावरकर, अण्णासाहेब भोपटकर, अण्णासाहेब जतक, नानासाहेब गोखले, इ. सारख्या देशभक्तांच्या रा. अं. कानिटकर हे संपर्कात आले. लो.टिळकांच्या देशभिमानीच्या चळवळीचा ह्या चर्च मित्रांच्या मातार परिणाम झाला. वकीलीची परीक्षा पास होवून ते धंद्याला लागले. तरी काहीना ना काही तरी देशाकरिता केलेच पाहिजे ह्या जाणीवने या सर्वांनीच देशासाठी मार्ग पत्करला.

१९०८ मध्ये रा. अं. कानिटकर हे वकीलीचा व्यवसाय करण्याकरिता मुंबईतून त्यांनी आपल्या सार्वजनिक जीवनाला नगरपालिकेपासून प्रारंभ केला.

२२० / अथर्व पब्लिकेशन्स

नगरपालिका, जिल्हा कौन्सिल आणि शेवटी मध्यप्रांत-बऱ्हाड कायदेमंडळ हे त्यांच्या राजकीय जीवनातील अधिग्रहणाचे चढते ती टप्पे होते. मध्यप्रांत-बऱ्हाड कायदेमंडळात त्यांचे घटनापारिडित्य आणि कामकाजाची काटेकोर पद्धती यामुळे तर त्यांचे वजन इतके पडले की, गोलमेज परिषदेच्यावेळी जेव्हा १९३०-३१ साली बऱ्हाडची कैफियत सकार आणि संसद यांच्या पुढे मांडण्याचा प्रसंग उद्भवला, तेव्हा त्या महत्त्वाच्या नाजूक राजकारणासाठी रामचंद्र कानिटकर यांची निवड बऱ्हाडातील कार्यकर्त्यांनी केली.

१९१४ नंतर लो. टिळकांच्या सुटकेमुळे महाराष्ट्राच्या स्वातंत्र्य चळवळीला पून्हा नवचैतन्य संचारले. स्वराज्याच्या मागणीसाठी १९१६ मध्ये होमरूल लीगची स्थापना झाली. या चळवळीच्या निमित्ताने या काळात टिळकांचे मित्र न. चिं. केळकर यांनी बुलढाणा जिल्हयात स्वराज्याच्या तुफानी प्रचार केला व टिळक फंड गोळा केला. केळकर यांच्या तुफानी दीन्यात रा. अं. कानिटकर यांनी महत्त्वाची कामगिरी बजाविली. होमरूल चळवळीसाठी प्रत्येक जिल्हयात समित्या स्थापन करण्यात आल्या. त्याप्रमाणे बुलढाणा जिल्हयात होमरूल लीगची समिती स्थापन करण्यात येवून त्या समितीच्या संपटकाची जबाबदारी रा. अं. कानिटकर यांच्याकडे सोपविण्यात आली. त्यांनी जिल्हयात सर्वत्र स्वराज्य मोहिमेला गती दिली आणि बुलढाणा जिल्हयात प्रचाराची आघाडी उघडली. रा. अं. कानिटकर यांनी यावेळी होमरूलचे संपटन व कार्य मोठ्या कुशाळतेने केले. तसेच ते १९१५ ते १९२० या काळात काँग्रेसचे जिल्हा सचीव म्हणून कार्यरत होते.

न.चिं. केळकर नंतर १९१७ मध्ये लो. टिळकांनी बऱ्हाडात स्वराज्याच्या तुफानी दौरा केला. यावेळीही रा. अं. कानिटकर यांनी गावोगावी फिरून होमरूलची सदस्य संख्या वाढविली. विद्यार्थीही या संपटनेचे सदस्य झाले. यागुळे स्वराज्यसाठी जनजागृती घडवून आली. दि. ६ फेब्रुवारी १९१८ रोजी बुलढाणा येथे टिळकांची सभा झाली. सभेनंतर रा. अं. कानिटकर यांच्या पत्नी सौ. जानकीबाई कानिटकर यांनी भगीनी मंडळाच्या स्वराज्य संघाच्या अधिकारी म्हणून जमविलेली वर्गीची टिळकांना अर्पण केली.

१९२० मध्ये म. गांधींनी असहकाराचा कार्यक्रम घोषित केला. म. गांधींच्या 'नॉन कॉपरेशन' ला बऱ्हाडातील काही मंडळांच्या विरोध होता. त्यापैकी बुलढाणा जिल्हयातील जहालवादी विचाराचे रा. अं. कानिटकर हे दादासाहेब खापर्डे यांच्या गटाचे नेते होते. ते म. गांधींच्या 'नॉन कॉपरेशन' विरुद्ध होते. कौन्सिल बहिष्काराला विरोध करून, कौन्सिल बहिष्काराने नव्हे तर कौन्सिल काबीज करूनच स्वराज्य प्राप्तीचे उद्दिष्ट साध्य करता येईल अशा मताचे रा. अं. कानिटकर होते. त्यांनी दादासाहेब खापर्डे यांना कौन्सिल प्रवेशाबाबत अनुकूल मत दिले.

भारतातील राजकीय व सामाजिक चळवळी / २२१

म. गांधीविरोधी विचार ठेवणारे बुलढाणा जिल्हयाचे रा. अं. कानिटकर हे एकमेव नेते. म. गांधींच्या राजकारण पद्धतीच्या विरुद्ध एक मत प्र (अ)जुनही सुरू होता. सर्व बऱ्हाडच्या सारही जिल्हयात म. गांधींच्या विरुद्ध बोलणारे प्रमुख अनेक सार्वजनिक कार्यकर्ते होते. ह्या कार्यकर्त्यांना चळवळीत व तत्कालीन बदल पाहिजे होता. ते फेरवादी व्यक्तिमत्त्व होते. म. गांधी भक्तांना त्यांच्याकडे दुर्लक्ष करणे किंवा डावलणे वा पुढे जाणे शक्य नव्हते. परंतु फेरवादी मंडळी म. गांधींच्या पद्धतीला काही विशिष्ट मर्यादित पूर्ण सहाय्य करणारा तयार होते.

अकोला येथे ३ व ४ डिसेंबर १९२१ रोजी डॉ. जयकर यांच्या अध्यक्षतेखाली हिंदी भाषिक वगळून 'मध्यप्रांत-बऱ्हाडची' राजकीय परिषद भरली. या परिषदेत फेरवाद्यांनी उचल खांदी व फेरवाद्यांची शक्ती या परिषदेत दिसून आली. या परिषदेत प्रामुख्याने रा. अं. कानिटकर यांनी असहकाराच्या उरावात बदल व सुधारणा करण्याच्या बाजूने भाग घेतला. असहकारवाद्यांनी मात्र या परिषदेला विरोध दर्शविला होता.

स्वराज्य पक्ष व रामचंद्र अनंत कानिटर

म. गांधींनी चौराचौरी प्रकरणामुळे असहकाराचेच चळवळ मागे घेतली. त्यामुळे असहकाराचेच स्थगितीबद्दल नेत्यांमध्ये मतभेद निर्माण झाले. स्थगितीच्या निषण्यांच्या संतापाची लाट विदर्भ-बऱ्हाडात उमटली. बापूजी अणे, दादासाहेब सोमण, व रा. अं. कानिटकर इ. गांधीविरोधी विचारधारा असलेल्या पुढाऱ्यांमध्ये असहकार कार्यक्रमाबद्दल बापूजींच सांस्कृतिक निर्माण झाली होती. त्यांनी कार्यक्रमात बदल करण्याची मागणी केली होती. याच नेत्यांनी लवकरच स्वतंत्र 'स्वराज्य पक्षाची' मुहुर्तमेळ बऱ्हाडात रूजविली. १९२३ मध्ये सी.आर. दास व मोतीलाल नेहरू या राष्ट्रीय स्तरावरील नेत्यांनी कौन्सिल प्रवेशासाठी 'स्वराज्य पक्ष' निर्माण केला तेव्हा बऱ्हाडातील नेत्यांनी स्वराज्य पक्षाला मनापासून पाठींबा व्यक्त केला. स्वराज्य पक्ष स्थापन होण्यापूर्वी जी कायदेभंग चौकशी कमिटी नेमण्यात आली त्या कमिटीमार्फत काँग्रेसजणांच्या साक्षी घेण्यात आल्या. त्यामध्ये पहिल्या साक्षीत म्हणजे कार्यक्रमात फक्त पाहिजे म्हणणाऱ्यांमध्ये रा. अं. कानिटकर, बामणगांवकर, बापूजी अणे, केळकर, मोहरील, खापर्डे, भागवत, काणे ही मंडळी प्रामुख्याने होती.

असहकाराचेच कार्यक्रमाला ओस पडताच बऱ्हाडात कौन्सिलवादी गट अधिक प्रभावी झाले. बऱ्हाडात 'स्वराज्य पक्ष' स्थापनेमागे बापूजी अणे यांचा मोठा हातभार होता. बापूजी अणेंनी अमरावती येथील दि. ७ फेब्रुवारी १९२३ रोजी झालेल्या सभेत रा. अं. कानिटकर यांची स्वराज्य पक्षाच्या संपटकापदी निवड केली गेली. स्वराज्य पक्षाचा प्रचार व पक्षाला सभासद मिळविण्यासाठी

२२० / अथर्व पब्लिकेशन्स

कार्य करण्याची जबाबदारी रा. अं. कानिटकर यांच्याकडे सोपविण्यात आली होती. मार्च १९२३ मध्ये पुणे येथे 'बऱ्हाड स्वराज्य पक्ष' स्थापन करण्यासाठी सभा झाली. या सभेत स्वराज्य पक्षाचा मतप्रचार करण्यासाठी एक 'कार्यकारी मंडळ' स्थापन करण्यात येवून त्यात लक्ष्मणराव ओक, संत बामणगांवकर, व बुलढाण्याचे रा. अं. कानिटकर यांना कार्यमंडळात स्थान देण्यात आले. पक्षाची कचेरी यवताळ येथे ठेवण्यात आली. रा. अं. कानिटकर यांनी लवकरच बुलढाणा जिल्हयात दौरा करून स्वराज्य पक्षाचे बळ व सभासद संख्या वाढविली. स्वराज्य पक्षाचे 'उत्तम संपटक' म्हणून त्यांनी लवकरच ख्याती मिळविली. त्यांनी स्वराज्य पक्ष बळकट करण्यासाठी बापूजी अणे व त्यांच्या सहकाऱ्यांमार्फत जनतेचे मत अनुकूल करून घेण्याकरिता म. १९२३ मध्ये 'बऱ्हाड-मध्यप्रांताची संयुक्त परिषद' बुलढाणा येथे घेतली. या परिषदेचे अध्यक्ष देशबंधू चित्तरंजन दास होते.

सप्टेंबर १९२३ मध्ये आगामी निवडणुका लढविण्याचा निर्णय झाल्यावर बऱ्हाड मध्ये स्वराज्य पक्षाच्या ठिकठिकाणी सभा व परिषदा भरून स्वराज्य पक्षाला पाठींबा मिळाला. स्वराज्य पक्षाबद्दल जनतेमध्ये अनुकूल वातावरण तयार झाले. अमरावतीच्या एका सभेमध्ये बऱ्हाड प्रांतिक काँग्रेसमध्ये रा. अं. कानिटकर यांची निवड करण्यात आली. तसेच काँग्रेसच्या नवीन घटनेनुसार नियमाप्रमाणे बऱ्हाड प्रांतिक काँग्रेसने राष्ट्रीय सभेच्या अधिवेशनास पाठविण्यासाठी दहा प्रतिनिधींची निवड करण्यात आली. त्यानुसार रा. अं. कानिटकर हे ग्या येथील राष्ट्रीय सभेच्या अधिवेशनास गेले.

कौन्सिल प्रवेशाची बंदी उठताच, असेव्ही व कौन्सिलच्या निवडणुकांची तयारी बऱ्हाड स्वराज्य पक्षाने सुरू केली. ठिकठिकाणी प्रचार सभा-व्याख्यानांद्वारे जनजागृती करण्यात आली. रा. अं. कानिटकर हे सामाजिक, आर्थिक व शेतकऱ्यांचे प्रश्न घेवून यावेळी चळवळ-प्रचार करित होते. याद्वारे जनतेला आपल्या अधिकाऱ्यांची जाणीव करून देत होते. प्रांतिक कौन्सिलसाठी पश्चिम बऱ्हाडातून रा. अं. कानिटकर यांची उमेदवारी निश्चित करण्यात आली. मध्यप्रांत-बऱ्हाड प्रांतिक कौन्सिलमध्ये ७० पैकी ४५ सभासद बऱ्हाड स्वराज्य पक्षाने जिंकल्या. त्यात रा. अं. कानिटकर यांचा समावेश होता. त्यांची कौन्सिलमधील कामगिरी वैशिष्टपूर्ण ठरली. त्यांनी मार्च १९२५ च्या प्रांतिक कौन्सिलच्या अधिवेशनात एक महत्त्वपूर्ण उराव मांडला, तो असा होता, 'पंचायत स्थापनेकरिता डी. सी. ने कार्यवाही करावी व बिनासकारी प्रयत्नांना मदत करावी' त्यांनी मांडलेला हा उराव कौन्सिलमध्ये पास करण्यात आला. यामुळे यांच्या प्रयत्नांनी स्थानिक स्वराज्य संस्थांचा विकास झाला. पंचायत स्थापनेमागे त्यांना महत्त्वाची स्थान देता येईल. त्यांच्या प्रयत्नांना यश येवून, बऱ्हाडात ग्रामपंचायती स्थापन

भारतातील राजकीय व सामाजिक चळवळी / २२१



करण्यात आल्या.

दासबंधूच्या मृत्युनंतर स्वराज्य पक्षाला चंद्रग्रहण लागले. वऱ्हाडातील बहुतांश नेत्यांनी असेंब्ली सदस्यत्वाचे राजीनामे देवून स्वराज्य पक्षातून बाहेर पडले. बी.जी. खापडे, डि.के.काणे, रा. अ. कानिटकर यांनी असेंब्लीचे राजीनामे दिले. डॉ. मुंजे व रा. अं. कानिटकर यांचा राजीनामा स्वीकारण्यात आला. यानंतर राजीनामे दिलेल्या सदस्यांनी दि. १४ फेब्रुवारी १९२६ रोजी अकोला येथे प्रतिसहकार पक्षाची प्रतिष्ठापना केली.

रा. अ. कानिटकर यांची गोल्मेज परिसरेतील कामगिरी

वऱ्हाडाची स्थिती सुधारण्यासाठी आणि त्याला स्वतंत्र दर्जा देण्यासाठी तत्कालिन वऱ्हाडाच्या आमदारांनी फार मोठे प्रयत्न चालविले गेले. त्यासाठी 'स्वतंत्र वऱ्हाड संघ' स्थापन करण्यात आला. याद्वारे गोल्मेज परिसरेकडे वऱ्हाडसंबंधी एक निवेदन पाठविले गेले. या निवेदनावर मध्यप्रान्त-वऱ्हाडातील १८ आमदारांसह रामचंद्र अंतर्गत कानिटकर-राल. एम. सी. वेस्ट बेगार, यांच्या सहया होत्या.

वऱ्हाडाच्या जनतेला आपल्या अधिकाराची मागणी करण्याकरिता व आपल्याप्राप्ती भावना व्यक्त करण्याकरिता वऱ्हाडातील नेत्यांनी एक वऱ्हाड सर्वपक्षीय समिती स्थापन केली. या समितीचे अध्यक्ष लोकनायक बापुजी अणे तर सचीव रा. अ. कानिटकर यांची निवड करण्यात आली.

वऱ्हाडाच्या समस्यांचा विचार करण्याकरिता दि. १ व २ जून १९३१ रोजी खामगांव येथे सरदार वल्लभभाई पटेल यांच्या अध्यक्षतेखाली 'वऱ्हाड प्रांतिक सर्वपक्षीय राजकीय परिषद' भरविण्यात आली. भावी घटनेत वऱ्हाडला काहीतरी निश्चित स्थान प्राप्त झाले पाहिजे या हेतूने खटपट करण्याकरिता ही परिषद घेण्यात आली होती. वऱ्हाड प्रांतीचा दर्जा हिंदुस्थानच्या भावी घटनेत इतर प्रांतांच्या बरोबर असावयास पाहिजे, असे मत या परिषदेत व्यक्त करण्यात आले. विदर्भ राज्य स्वतंत्र केल्यास ते स्वयंपूर्ण व स्वातंत्र्य ही होवू शकते, हे विदर्भाचे उत्पन्न व खर्च लक्षात घेवून ठरविण्यात आले. विदर्भ जर मध्याप्रान्ताशी जोडलेला राहिला तर विदर्भाचे राजकीय व आर्थिक दृष्टीने नुकसान आहे, असे ठरावात मांडण्यात आले. या परिषदेत रा. अ. कानिटकर यांची भूमिका अत्यंत महत्त्वपूर्ण ठरली. या परिषदेत त्यांच्या पत्नी श्री. माईसाहेब कानिटकर उपस्थित होत्या.

दि. २८ जुलै १९३१ रोजी वऱ्हाड प्रांतिक सर्वपक्षीय कमिटीने निर्णय घेवून खंडन येथे होणाऱ्या दुसऱ्या गोल्मेज परिषदेत रा. अ. कानिटकर वकील यांना वऱ्हाडाच्या प्रश्नासंबंधी सर्व कारवाई करण्यासाठी पाठविण्यात यावे असे ठरविण्यात आले. रा. अं. कानिटकर यांनी यासाठी मान्यताही दिली. रा. अ. कानिटकर यांच्या कायदेमंडळातील कार्यकुशल व अभ्यास कामगिरीवरून, त्यांच्या



२२२ / अथर्व पब्लिकेशन्स

पक्षातील विचारी व क्रियावान सभासदांचा विश्वास त्यांनी संपादन केला होता आणि म्हणूनच वऱ्हाडाची कैफियत सरकार आणि संसद यांच्यापुढे मांडण्यासाठी अशा महत्त्वाच्या नातुक राजकारण्यासाठी रा. अ. कानिटकरांची निवड वऱ्हाडातील कार्यकर्त्यांनी केली.

जातीय निवाडावरील रा. अ. कानिटकरांचा हल्ला

दि. १७ ऑगस्ट १९३२ रोजी मॅकडोनाल्ड यांनी घोषित केलेल्या जातीय निवाडावत, हिंदू समाजातील दलीत-असमूह जातीजमातींसाठी विभक्त मतदार संघ देण्यात येतील, असे नमुद करण्यात आले होते. त्यामुळे या जातीय निवाडावर सर्वत्र कडाडून हल्ला चढविण्यात आला. रा. अ. कानिटकरांनी मध्यप्रान्ताच्या कायदेमंडळात जातीय निर्णयावरील चर्चाचा उठाव दि. २६ ऑगस्ट १९३२ रोजी आणला. परंतु या ठरावाच्या चर्चेस दिलेली मुदत न पुरल्यामुळे अर्धवट राहिली. परंतु पुढे मात्र रा. अ. कानिटकर यांनी आपल्या भाषणाद्वारे या जातीय निवाडाविरुद्ध जागृती करण्यास सुरुवात केली. पुणे येथील टिळक स्मारक मंदीरात भरलेल्या, श्वेतपत्रिकेला व जातीय निर्णयाला विरोधी असणाऱ्या महाराष्ट्रातील सर्व पक्षांच्या परिषदेत कानिटकर यांनी आपल्या भाषणात श्वेतपत्रिकेवर सडेतोड टीका केली. 'पांड्या खलिच्यात हिंदुस्थानला जे हक्क देण्यात आले आहेत, त्यांची उभारणी अविश्वासावर झाली आहे. म्हणून ती व्यवहारात उपयोगी पडणार नाही. त्यात हिंदुस्थानचे राजकीय नुकसान झाले आहे. जातीय निर्णय हा पांड्या खलिच्याचा पाया आहे' असे रा. अ. कानिटकर यांनी स्पष्ट केले.

१९३५ मध्ये सरकारने आगामी राज्यघटनेसंदर्भात जॉईंट सिलेक्शन कमिटी रिपोर्ट प्रसिद्ध केला. परंतु रिपोर्टचा ठिकठिकाणी विरोध करण्यात आला. निषेध सभा घेण्यात आल्या. मध्यप्रान्त कायदेमंडळात या रिपोर्ट बाबतीत मते व्यक्त केली गेली. रा. अ. कानिटकर यांनी रिपोर्टवर आपल्या भाषणातून विरोधी व्यक्त केले. त्यांनी आपल्या रांगभूमीतील भाषणशैलीत नामदार राव यांना जाब विचारले. नामदार प्रॉस्टींग करीत होते. अशाप्रकारे वऱ्हाड-विदर्भातील कौन्सिलरांनी मध्यप्रान्त कायदेमंडळात जॉईंट सिलेक्शन कमिटी रिपोर्टचा निषेध करीत, बहुमताने हा रिपोर्ट फेटाळून लावला. अशाप्रकारे कायदेमंडळात देखील त्यांनी कामगिरी महत्त्वपूर्ण बजावलेली दिसते.

१९३९ मध्ये दुसरे महायुद्ध सुरू झाले तेव्हा रा. अ. कानिटकरांची भूमिका वेगळी होती. परंतु ती देशहित साधणारी होती. या लढयात दोस्त राष्ट्रांच्या बाजूने राहण्यात भारताचे हित आहे असे त्यांचे मत होते. या संधीचा फायदा घेवून भारतातील तरुणांनी सैन्य, आरमार व नाविक दलात प्रवेश करून घेवून

भारतातील राजकीय व सामाजिक चळवळी / २२३

लष्करी शिक्षण संपादण्याची संधी साधावी असे त्यांना वाट होते. ते वीर लावकरांच्या विचारांचे समर्थक होते. १९४२ ते १९४५ याकाळात रा. अं. कानिटकर हे नॅशनल वॉर फ्रंटचे प्रांतिक संघटक होते. भारतात युद्ध मद्दतीस काँग्रेसचा उघड विरोध असल्याने जनमत युद्धप्रयत्नास पोषक निर्माण करावयाचे होते. त्यांनी हे प्रचारकार्य मध्यप्रदेशाच्या दहा मराठी जिल्हयात सातत्याने व निष्ठेने केले होते. यानंतर त्यांनी अखिल भारतीय हिंदू महासभेचे कार्य केले. ते नवी दिल्ली कार्यालयाचे सचिव सुद्धा होते. शंकरराव देव यांच्या नेतृत्वाखाली सुरू झालेल्या संयुक्त महाराष्ट्राच्या लढयात ते सहभागी झाले. संयुक्त महाराष्ट्रात वऱ्हाड का घालवा? याबाबत त्यांनी स्वतःचे प्रतिपादन उत्तम रितीने केले. ते संयुक्त महाराष्ट्राच्या शिष्टमंडळात विदर्भातील सदस्य होते. अशा या वऱ्हाडातील अग्रगण्य नेता आणि घटनापंडीत दि. १ जून १९६२ रोजी बुलडाणा येथे काळाच्या पडद्याआड गेले.

संक्षेप ग्रंथ

1. Joshi, Dr. P. L. [Edi]: Political Ideas and Leadership in Vidharbha, Sponsored by Silver Jubilee Committee, Dept. Of Political Science & Public Administration, Nagpur University, Edition: 1980
2. कानिटकर नागेश रामचंद्र (सं. अं): रा. अं कानिटकर जीवनचरित्र, प्रकाशक: नागेश रामचंद्र कानिटकर, बुलडाणा, १९६८.
3. कांउत्तर, मि. रे.: अमरावती शहराचा इतिहास, प्रकाशक: श्री. दा. मुळे, मुख्यधिकारी, नागरपालिका, अमरावती, १९७८.
4. बक्काणी, डॉ. नि. आ.: आधुनिक विदर्भाचा इतिहास, प्रकाशक: श्री मंगेश प्रकाशन, नागपूर, १९८५.
5. देशपांडे, अ. के.: बुलडाणा जिल्हयातील स्वातंत्र्यलढा, प्रकाशन: ऑगस्ट क्रांती सुवर्ण महासभे समिती, मुंबई, १९७२.
6. कुळकर्णी, आबासाहेब: वऱ्हाडाची स्वातंत्र्यसेवा, प्रकाशन: काँग्रेस सुवर्ण महासभे समिती, अकोला, दि. २८ डिसेंबर १९३५.
7. उदासी, बि. ना.: दैनिक मुद्रीका, वऱ्हाड स्वातंत्र्य संग्राम विवोशांक, प्रकाशक: दै मुद्रीका प्रकाशन, सुदर्शन प्रेस, अकोला, १९८६.
8. फडके, यशवंत दिवाकर: विसाव्या शतकातील महाराष्ट्र, १९२१-१९२९, खंड-३, प्रकाशक: रत्नांपा कुंभार, सासवड पुणे, श्रीविद्या प्रकाशन, २५०, शनिवार चेट, पुणे, १९९१.
9. सीतारामया, डॉ. बी. परटमि: संक्षिप्त काँग्रेसका इतिहास, १८८५-१९४७, प्रकाशक: मॉर्टड उपाध्याय मंडळ, नई दिल्ली, १९५८.
10. वेडा डॉ. सुमन, कोठेकर डॉ. शशांग/आधुनिक भारताचे इतिहास, १८५७-१९२०, प्रकाशक: ललिता प्रतापिक, श्री साहय प्रकाशन १, धरमपेट, नागपूर, १९९६
11. चौधरी, के. के: भारतीय स्वातंत्र्य संग्राम और महाराष्ट्र, प्रकाशक: शांताराम सागणे, सुचना एवं जनसंपर्क महासंस्थान, महाराष्ट्र राज्य, मुंबई, १९८५.

२२४ / अथर्व पब्लिकेशन्स
Principal
Jijamata Mahavidyalaya
Buldhana

क्रांतीकारी चळवळ

- रुपसिंग दारशरराव तडोड
श्री शिवाजी कला, वाणिज्य व
विज्ञान महाविद्यालय, अकोला

प्रस्तावना

भारतीय स्वातंत्र्य संग्रामामध्ये क्रांतीकारकांनी केलेले कार्य अविस्मरणीय आहे. प्राचीन भारतावर ब्रिटीश राज्यकर्त्यांनी अनेक वर्षे राज्य केल्यामुळे भारतीय जनतेची ब्रिटिश सरकारविषयी नाराजीची भावना निर्माण झाली होती. भारतीय जनतेवर अन्याय, अत्याचार, लाठीमार, बळजबरीने तुरुंगामध्ये टाकणे अशा अनेक घटनेमुळे भारतीय जनतेच्या मनामध्ये ब्रिटिश राज्यकर्त्यांविषयी असंतोषाची भावना हळूहळू निर्माण व्हायला सुरुवात झाली. इ.स. १८५७ मध्ये भारतीय जनतेचे ब्रिटिश राजवटीच्या विरोधात सशस्त्र उठाव केला. हाच उठाव भारताचे पहिले स्वातंत्र्ययुद्ध म्हणून ओळखले जाते. हा उठाव ब्रिटिश सरकारने निर्दयीपणे मोडून काढला. त्यामुळे ब्रिटिश सरकारला संघटीतपणे सशस्त्र लढा देण्याशिवाय पर्याय नाही. ही गोष्ट भारतीयांच्या लक्षात आली. इ.स. १८५७ च्या उठावातील अपयशाने देशात नैराश्य निर्माण झाले असले, तरी ब्रिटिशांच्या विरोधात सशस्त्र उठाव चालूच राहिले.

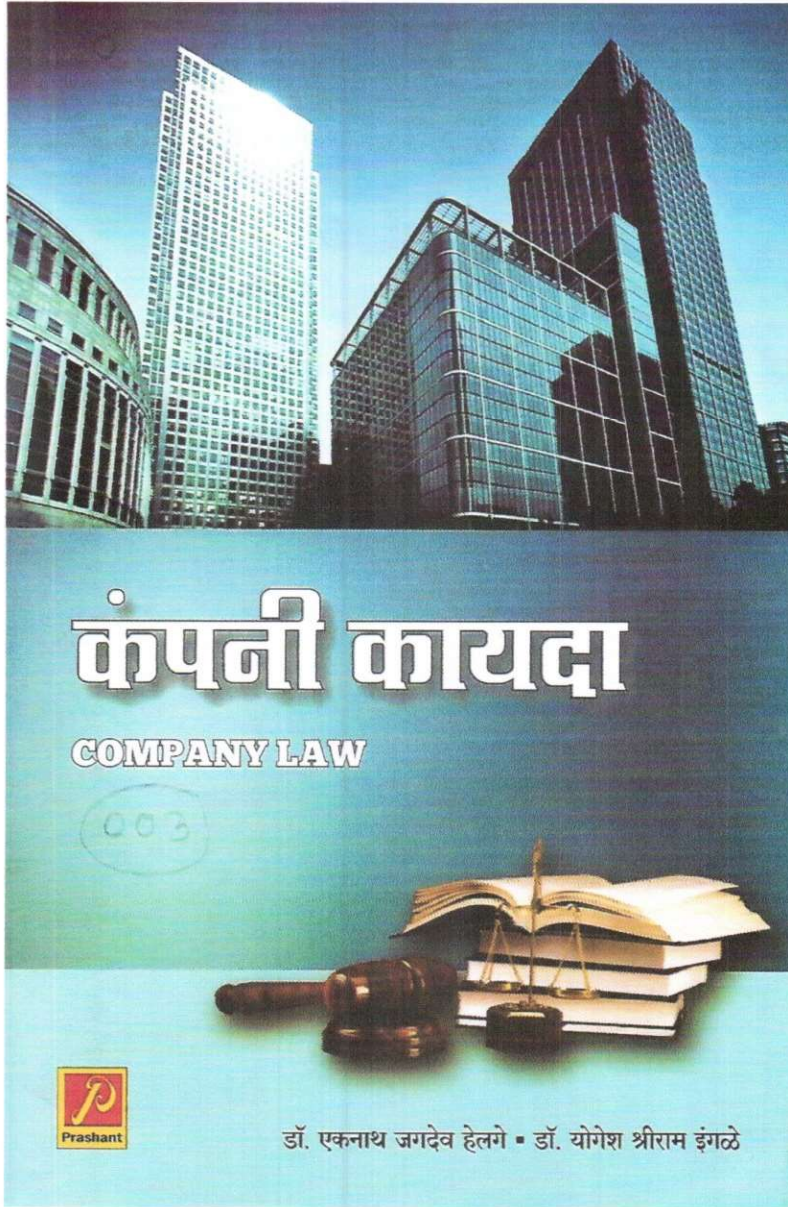
भारत ही शूरवीरांची भूमी आहे. संयम, शांतता, सहनशीलता, सहानुभूती या मातृभूमीचे वैशिष्ट्य आहे. परंतु ज्यावेळी भारतभूमीवर अत्याचार, अन्याय, हिंसाचार निर्माण करण्याचा प्रयत्न झाला त्या त्यावेळी इथल्या जनतेनी एकजूटिने, प्रखरतेने या परिस्थितीला प्रतिउत्तर देण्याचे एकजूटिचे कार्य केलेले आहे. हा या भारत देशाचा इतिहास आहे. ब्रिटिश अधिकाऱ्यांकडून अनेक वेळा दुष्टपशाहीचा प्रयोग करून बळजबरीने अत्याचार करून लूट करण्याचा वेळोवेळी प्रयत्न केला गेला.

भारतीय जनतेकडून ब्रिटिशांच्या अत्याचाराच्या विरोधात सशस्त्र उठाव चालूच राहिले त्यामध्ये महाराष्ट्रातील बासुदेव बळवंत फडके व पंजाबातील रामसिंह कुका व अनुयायांचे उठाव उल्लेखनीय ठरतात. परंतु हे उठाव एका व्यक्तीने प्रेरित केलेले असल्याने ब्रिटिश सरकारने ते सहजपणे दडपून टाकले. एकांगविसाव्या शतकाच्या शेवटी मात्र व्यक्तिनिष्ठ उठावाची जागा संघटित क्रांतीकारी चळवळीने घेतली. ही क्रांतीकारी चळवळ भारतीय स्वातंत्र्यसंग्रामाचे एक अविभाज्य अंग बनली क्रांतीकारी चळवळ म्हणजे प्रखर राष्ट्रवादाचा एक अविभाज्य अंग बनली क्रांतीकारी चळवळ म्हणजे प्रखर राष्ट्रवादाचा एक अंग होती. या चळवळीत अनेक भारतीय तरुणांनी सहभाग घेतला व ब्रिटिश

भारतातील राजकीय व सामाजिक चळवळी / २२४



2019-2020



महाराष्ट्रातील सर्व विद्यापीठांच्या पदवी व पदव्युत्तर वर्गासाठी उपयुक्त.
संत गाडगे बाबा अमरावती विद्यापीठ अमरावतीच्या बी.कॉम. भाग-३ (सत्र ६) च्या
नवीन बदललेल्या अभ्यासक्रमानुसार क्रमिक पुस्तक.
MPSC, UPSC, NET-SET व इतर स्पर्धा परीक्षांसाठीही उपयुक्त.


कंपनी कायदा

COMPANY LAW

Presented by
Dr. E. J. HELGE
Head & Professor & Research Guide
Department of Commerce
Jijamata Mahavidyalaya, Buldhana

डॉ. एकनाथ जगदेव हेल्गे
प्रोफेसर व वाणिज्य विभाग प्रमुख,
जिजामाता महाविद्यालय, बुलढाणा.

डॉ. योगेश श्रीराम इंगळे
श्री शिवाजी कला व वाणिज्य महाविद्यालय,
अमरावती.

 WITH BEST COMPLEMENTS
FROM
AUTHORS AND PUBLISHERS
प्रशांत पब्लिकेशन्स





कंपनी कायदा
Company Law
© सुरक्षित

|| प्रकाशक | मुद्रक
संगराव पाटील

|| प्रशांत पब्लिकेशन्स
3, प्रताप नगर, श्री सत ज्ञानेश्वर मंदिर रोड,
नूतन मराठा महाविद्यालयाजवळ,
जळगाव 425001.

|| दूरध्वनी | वेब | ईमेल
0257-2235520, 2232800
www.prashantpublications.com
prashantpublication.jal@gmail.com

|| आवृत्ती | आयएसबीएन | किंमत
जानेवारी, 2020
978-93-89501-16-2
₹ 175/-


|| अक्षरजुळवणी
प्रशांत पब्लिकेशन्स

या पुस्तकातील कोणताही मजकूर, कोणत्याही स्वरूपात वा माध्यमात पुनःप्रकाशित अथवा संग्रहित करण्यासाठी लेखक/प्रकाशक दोघांचीही लेखी पूर्वपरवानगी घेणे बंधनकारक आहे.


२ | प्रशांत पब्लिकेशन्स



लेखक



प्रोफेसर (डॉ.) एकनाथ जगदेव हेल्गे
एम.कॉम., एम.ए. (अर्थशास्त्र, इतिहास),
बी.एड., पीएच.डी.




डॉ. योगेश श्रीराम इंगळे
एम.कॉम., एम. फिल., पीएच.डी.,
एम.बी.ए (फायनान्स),
एम.ए. (अर्थशास्त्र).जी.डी. सी. अॅन्ड ए.

**संत गाडगे बाबा अमरावती विद्यापीठाच्या
नवीन अभ्यासक्रमानुसार क्रमिक पुस्तके – बी.कॉम. (भाग ३)**

- व्यवसाय नियामक कायदे
- कंपनी कायदा
- व्यावसायिक पर्यावरण
- विकासाचे अर्थशास्त्र
- विमा प्रणाली
- भारतीय बँकिंग प्रणाली
- इंटरनेट आणि वर्ल्डवाईड वेब


- Cost Accounting
- Management Accounting
- Business Regulatory Framework
- Company Law
- Internet and World Wide Web
- Essential of e-Commerce



Prashant


वाणिज्य ₹ 175

ISBN 978-93-89501-16-2



9 789389 501162

www.prashantpublications.com
prashantpublication.jal@gmail.com





कंपनी कायदा
Company Law
© सुरक्षित

प्रकाशक | मुद्रक
संगराव पाटील

प्रशांत पब्लिकेशन्स
3, प्रताप नगर, श्री सत ज्ञानेश्वर मंदिर रोड,
नूतन मराठा महाविद्यालयाजवळ,
जळगाव 425001.

दूरध्वनी | वेब | ईमेल

0257-2235520, 2232800
www.prashantpublications.com
prashantpublication.jal@gmail.com

आवृत्ती | आयएसबीएन | किंमत

जानेवारी, 2020
978-93-89501-16-2
₹ 175/-

अक्षरजुळवणी

प्रशांत पब्लिकेशन्स

या पुस्तकातील कोणताही मजकूर, कोणत्याही स्वरूपात वा माध्यमात पुनःप्रकाशित अथवा संग्रहित करण्यासाठी लेखक/प्रकाशक दोघांचीही लेखी पूर्वपरवानगी घेणे बंधनकारक आहे.

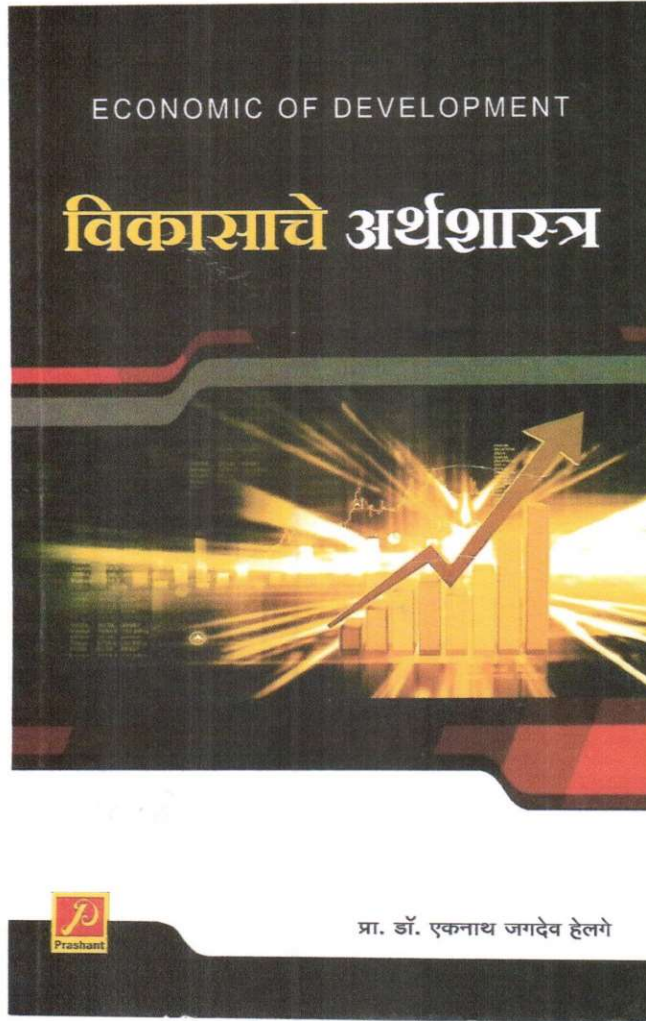
२ | प्रशांत पब्लिकेशन्स



Principal
Jijamata Mahavidyalaya
Buldhana

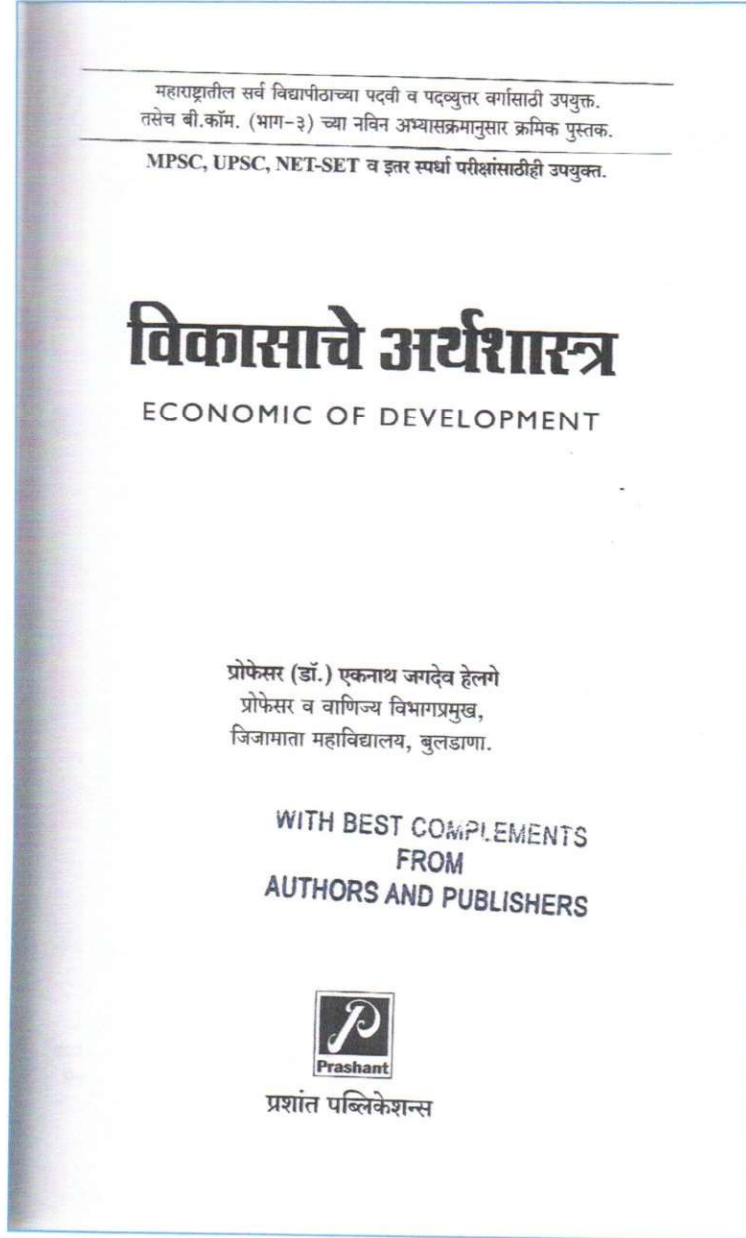


~~2019~~ 2020
2020



Principal
Jijamata Mahavidyalaya
Buldana







विकासाचे अर्थशास्त्र
Economic of Development
© सुरक्षित

■ प्रकाशक । मुद्रक
रंगराव पाटील
प्रशांत पब्लिकेशन्स
3, प्रताप नगर, श्री संत ज्ञानेश्वर मंदिर रोड,
नूतन मराठा महाविद्यालयाजवळ,
जळगाव 425001.

■ दूरध्वनी । वेब । ईमेल
0257-2235520, 2232800
www.prashantpublications.com
prashantpublication.jal@gmail.com

■ आवृत्ती । आयएसबीएन । किंमत
फेब्रुवारी 2020
978-93-89501-35-3
₹ 225/-

■ अक्षरजुळवणी
प्रशांत पब्लिकेशन्स

या पुस्तकातील कोणताही मजकूर, कोणत्याही स्वरूपात वा माध्यमात पुनःप्रकाशित व
संग्रहित करण्यासाठी लेखक/प्रकाशक दोघांचीही लेखी पूर्वपरवानगी घेणे बंधनकारक व

२ । प्रशांत पब्लिकेशन्स





प्रोफेसर (डॉ.) एकनाथ जगदेव हेलगे

एम.कॉम., पीएच.डी., एम.ए., (अर्थशास्त्र, इतिहास), बी.एड.
प्रोफेसर, वाणिज्य व व्यवस्थापन विभाग प्रमुख,
जिजामाता महाविद्यालय, बुलडाणा.

- शैक्षणिक अनुभव (पदवी व पदव्युत्तर पदवी) मध्ये २९ वर्षे.
- संत गाडगेबाबा अमरावती विद्यापीठात Ph.D. चे मार्गदर्शक म्हणून कार्यरत.
- सदस्य, व्यावसायिक अर्थशास्त्र अभ्यास मंडळ, संत गाडगेबाबा अमरावती विद्यापीठ व गोंडवाना विद्यापीठ, गडचिरोली.
- सात संशोधकांना Ph.D. पदवी प्रदान
- विद्यापीठ अनुदान आयोग प्रायोजित लघुशोध प्रबंध पूर्ण (Minor Research Project)
- आंतरराष्ट्रीय व राष्ट्रीय शोधनिबंध प्रकाशित.
- कार्यकारी प्राचार्य पदाचा अनुभव १२ वर्षे (श्री. शिवाजी महाविद्यालय, मोताळा जि. बुलडाणा व जिजामाता महाविद्यालय, बुलडाणा)
- आजिवन सभासद म्हणून Indian Commerce Association, Indian Accounting Associations, Indian Economics Association
- संत गाडगेबाबा अमरावती विद्यापीठ, अमरावतीच्या विविध समित्यांवर कामकाजाचा अनुभव.
- प्रकाशित पुस्तके - १) Income Tax, २) अंकेक्षण, ३) व्यावसायिक नियामक कायदे, ४) कंपनी कायदा, ५) विकासाचे अर्थशास्त्र.



अपेक्षास/वाणिज्य ₹ 225

ISBN 978-93-89501-35-3

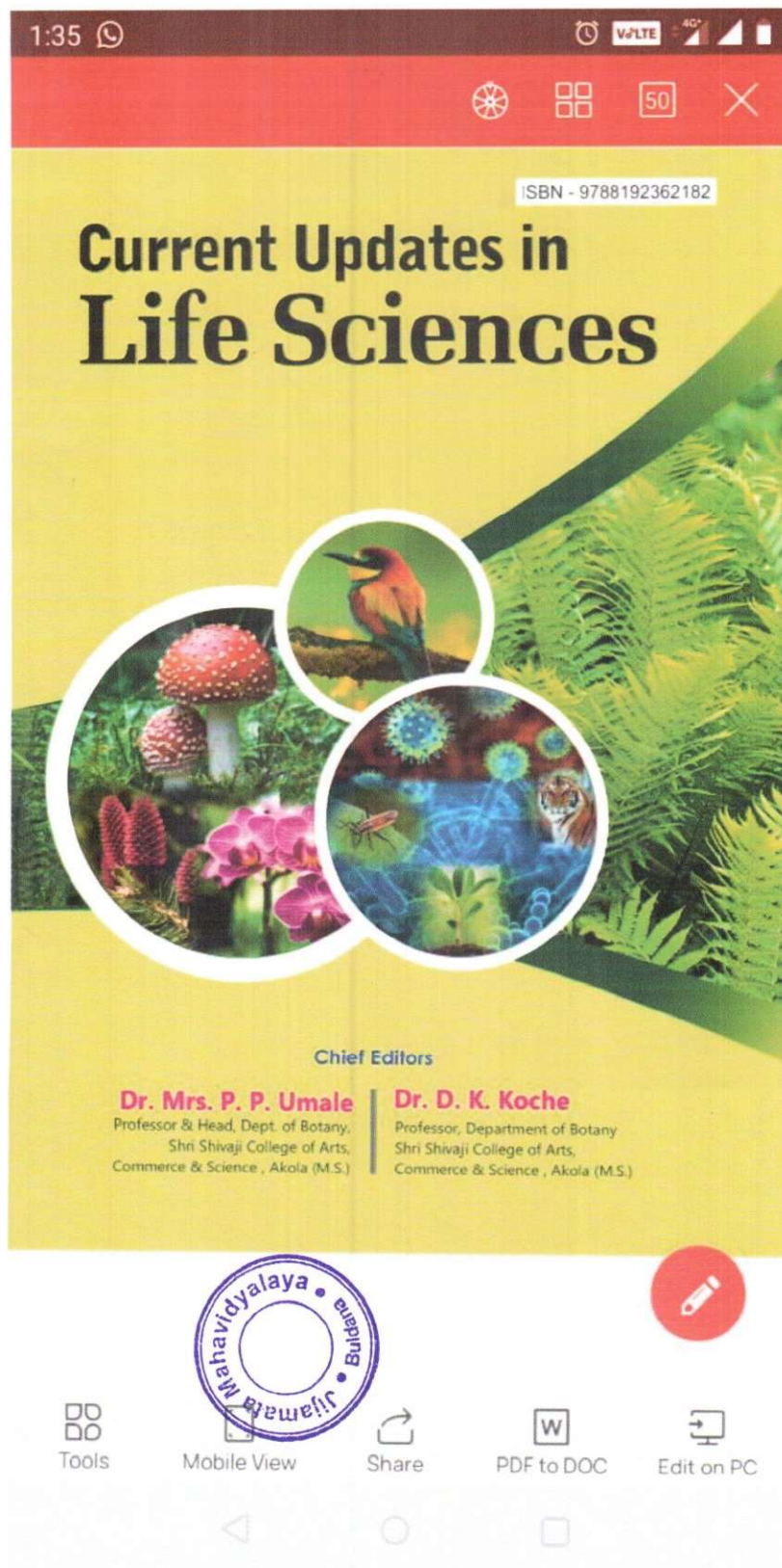


www.prashantpublications.com
prashantpublication.jal@gmail.com



Principal
Jijamata Mahavidyalaya
Buldana





2020-21
2020



	habitats of Pandharkawada Tahsil (MS), India		
54	Diversity of orb-weavers from Satpuda landscape	Anuradha Rajoria	421
55	Birds of Maljura Nature Interpretation Centre Patur District Akola (MS) India	Amrita M. Shirbhate and Milind V. Shirbhate	429
56	Role of spiders for trapping harmful insect from traditional crop around farm field of Dharni Melghat region	R. B. Bahadure and P. M. Makode	434
57	Current status of family Mastacembelidae in Akola District (MS) India	P. S. Dhabe	439
58	Quantitative distribution of bacteria associated with freshwater crab <i>paratelphusa jacquemontii</i> (Rathbun) from Nal-Damayanti Sagar Dam Tq. Morshi Dist. Amravati (MS) India	A. U. Ghaware and R.G. Jadhao	442
59	An intramural study of airborne fungal spores in laboratories of Govt. Institute of forensic science, Nagpur	Bhupali Bhusari, Archana Mahakalkar and Hemant Sapkal	447
60	Effect of Cypermethrin on heartbeat of <i>Periplaneta americana</i>	J. V. Pawara	457
61	Diversity of Gekkonidae species (wall lizards) in Buldhana region (MS) India	V. R. Kakde and A. C. Thakur	462
62	Morphometric and qualitative analysis of Rotifer in upper Morma reservoir, Medshi, Dist-Washim, Maharashtra (India)	M. R. Solanke and D. S. Dabhade	464
63	Preliminary checklist of Damselflies and dragonflies (Insecta, Odonata) of Karanja Sohul Wildlife Sanctuary	Milind Shirbhate and Amrita Shirbhate	474
64	Migration: an environmental fascinating aspect of the birds life	Nilima M. Kankale	481
65	Cladoceran diversity in lentic ecosystem of Shivan reservoir with reference to physicochemical parameters	P. M. Makode and R. B. Bahadure	484
66	Histophysiological alterations caused due to intoxication of Atrazine herbicide in Wistar albino rats (Male).	P. M. Ramteke	496
67	Spider diversity in organic farming of Dr. Panjabrao Deshmukh Krishi Vidhyapith Campus Akola (MS) India	Prakash P. Ade	504
68	Physico-chemical parameter of kumbhar kini dam of yavatmal district (ms) india	Shubhangi B. Misal	520
69	Characterization of Exochelin an extracellular iron chelator Siderophore of <i>Pseudomonas stutzeri</i> of SGM 1 strain	S. D. Adole and S. M. Chavhan	530
70	A new gall midge (Cecidomyiidae: diptera) from Hingoli (MS)	S. S. Bhalerao	538
71	Effect of environment on the different developmental stages of common Mormon butterfly (Lepidoptera: Papilionidae)	Dnyaneshwari M. Satarkar and Nisha V. Warade	542
72	A multifunctional biomaterial: Spider silk	A. S. Sawarkar	547
73	Habitat fragmentation and biodiversity	Sujata Kawade	543
74	Effect of double dose of Carp pituitary extract on the breeding performance of the Snakehead Uurrel, <i>Channa punctatus</i> (Bloch)	Tushar G. Deshmukh	562
75	Diversity of copepods in lentic ecosystem of Sonala Dam, Sonala, Dist. Washim, (MS) India	Ujwala P. Lande	568
76	Allelic frequency of abo and Rh d blood group among the population of endogamous group of Amravati District (MS) India	Sumit Wankhade and Santosh S. Pawar	574
77	Novel covid-19 disease, human health related complications and its prevention	A. S. Pethe	579
78	Lonar lake: Physicochemical qualities of water	A. L. Pawar and P. V. Gadakh	584
79	Application of ash as a natural fertilizer for plant growth	A. A. Balode, S. S. Bhutekar and H.V. Dhanokar	591
80	Probiotication of Papaya juice – an innovative	G. D. Surve, R. R. Pachori and	600



1020-21

DIVERSITY OF GEKKONIDAE SPECIES (WALL LIZARDS) IN BULDHANA REGION (MS) INDIA

V. R. Kakde and A. C. Thakur

Department of Zoology, Jijamata Mahavidyalaya, Buldana (M.S.) India
Email- vrkakde@gmail.com

ABSTRACT:

Lizards typically have feet and external ears. Vision, including color vision, is particularly well developed in most lizards, and most communicate with body language or bright colors on their bodies, as well as with pheromones. Buldhana is the westernmost district of Vidarbha region in Maharashtra, situated in the Tapi and Godavari basins Indian reptiles does not provide a basis for direct verification of the information presented. In this paper annotated checklist of wall lizards (Gekkonidae) in Buldana Town (M.S.) is going to report. Wall lizards were abundant and conspicuous where found. Adults and sub adults were seen almost exclusively around large cover objects (piles of logs and rocks, especially the latter) in open areas, but juvenile lizards were seen most of-ten in lightly vegetated areas, particularly tall, thin grassland were found out in the open away from cover much more frequently than adults. We almost never saw wall lizards in forests.

Key words: Checklist, lizards, Reptiles, annotated, juvenile, abundant, conspicuous

Introduction:

This very agile lizard is well named as it can often be seen basking, hanging from walls or rock faces. It is either green or brown with mottled marking along its flanks, and reaches a length of about 8-inches (20cm) with the tail making up to two thirds its overall length. The sexes apart can be difficult; however the male has a larger head and a thick- set neck. Sometimes the banding along the flanks of the female is more noticeable than that of the male. Females are significantly smaller than the male. It needs wall cavities in which to shelter, but also loose stones at ground-level, under which the lizard lays its eggs. Some vegetation is required to support the food chain of invertebrates, but too much vegetation does not suit this lizard as it is a lover of sunshine and requires open bare areas. Old stone garden walls are a particularly

Current Updates In Life Sciences 462


Principal
Jijamata Mahavidyalaya
Buldana



favouirite habitat, although the wall must have a mix of vegetated portions and open basking spots. There should also be good vegetation at ground level to help to support the food chain. The wall lizard is adept at catching all sorts of invertebrates, with particular favorites' being crickets and grasshoppers, spiders caterpillars and woodlice. It will eat flying insects such as flies, moths and butterflies, and can often be seen athletically jumping to attempt to catch a passing meal. The wall lizard will make use of any dry, frost-free refuge, although it has a strong preference for cracks and voids stone; whether this is in an old stone wall, a cliff face or paving slabs. If stone is unavailable, it will redily make use of any hollows found in debris or rubble. It is an accomplished digger, and will readily burrow if no natural shelter is available.

The district is situated partly in Tapi basin and partly in the Godavari basin. Buldana is situated between 19°.51' and 21 °.17' North latitudes and 75°.57' and which 1,558 sq. km. (1984-85) are constituted of forests, which comes to less than 16% (1984-85) of the total area of the district. The monumental works on Indian reptiles are, 'The Reptiles of British India' by Gunther (1869), 'Fauna of British India - 'Reptilia and Batrachia' by Boulenger (1890) and Smith (1931, 1935, 1943). The work of Smith stood the test of time and forms the standard work on the subject. Further contributions were made by Tiwari & Biswas (1973), Murthy (1994, 2010), Das (2003), Tikedar & Sharma (1992), Das & Bauer (2000), Das (2000), Daniel (2002), Sharma (2007), Das and Vijayakumar (2009), Giri (2008), Giri & Bauer (2008), Giri, et al (2009a), Giri et al (2009b) and Venugopal (2010). In Satara District of Maharashtra, the research belonging to lizards like The diversity and distribution of the Six Families of the Order Squamata was studied by Sayyed and Bhagwat (2009), but no considerable work or study was undertaken in Buldhana district of Maharashtra. Species listings or checklists, which contain such primary and compiled species-occurrence data, play a vital role in providing information on the number of species occurring in different regions across different spatial scales (local, regional, national and global).

Validity of the species listed in the earlier checklists of India published in the past two decades has been reviewed. Among the publications pertaining to reptilian taxonomy and species occurrences in India the works of Malcolm Smith (1931, 1935a, 1943), though more than half a century old, still remains the most important contribution (Das 2003). Over the past two decades many checklists of reptiles of India (Murthy 1985; Murthy 1990; Tikader & Sharma 1992; Das

Current Updates In Life Sciences 463



1997a; Das 2003), sometimes including adjacent countries (Das 1994; Das1996a; Sharma 2002) have been published. An apparent inadequacy of the above-mentioned checklists of Indian reptiles published over the past 20 years is that species with valid distributional records are not differentiated from those with questionable records.

Materials and Methods:

In the present study, the ecology and behavior of lizard fauna in the Buldhana Town (M.S.) was examined. During the study some of the methods and protocols will be followed to study the ecology and diversity of lizards in Buldhana region (M.S). To study the ecology and diversity of lizard fauna in Buldhana Town (M.S). The study will be done in different regions of Buldhana with reference and on basis of availability of the species. After collection and detection it will be photographed and identified with the help of the different bases like phenotypic characters like body, color, shape and size for the identification and study of collected and observed species keys and methods like Daniel (2002) will be used. The statistical analysis of diversity will be made by computer program PAST (Hammer et al. 2001).

Observations and Results:

Presented study was carried out during 2016-17. It reveals 06 species of wall lizards from the study area. Based on the distributional records available, validity of the species listed in the earlier checklists of India published in the past two decades has been reviewed.

Table :1 Annotated Checklists of Lizards observed from Buldana District (MS)

S. N	Family / Species	Common name	IUCN*	Status
	Gekkonidae			
1	<i>Hemidactylus brooki</i>	Brook's house gecko	LC	Rare
2	<i>Hemidactylus flaviviridis</i>	Yellow-green House Gecko	LC	Common
3	<i>Hemidactylus frenatus</i>	Asian house gecko	LC	Frequent
4	<i>Hemidactylus giganteus</i>	Common giant gecko	NE	Rare
5	<i>Hemidactylus leschenaultia</i>	Common bark gecko	LC	Abundant
6	<i>Hemidactylus triedrus</i>	Termite hill gecko	NT	Rare



Discussion:

Gehyra mutilata, Gekko gekko and Gekko smithi are very adaptable to its surroundings, although it usually prefers woodlands, rocky areas, and human dwellings. Hemidactylus are commonly found in Gardens and rocky areas also in agricultural fields. The common wall lizard is a thing of great beauty when seen like this. The ecological impacts of having perhaps one-quarter million introduced lizards running about can't be good, but it is difficult to ascertain with certainty exactly what damage they have done. Wall lizards, given their success, must have had a role in reducing native lizards such as eastern fence lizard and five-lined skink, which are rare or absent where the wall lizard occurs although both used to occur in this area. Brown (1992) made a plea for standardizing the distributional records of Indian reptiles almost two decades ago. However, drawing a standardized format for publishing species checklists is an important task to be undertaken, in order to verify and validate the species occurrence data and also to prevent perpetuation of mistakes. The Conservation Assessment and Management Plan (CAMP) for Indian reptiles (Molur & Walker 1998) which formed the IUCN red list of Indian reptiles used the checklist list provided by Das (1997a) as the starting reference point for the number of reptiles in India. However, Das (1997a) contained many erroneous inclusions and omissions and the standard of reporting does not provide means to directly verify the quality of information presented.

References:

- Boulenger, G.A. (1890) The fauna of British India including Ceylon and Burma: Reptilia and Batrachia, London, viii+541pp.
- Brown, S. B. (1992) Indian herpetofauna: a plea for standardized distributional records. *Hamadryad* 17: 52-53.
- Daniel J. C. (2002) The Book of Indian Reptiles. Bombay History Society, Mumbai. 227 pp.
- Das, I. (1997a) Checklist of the reptiles of India with English common names. *Hamadryad* 22(1): 32-45.
- Das, I. (1997b) A new species of *Cyrtodactylus* from the Nicobar Islands India. *Journal of Herpetology*, 31(3): 375-382.
- Das, I. (2003) Growth of knowledge on the reptiles of India with an introduction to systematic taxonomy and nomenclature. *Journal of Bombay Natural History Society* 100(2&3): 446-501.



Current Updates In Life Sciences 465



- Gunther, C. L. C and Albert. (1864) The Reptiles of British India .Published by Oxford & IBH Publishing Co. New Delhi. 452pp
- Hammer, Ø., Harper, D. and Ryan, P. (2001).. Paleontological statistics software package for education and data analysis. *Paleontologia Electronica*. 4(1): 9
- Molur, S. and Walker, S. (1998) (eds). Report of BCCP CAMP on Reptiles of India. Zoo Outreach Organisation, Coimbatore, India, 65p.
- Murthy, T. S. N. (1985) Classification and distribution of the reptiles of India. *The Snake* 17: 48-71.
- Murthy, T. S. N. (1990). A field book of the lizards of India. Records of the Zoological Survey of India. *Occasional paper* . 115: 1-116.
- Sayyed and Bhagwat (2009) The diversity and distribution of the Six Families of the Order Squamata in Satara District (Maharashtra).
- Sharma, R. C. (2002) The fauna of India and the adjacent countries – Reptilia (Sauria). Vol II. Zoological Survey of India, Kolkatta, 430pp.
- Smith M. A. (1931) The Fauna of British India including Ceylon and Burma. Vol. I. Loricata Testudines. Taylor and Francis, London, 185pp+2 plates
- Smith, M. A. (1935a) The Fauna of British India including Ceylon and Burma. Reptilia and Amphibia. Vol. II Sauria. Taylor and Francis, London. 440pp+1 plate.
- Smith, M. A. (1935b) Some notes on the monitors. *Journal of Bombay Natural History Society* 35: 615-619.
- Smith, M. A. (1943) The Fauna of British India Ceylon and Burma including the whole of the Indo-Chinese region. Vol. III. Serpentes. Taylor and Francis, London, 583pp+1 map.
- Tikader B. K. and Sharma, R. C. (1992) Handbook of Indian Reptiles. Zoological Survey of India, Kolkatta, 250pp+42 plates.
- Tiwari, K. and Biswas S. (1973) Two new reptiles from the Great Nicobar Island. *Journal of Zoological Society of India*, 25(1&2): 57-63.
- Venugopal, P. D. (2010) An updated and annotated list of Indian lizards (Reptilia: Sauria) based on a review of distribution records and checklist of Indian reptiles. *Journal of Threatened Taxa*. 2(3):725-738.


Principal
Jijamata Mahavidyalaya
Buldana



Current Updates In Life Sciences 466



2020
2019-20

प्रियदर्शिना इंदिरा गांधी



। डॉ. उमाकांत चानखेडे



Principal
Jijamata Mahavidyalaya
Buldana



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

01

प्रियदर्शिनी इंदिरा गांधी

जीवन आणि कार्य**Editor****Dr. Wankhede Umakant**


(M.A. M.Phil., Ph.D)


Printed by: Harshwardhan Publication Pvt.Ltd. Published by Ghodke Archana Rajendra & Printed & published at Harshwardhan Publication Pvt.Ltd., At.Post. Limbaganesh Dist, Beed -431122 (Maharashtra)

Harshwardhan Publication Pvt.Ltd.
At.Post.Limbaganesh, Tq, Dist. Beed
Pin-431126 (Maharashtra) Cell:07588057695, 09850203295
harshwardhanpubli@gmail.com, vidyawarta@gmail.com
Reg.No.U74120 MH2013 PTC 251205
All Types Educational & Reference Book Publisher & Distributors www.vidyawarta.com

Principal
Jijamata Mahavidyalaya
Buldana



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य	02
प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य	
© डॉ. उमाकांत वानखेडे 9421336952	
❖ Publisher : Harshwardhan Publication Pvt.Ltd. Limbaganesh, Dist. Beed (Maharashtra) Pin-431126, vidyawarta@gmail.com	
❖ Printed by : Harshwardhan Publication Pvt.Ltd. Limbaganesh, Dist. Beed, Pin-431126 www.vidyawarta.com	
❖ Page design & Cover : Shaikh Jahuroddin,Parli-V	
❖ Edition: December 2020	
ISBN 978-93-85882-65-4	
❖ Price : 499/-	
	
All Rights Reserved, No part of this publication may be reproduced, or transmitted, in any form or by any means, electronic mechanical, recording, scanning or otherwise, without the prior written permission of the copyright owner. Responsibility for the facts stated, opinions expressed. Conclusions reached and plagiarism, If any, in this volume is entirely that of the Author. The Publisher bears no responsibility for them. What so ever.Disputes, If any shall be decided by the court at Beed (Maharashtra, India)	
http://www.printingarea.blogspot.com	
ISBN 978-93-85882-65-4	



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

04

INDEX

01)	THE HISTORY OF INDIA AS THE ASSASSINATION OF INDIRA GANDHI Dr Aminur Islam Sk, Gauripur (Assam)	09
02)	Indira Gandhi: India's Greatest Women's Political Leadership Dr. R. K. Kale, Beed	11
03)	THE ROLE OF INDIA AS WELL AS INDIRA GANDHI IN THE EMERGENCE OF Mahesh Prabhakar Ratnaparkhi Badnapur, Jalna.(M.S.)	15
04)	ROLE OF INDIRA GANDHI IN THE ECONOMIC DEVELOPMENT OF INDIA Mehzabeen Sultana, Cotton University	21
05)	A short story on Life and Work of Indira Gandhi Aftab Uddin Ahmed, Gauripur (Assam)	23
06)	Domestic Policy of Indira Gandhi Dr. Manoj Somwanshi, Lohara Dist. Osmanabad	26
07)	Indira Gandhi's New Economic Approaches: Dr. Santosh Lobhaji Wankhede, Mantha Dist Jalna.	29
08)	Contributions of Indira Gandhi in the making of Our Nation Mr.Dnyanoba Trimbak Dhage,Nasik	31
09)	India's Bank Nationalization and Vision of Indira Gandhi Mr. Rupesh W. Khubalkar,Umred, Dist.Nagpur	34
10)	Mrs.Indira Gandhi : Epitome of Patriotism and Iron lady of India Dr. Sasane S.S.,Beed/Dr Arjun Galphade,Kaij Dist.Beed	39
11)	इंदिरा गांधी जीवन घटना क्रम प्राचार्य डॉ.पुष्प राज गौतम, सारण बिहार	41
12)	इंदिरा गांधी उत्तराधिकारी के रूप में प्रा.डॉ. कदम एस. एस.,लोहारा जिला उस्मानाबाद	44
13)	इंदिरा गांधी -आपातकाल - १९७५ डॉ. सी .जी.कडेकर, लोहारा, जिल्हा उस्मानाबाद	48

www.vidyawarta.com/03 | http://www.printingarea.blogspot.com

ISBN 978-93-85882-65-4



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

07

40)	इंदिरा गांधी आणि आणिबाणी प्रा.राजेश अनंतराव कांबळे, कन्नड, जि,औरंगाबाद	128
41)	भारतातील कर्तबगार राजकीय महिला नेतृत्व प्रा.शहाणे रंजना प्रल्हादराव, परळी-वैजनाथ जि.बीड	130
42)	इंदिरा गांधी आणि बँकांचे राष्ट्रीय कारण प्रा.डॉ.तानाजी लोखंडे, माणगांव रायगड	132
43)	इंदिरा गांधी यांची अभिनव वानरसेना प्रा.आवटे भाऊ दगडोबा, मठा जि.जालना	134
44)	इंदिरा गांधी यांचे शांती निकेतनातील एक वर्ष प्रा.डॉ.ओचित्ये बी. सी., गंगाखेड जि.परभणी	136
45)	इंदिरा गांधींचे शिक्षण आणि संस्कार प्रा.डॉ.धायगुडे राजाभाऊ भाऊसाहेब, परळी-वैजनाथ जि.बीड	139
46)	इंदिरा गांधी यांच्या कार्याचा आढावा प्रा.दुनघव अशोक ज्ञानोबा, भूम जि.उस्मानाबाद	141
47)	इंदिरा गांधी जीवन आणि कार्य प्रा.डॉ.कंधारे विश्वास शामराव, चौसाळा ता.जि.बीड.	143
48)	इंदिरा गांधी यांची भारतीय राजकारणात भूमिका स्मिता विजय मामीलवाड, लातूर	145
49)	गरीबी हटाव आणि इंदिरा गांधी प्रा.डॉ.मुळे उध्दव माधवराव, परळी-वै. जि.बीड	147
50)	भारताच्या पहिल्या महिला पंतप्रधान इंदिरा गांधी प्रा.निर्वळ उध्दव गणपतराव, पालम	149
51)	इंदिरा गांधी आणि बँकेचे राष्ट्रीयीकरण प्रा.डॉ.पवार रणजित कवरसिंग, कन्नड जि.औरंगाबाद	151
52)	इंदिरा गांधींच्या काळातील भारताचे रशिया व अमेरिकेशी असलेले संबंध डॉ.नामदेव वा. ढाले, बुलडाणा	153

ISBN 978-93-85882-65-4



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

0153

52

इंदिरा गांधीच्या काळातील भारताचे रशिया व अमेरिकेशी असलेले संबंध

डॉ.नामदेव वा. ढाले

सहयोगी प्राध्यापक व इतिहास विभाग प्रमुख
जिजामाता महाविद्यालय, बुलडाणा

कोणत्याही देशाच्या सर्वांगिक विकासासाठी इतर राष्ट्रांशी मैत्रीपूर्ण संबंध ठेवणे महत्वाचे असतात. प्राचीन काळापासून दृष्टीक्षेप टाकला असता भारताचे जगातील इतर देशांशी बऱ्याच प्रमाणात सौहार्दाचे संबंध होते. मात्र भारत जेव्हा ब्रिटीश राजवटीखाली आला तेव्हापासून भारताचे अंतर्गत धोरण असो किंवा परराष्ट्र धोरण हे ब्रिटिश सरकारच ठरवित असे. त्यांच्या वसाहतवादी हेतूने प्रेरित परराष्ट्र धोरणामुळे भारताच्या जगातील इतर देशांशी असणा-या संबंधांमध्ये बद्धत होत गेला. ब्रिटिश सत्ता आपल्या स्वार्थी भूमिकेतून इतर राष्ट्रांशी संबंध ठेवीत असे. त्यामुळे राष्ट्रीय चळवळीतील भारतीय नेत्यांनी देशाचे सार्वभौमत्व, अखंडत्व आणि शांततापूर्ण सहअस्तित्व या तत्वांचर आधारित त्यांनी परराष्ट्र धोरणाचा पुरस्कार केला आणि भारतासंबंधी असणाऱ्या ब्रिटिशांच्या धोकादायक परराष्ट्र धोरणावर वारंवार विरोध दर्शविला. भारतीय स्वातंत्र्य लढा सुरु असतांना भारतीय नेते आंतरराष्ट्रीय देशांच्या घडामोडींचा अभ्यास करीत असत. तसेच त्यांचे अनेक देशांशी संबंध प्रस्थापित झाले. आंतरराष्ट्रीय परिषदांमध्ये सुध्दा काँग्रेसचे प्रतिनिधी उपस्थित राहत असत. त्यामुळे निरनिराळ्या देशातील परिस्थिती, त्यांच्या समस्या यांची माहिती भारतीय नेत्यांना मिळत होती. त्यामुळे परराष्ट्रीय धोरणबाबतचा भारतीय नेत्यांचा दृष्टिकोन व्यापक बनला आणि जागतिक राजकारणात स्वतंत्र भारताची भूमिका कशी राहिल याविषयी कल्पना स्पष्ट होत गेल्या.

स्वातंत्र्यानंतर भारतीय नेत्यांनी ब्रिटिशांच्या धोरणाचा त्याग केला आणि आपल्या देशाच्या स्वहिताच्या दृष्टीने आपले स्वतंत्र धोरण राबविण्यास सुरुवात केली. तत्कालिन भारताचे पहिले पंतप्रधान व परराष्ट्र धोरणाचे शिल्पकार पंडीत जवाहरलाल नेहरू यांनी ब्रिटिश राजवटीच्या परराष्ट्र धोरणातील कटू अनुभव लक्षात घेवून भारताचे परराष्ट्र धोरण आखले. प्रादेशिक अखंडत्वाचे संरक्षण, जागतिक शांतता

राखणे, परराष्ट्रीय धोरण ठरविण्याचे स्वातंत्र्य टिकविणे, भारताचा आर्थिक विकास साध्य करणे, वंशभेदाचे निमूलन करणे, अलिप्तवादाचा स्वीकार करणे, शेजारी असलेल्या राष्ट्रांशी मित्रत्वाचे संबंध ठेवून सहकार्य करणे, साम्राज्यवाद व वसाहतवादाला विरोध करणे, साम्राज्यवादी युद्धांचा धिक्कार करून जागतिक शांतता टिकविण्याचा प्रयत्न करणे ही तत्वे भारताच्या परराष्ट्रीय धोरणाला आधारभूत ठरतील, हे काँग्रेसने वेळोवेळी पास केलेल्या ठरावावरून स्पष्ट झाले होते. 1 अशाच प्रकारच्या परराष्ट्रीय धोरणाचा पुरस्कार श्रीमती इंदिरा गांधी यांनी आपल्या कारकिर्दीत केल्याचे निर्देशनास येते.

लाल बहादूर शास्त्री यांच्या आकस्मिक निधनानंतर श्रीमती इंदिरा गांधी हया दिनांक 24 जानेवारी 1966 रोजी भारताच्या पंतप्रधानपदी विराजमान झाल्या तेव्हा त्यांच्यासमोर अनेक होत्या. त्या एक स्त्री पंतप्रधान असल्यामुळे तर त्यांना विरोधकांचा मोठा सामना करावा लागला. सत्तेवर आल्यावर देशाच्या अंतर्गत समस्यांबरोबरच आंतरराष्ट्रीय संबंध जोपासणे हा सुध्दा महत्वाचा प्रश्न होता. परंतु श्रीमती इंदिरा गांधी हया पं. जवाहरलाल यांच्या कन्या होत्या. त्यांना आपल्या वडीलांकडून देश आणि आंतरराष्ट्रीय पातळीवरील राजकारणाचा अभ्यास झालेला होता. म्हणूनच परराष्ट्र धोरणाच्या क्षेत्रात श्रीमती इंदिरा गांधींनी आपल्या पित्याचे असंलग्नतेचे आणि शांततामय सहजीवनाचे ध्येय कधीही दृष्टीआड होऊ दिले नाही. जवाहरलालांप्रमाणे त्या जागतिक शांतीच्या कष्ट पुरस्कर्त्या होत्या. तसेच परकीय अंमलाखाली असलेल्या राष्ट्रांच्या स्वातंत्र्यप्राप्तीच्या प्रयत्नांना त्यांचा पूर्ण पाठिंबा होता. कोणत्याही प्रकारचे शोषण गहर्णीय आहे, आणि राजकीय व लष्करी गटांमुळे जागतिक शांततेला धोका निर्माण होतो अशीच इंदिरा गांधींची धारणा होती. 2

अमेरिका-रशिया या दोन बड्या राष्ट्रांच्या शीतयुद्धात भारतासमोर आंतरराष्ट्रीय राजनैतिक क्षेत्रात मोठा पेचप्रसंग निर्माण होत होता. साम्यवादाच्या गोटात भारत जाणार की काय अशी सतत भिती अमेरिकेला वाटत होती. त्याच कारणाने जगातील सर्व आर्थिक दुर्बल राष्ट्रांना अमेरिका आर्थिक पुरवठा करीत असे. मात्र भारत कधीही कोणत्याही एका गोटात सहभागी झाला नाही. पं. नेहरूंच्या काळापासून भारताने स्वीकारलेले अलिप्ततावादी धोरण श्रीमती इंदिरा गांधी यांनीही पुढे अमलात आणले.

तटस्थ धोरणाच्या पुरस्कर्त्या श्रीमती इंदिरा गांधी :

शीतयुद्धाचा प्रखर काळ सुरु असतांना पं. नेहरूंप्रमाणेच



ISBN 978-93-85882-65-4



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

0154

आंतरराष्ट्रीय जागतिक राजकारणात कोणत्याही दोन महासत्तांच्या एका गटात सामील न होता तटस्थ्याची भूमिका स्विकारणे इंदिरा गांधींना योग्य वाटले. आणि म्हणूनच सत्तेवर आल्या आल्याच सोव्हित रशियाला भेट देण्यापूर्वी त्यांनी भारत, युगोस्लाव्हिया आणि युनाटेड अरब गणराज्य या तीन राष्ट्रांची एक शिखर परिषद नवी दिल्ली येथे जुलै 1966 मध्ये भरविली. तटस्थ धोरण हे सध्याच्या स्थितीमध्ये भारताला उपकारक आहे हे दाखविण्याचा श्रीमती इंदिरा गांधींचा त्यात हेतू होता.3 इंदिरा गांधींनी तटस्थेचा पुरस्कार करीत इतर देशांशी स्नेहाचे आणि मैत्रीपूर्ण संबंध ठेवण्याचा प्रयत्न केलेला निदर्शनास येतो.

भारत-रशिया संबंध :

1966 च्या जुलै महिन्यात इंदिरा गांधी हया मास्को येथे गेल्या त्यावेळी सोव्हियत नेते त्यांच्याशी अत्यंत सांभाळून वागले. त्यांनी एकदाही आपल्या चर्चेत काश्मीर किंवा रुपयाच्या अवमुल्यानाचा विषय किंवा वॉशिंग्टन हे इंदिरा गांधींवर कसे दडपण आणीत आहे याचा चुकूनही उच्चार केला नाही. उलट इंदिरा गांधींनी जी आश्वासने दिली ती जगाच्या कल्याणाच्या दृष्टीने किती आवश्यक आहेत हे पंतप्रधान कोसिजिन यांनी वारंवार सांगितले. भारत तटस्थ धोरणाचा कधीही त्याग करणार नाही आणि व्हिएतनाममधील प्रतिक्रियावादी अमेरिकन सैन्याचा आम्ही निषेध करतो असेच त्या दिलेल्या वचनात आले होते. यावर अमेरिकेच्या स्टेट डिपार्टमेंटची त्वरित प्रतिक्रिया आणि त्यांनी आपली निराशा व दुःख इंदिरा गांधींना कळविले.4

देशाच्या उन्नतीसाठी किंवा युद्धपेचप्रसंगाच्या काळात रशिया भारताच्या बाजूने सक्षमपणे वारंवार उभा राहिलेला दिसतो. स्वातंत्र्यानंतर अनेक अडीचणीत सापडलेल्या भारताला रशियाने मदत केली होती. भारत-रशिया सल्लोख्याला उपकारक ठरलेली बाब म्हणजे, जागतिक शांतता, वंशवर्णभेद, साम्राज्यवाद व वसाहतवाद विरोध याबाबतची दोन्ही राष्ट्रांची नीती समान होती. 1955 मध्ये पं.नेहरुंनी रशियाला दिलेली भेट तर दोन्ही राष्ट्रांत सामंजस्य व जवळीक निर्माण होण्याच्या दृष्टीने अत्यंत महत्त्वपूर्ण ठरली. त्यांच्या 15 दिवसांच्या मुक्कामात भारताच्या असंलग्नता नीतीबद्दल स्पष्ट कल्पना नेहरुंनी रशियाला दिली होती. पुढेही या दोन राष्ट्रांची मैत्री कायम राहिली.

1970 मध्ये पाकिस्तानमधून आलेले लोकांचे लोंढेच्या लोंढे भारत सरकारपुढे मोठेच राजकीय व आर्थिक समस्या निर्माण करणारे ठरले. भारतापुढे उभ्या ठाकलेल्या गंभीर समस्येबाबत खरी परिस्थिती बडया राष्ट्रांपुढे ठेवण्याच्या हेतूने श्रीमती इंदिरा गांधी यांनी

स्वतः परदेशाचे दौरे केले. पण बडया राष्ट्रांनी कोणतीही हालचाल केली नाही. भारत-पाक युद्ध भडकलेच तर त्यात अमेरिका व चीन यांची गुंतागुंत होईल की काय या धास्तीने जुलै 1971 मध्ये इंदिरा गांधी यांनी आपले परराष्ट्र मंत्री स्वर्णसिंग यांना सोव्हिएत सरकारशी बोलणी करण्याकरिता मास्को येथे पाठविले. या परिस्थितीतून भारत-रशिया करार जन्माला आला.5 यानंतर ऑगस्ट 1971 मध्ये रशियन परराष्ट्र मंत्री ग्रेमिको नवी दिल्ली येथे आले. 9 ऑगस्ट 1971 रोजी स्वतः श्रीमती इंदिरा गांधींनी जी भेट सोव्हिएत रशियाला दिली त्याचा परिणाम म्हणून भारत व रशिया यांच्यात 20 वर्षांकरिता एक मैत्रीचा करार झाला.

चीनने पाकिस्तानातील अंतर्गत कारभारात हस्तक्षेप केला म्हणून रशियाशी हा करार भारताला करावा लागला. भारताने तटस्थ धोरणाचा त्यामुळे त्याग केला असा याचा अर्थ नव्हता. इंदिरा गांधींच्या वस्तुनिष्ठ धोरणाचा तो विजय होता.6 या करारामुळे भारतावर बरीच टिका झाली. हा लष्करी करार आहे, भारताच्या असंलग्नता नीतीला हरताळ फासला गेला आहे, भारत रशियाच्या गोटात सामील होत आहे असे आरोप करण्यात आले. परंतु या करारात लष्करी मदत देण्याची कोणतेही तरतूद नव्हती. तसेच या करारात रशियाने भारताच्या असंलग्नता धोरणाला मान्यता दिलेली होती. राजनैतिक पेचप्रसंगाचेवेळी विचारविनिमय करण्याची तरतूद केवळ प्रादेशिक शांतता टिकविण्याकरीता करण्यात आली आहे, असा तर्कवाद करून श्रीमती इंदिरा गांधींनी विरोधकांचे सर्व आक्षेप खोडून काढले. हा करार म्हणजे वर्षानुवर्षांच्या भारत-रशिया मैत्रीचा परिपाक असून तो भारत-रशिया यांच्याच केवळ नव्हे तर जागतिक शांततेला हितावह ठरणारा आहे असे इंदिरा गांधी म्हणाल्या होत्या. एका फार मोठ्या संकटाला तोंड देण्याकरिता या कराराने भारताला पाठबळ व शक्ती मिळाली. युद्ध भडकलेच तर करारांतर्गत सर्व सहाय्य रशिया भारताला करेल असे आश्वासन रशियन सरकारने भारताला दिले.

1971 च्या भारत-रशिया मैत्री कराराचे चांगले फलित लवकरच दिसून आले. पाकिस्तानने 3 डिसेंबर 1971 रोजी भारतावर आक्रमण केले. याचवेळी अमेरिकेने पाकिस्तानला मदत करण्यासाठी बंगालच्या उपसागरात 'युएसएस' या विमानवाहू नौकेसह 'सातवे आरमार' पाठविले. अशा रितीने अमेरिकेने भारतावर दडपण आणण्याचा प्रयत्न केला. तेव्हा याचा पहिला निषेध रशियाने केला. 'पूर्व बंगालमधल्या पाकिस्तानी सैनिकांचे मनोधैर्य वाढावे आणि भारत सरकारवर जास्तीत जास्त दडपण यावे यामागे अमेरिकन सरकारचा हेतू आहे' असे सोव्हिएत रशियाने जाहीर केले. यावेळी खबरदारी म्हणून भारताने अमेरिकेच्या नौदल हालचालींवर नजर ठेवावी अशा



ISBN 978-93-85882-65-4



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

0155

प्रकारची रशियाला विनंती केली. तेव्हा ताबडतोब रशियाच्या पाणबुड्या आणि अणुशक्तीयुक्त जहाजे 'व्हॅलेंटिया व्हास्क' येथून निघाली आणि त्यांनी अमेरिकेच्या सातव्या नौदलावर निगराणी ठेवण्याचे कार्य उत्तम प्रकारे केले. रशियाच्या या दबावतंत्रामुळे अमेरिकेने भारताविरुद्ध कोणतेही नाविक कार्यवाही केली नाही. रशियामुळेच चीन व अमेरिका ही राष्ट्रे युद्धात हस्तक्षेप करण्यापासून परावृत्त झाली व बांगला देशाची निर्मिती व पाकिस्तानविरुद्धची मोहिम याची सांगता भारताला करता आली. संयुक्त राष्ट्रसंघाने याबाबत भारताविरुद्ध चीन व अमेरिका यांनी आणलेले सर्व प्रस्ताव रशियाने फेटाळून लावले. 1971 च्या या अग्निदिव्यातून यशस्वीरित्या बाहेर पडण्यात रशियाच्या मैत्रीचे महत्त्व भारताला विशेष तीव्रतेने जाणवले. पाकिस्तान व चीनला हाताशी धरून भारताला नमविणे सहज शक्य नाही हे अमेरिकेलाही कळून चुकले.7

1980 मध्ये पुन्हा पंतप्रधान पदाची सूत्रे श्रीमती इंदिरा गांधींनी हाती घेतली. रशिया-अफगाणिस्तानच्या पेचप्रसंगावरून रशियासोबतचे संबंध बिघडण्याच्या स्थितीत असताना मात्र इंदिरा गांधींनी हे संबंध दुरुवू दिले नाहीत आणि त्याचबरोबर आपले परंपरागत घोरणही सोडले नाही. डिसेंबर 1980 मध्ये रशियाचे राष्ट्रप्रमुख लिओनेद ब्रेझ्नेव हे भारताच्या दौऱ्यावर आले. तेव्हा इंदिरा गांधी आणि लिओनेद ब्रेझ्नेव यांच्यात आंतरराष्ट्रीय समस्यांवर चर्चा झाली. तसेच दोन राष्ट्रांत पाच नवे करार झाले. इंदिरा गांधींच्या कारकिर्दीत भारत-रशिया सहकार्याच्या कक्षा विस्तारित गेल्या. हया वाढत्या सहकार्याचे प्रतीक म्हणजे रशियन अवकाशयानातून रशियन अवकाशवात्री बरोबर राकेश शर्मा यांनी केलेला अवकाश प्रवास होय. इंदिरा गांधींच्या आंतरराष्ट्रीय शांतता टिकावण्याच्या मौलिक कार्याबद्दल रशियनांना वाटणाऱ्या आदराचे प्रतिक म्हणून त्यांना 'आंतरराष्ट्रीय लॅनिन पुरस्कार' हा रशियातील सर्वोच्च पुरस्कार देण्यात आला. हे भारतवासियांसाठी गौरोवाची बाब होती.

भारत-अमेरिका संबंध :

जागतिक राजकारणाबाबत भारताने स्वीकारलेले अलिप्ततावादी घोरण व त्या घोरणाच्या आधारावर आशिया व आफ्रिका खंडात नव्या राष्ट्रांना संपटित करण्याचा भारताचा प्रयत्न वाकियेव्या अमेरिकेच्या मनात तीव्र नाराजी होती. 1947 पासून पाकिस्तानविरुद्धच्या प्रत्येक युद्धाच्यावेळी पाकिस्तानलाच अमेरिकेचा पाठिंबा होता. संयुक्त राष्ट्रसंघाच्या देखरेखीखाली काश्मीरमध्ये सार्वमत घेण्याचा अट्टहास देखील अमेरिकेने धरला होता. गोवा मुक्ती वेळचे अमेरिकेचे घोरणही भारताला प्रतिकूल व जाचक ठरणारेच होते. हे सर्व अमेरिकेच्या बाबतीतील उदाहरणे म्हणजे अमेरिकेच्या

भारताविरुद्धी नीतीचाच एक भाग होता असे निदर्शनास येते. परंतु तरीही भारताच्या दुर्बल अर्थव्यवस्थेला सावरून धरणे व बळकटी आणणे या हेतूने थोड्या प्रमाणात का होईना, अनुदान, कर्ज, तांत्रिक मदत या स्वरूपात भारताला अमेरिकेने आर्थिक मदत देणे सुरुच ठेवले. ही आर्थिक मदत देत असताना भारताचे परराष्ट्रीय धोरण अमेरिकेच्या मर्जीनुसार साकार व्हावे असा प्रयत्न अमेरिका सतत करीत होती त्यासाठी कर्ज देताना काही अटी अमेरिका घालत होतीच. अमेरिकेचा हा राजनैतिक दबाव भारताला बऱ्याच वेळा फार मोठा अडथळा ठरत होता.8

1964 मध्ये अमेरिकेचे अध्यक्ष जॉनसन यांनी तत्कालिन पंतप्रधान लाल बहादुर शास्त्री यांची अमेरिका भेट ऐनवेळी रद्द केली होती. त्यामुळे ते इंदिरा गांधींना भेटण्याकरिता उत्सुक होते. श्रीमती इंदिरा गांधी यांची स्वतंत्र जगाविषयी काय भूमिका आहे आणि त्या कशा प्रकारच्या संबंध ठेवू इच्छितात हे जाणून घेण्याची जॉनसन यांना उत्कंठा होती. तसेच शास्त्रीबाबत झालेल्या दुर्व्यवहाराबाबत त्यांना स्पष्टीकरण द्यावयाचे होते आणि दिलगिरी सुध्दा व्यक्त करावयाची होती. अशा पार्श्वभूमीवर श्रीमती इंदिरा गांधी आणि अमेरिकेचे अध्यक्ष जॉनसन यांची भेट घडून आली. प्रत्यक्ष भेट अतिशय सौहार्दपूर्ण वातावरणात झाली आणि अमेरिका व भारत यांच्यात असलेले अनेक गैरसमज दूर झाले.9

एवढेच नव्हे तर या भेटीतून भारताला आर्थिक संकटातून बाहेर पडण्याचा मार्ग मिळाला. तो म्हणजे अमेरिकेची सर्व द्वार मदतीसाठी उघडण्यात आली होती. आर्थिक मदतीसाठी श्रीमती इंदिरा गांधी स्वतः मार्च 1966 मध्ये अमेरिकेला गेल्या. तेथे त्यांचे जोरदार स्वागत झाले. त्यांचे देखणेपण, सद्भिरीची दर्शविणारा त्यांचा पोशाख, त्यांचे सुसंस्कृत व प्रतिष्ठित वागणे बोलणे व भारतासारख्या विशाल देशाची पहिली स्त्री-प्रधानमंत्री या सर्व गोष्टींमुळे वृत्तपत्रांनी त्यांच्या भेटीला चांगलीच प्रसिध्दी दिली. काही अटीवर अमेरिका-भारत यांच्यात रुपयाच्या अवमुल्यनाबाबत करार झाला. 5 जून 1966 रोजी 35 टक्यांनी रुपयाचे अवमुल्यन करण्यात आले. तसेच 3.5 टन धान्य, प्रकल्पासाठी मदत, उद्योगधंद्यासाठी भांडवल, कच्चा माल, अमेरिकन उद्योगपतींची मदत यासंदर्भात मदतीची विनंती अमेरिकेला करण्यात आली. अमेरिकेने ही विनंती उत्सुकतेने मान्य केली. याबाबत श्रीमती इंदिरा गांधींवर सर्वच राजकीय पक्षांनी व शिक्षणतज्ज्ञांनी टिकेचे काहूर उठविले. नेहरूंच्या नीतीपासून इंदिरा गांधी दूर जात आहेत अशी टिका त्यांच्यावर होऊ लागली. परंतु इंदिरा गांधींचा हा दौरा भारताच्या दृष्टिकोणातून फायदयाचा ठरला. भारत आणि अमेरिका यांचे असलेले अनेक गैरसमज दूर झाले. यावेळी अमेरिकेकडून



ISBN 978-93-85882-65-4



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

0156

भारताला बरीच मदत मिळाली होती. अमेरिकेच्या मदतीबिबत विरोधकांनी आक्षेप घेतला तेव्हा परकीयांची मदत घेऊन येणारा समाजवादसुद्धा आपण स्वीकारला पाहिजे इंदिरा गांधींनी असे विरोधकांना स्पष्टीकरण दिले. आपण जर परकीयांची मदत घेतली नाही तर सामान्य माणसांच्या हाल-अपेष्टांना सीमा राहणार नाही असा श्रीमती इंदिरा गांधींच्या म्हणण्याचा अर्थ होता.10

श्रीमती इंदिरा गांधींच्या काळात शास्त्रात निर्मितीच्या क्षेत्रात भारताने वेगवान प्रगती केली. विस्कटलेल्या आर्थिक घडीवर सुद्धा जोमाने मात केली. त्यामुळे असंलग्न राष्ट्रगटात भारताची प्रतिष्ठा चांगलीच उंचावली. या सर्वच गोष्टी अमेरिकेला अस्वस्थ करणाऱ्या होत्या. पण भारताविरुद्ध अमेरिकन सरकार अत्यंत संतप्त झाले ते 1971 च्या भारत-पाक युद्धानंतर. या युद्धाच्यावेळी अमेरिकेने उघडपणे पाकिस्तानची बाजू घेतली. भारत अमेरिकन गटात सामील न झाल्याबद्दल अमेरिकेचा भारतावर रोष होताच. तसेच यावेळी चीनकडूनही भारताविरुद्ध चांगलाच प्रतिसाद मिळत गेला. अशाप्रकारे रशिया व भारत यांच्या विरोधात पाकिस्तानला अमेरिकेने खंबीरपणे उचलून धरले. अमेरिका-चीन सलोखा या भारत-पाक युद्धाच्या काळात स्पष्ट झाला. 1971 च्या युद्धात भारताला विजय मिळाल्यामुळे तर अमेरिका अजूनच संतप्त झाला.11

भारताच्या संदर्भात अमेरिकेला खूपणाऱ्या आणखीही काही घटना श्रीमती इंदिरा गांधींच्या कारकिर्दीत घडल्या होत्या. 1971 च्या युद्धात पाकिस्तानला अनुकूल भूमिका घेतलेल्या इराणशी, इंदिरा गांधींच्या राजकीय चातुर्यामुळे भारताचे मित्रत्वाचे संबंध प्रस्थापित झाले होते. तिसऱ्या जगात असंलग्न राष्ट्र एक अव्वल दर्जाचे राष्ट्र म्हणून भारताची प्रतिष्ठा उंचावली होती. इंदिरा गांधींच्या या यशात 1974 मध्ये आणखी एक मोलाची भर पडली आणि तोपर्यंत भारताकडे काहीशा अवहेलनेने बघणारे जग एकदम खडबडून जागे होऊन भारताकडे आश्चर्याने पाहू लागले. ही घटना म्हणजे राजस्थानच्या वाळवंटी भूभागात भारताने केलेली अणुचाचणी. भारताने केलेल्या या पहिल्याच यशस्वी अण्वस्त्र चाचणीमुळे अमेरिकन राष्ट्र रुष्ट झाले. भारताने अणुशक्ती चाचणी यशस्वीपणे केल्यापासून अमेरिका, इंग्लंड व पच्छिम जर्मनी या राष्ट्रांची हेरखाती सक्रिय झाली आहेत व भारताच्या आर्थिक अडचणींचा फायदा घेऊन ती देशात असंतोष व अराजक पसरवित आहेत, जनतेला सरकारविरुद्धी उठवावा उद्युक्त करीत आहेत असे इंदिरा गांधींनी खाजगी संभाषणातून बोलूनही दाखविले होते. 1975 च्या आणबाणी परिस्थितीतही लोकशाहीची गळचेपीचा मुद्दा धरून अमेरिकेने भारताविरुद्ध प्रचार केला.12 1980 साली पृथा श्रीमती इंदिरा गांधी पंतप्रधान झ

गल्यानंतर त्यांनी अमेरिकेसोबत सलोखा राखण्याचा प्रयत्न केला पण अमेरिकेचा राग मात्र कमी झालेला नव्हता. दोन्ही राष्ट्रांतील तणाव किंचित शिथिल झाला असला तरी सलोखा मात्र प्रस्थापित होऊ शकला नाही.

सारांश:

एकंदरीत, भारत-रशिया संबंधाचा आढावा घेतल्यास असे लक्षात येईल की, दोन्ही देशांमध्ये पं. नेहरुंपासून रशियाशी असलेले स्नेहाचे आणि मैत्रीचे संबंध श्रीमती इंदिरा गांधी यांनी पुढेही वृद्धिंगत केल्याचे निर्दर्शनास येते. राजनैतिक, आर्थिक, सांस्कृतिक अशा सर्वच क्षेत्रात दोन्ही राष्ट्रांमधील सहकार्य उभयपक्षी लाभदायक ठरले. दोन भिन्न विचारप्रणालीच्या राष्ट्रांमध्ये मैत्री व सहकार्य टिकू शकते आणि ते दोहोंना लाभदायक ठरू शकते हे भारत-रशिया मैत्रीने सिद्ध केले आहे. याउलट अमेरिका-भारत यांच्या जागतिक राजकारणातील अनेक मुद्द्यांबाबत मतभिन्नता मात्र नाहोशी झालीच नाही व पाकिस्तानला उचलून धरण्याचा अमेरिकेच्या नीतीत बदल झाला नाही.

श्रीमती इंदिरा गांधींच्या विविध क्षेत्रांतील यशांपैकी महत्त्वाचे यश म्हणजे त्यांनी परराष्ट्र धोरणाला दिलेला आकार. आंतरराष्ट्रीय धोरणाचे विश्लेषक व्ही. पी. दत्त यांनी इंदिरा गांधी यांच्या परराष्ट्र धोरणाचा उल्लेख आपल्या 'असंटेनरी हिस्टरी ऑफ द कॉंग्रेस' या ग्रंथात 'अत्यंत परिपक्व आणि भारताचे कमीत कमी नुकसान करणारे' असा केले आहे.

इंदिरा गांधी हया शांततेच्या कडूर पुरस्कर्त्या होत्या. सर्व राष्ट्रांशी संबंधात सलोखा असावा असेच त्यांचे धोरण होते. एकंदरीत त्यांचे परराष्ट्र धोरण पूर्णपणे स्वतंत्र, वास्तववादी व भारताचा ध्वज आंतरराष्ट्रीय क्षेत्रात सन्मानाने उंच फडकत राहावा या दृष्टीने यशस्वी ठरले.

संदर्भ टिपा:

1. तांबोळी एन.एस., पवार व्ही.पी., आधुनिक भारत (1750-2009), निराली प्रकाशन, पुणे, 2010, पृ.क्र.17-2.
2. कोठेकर शांता, आधुनिक भारताचा इतिहास (1947-2000), श्री साईनाथ प्रकाशन, नागपूर, 2008, पृ.क्र. 689.
3. कोलारकर श.गो., स्वतंत्र भारताचा इतिहास (1947-1980), श्री मंगेश प्रकाशन, नागपूर, द्वितीय आवृत्ती, 1997, पृ.क्र. 123.
4. पूर्वोक्त, पृ. क्र. 124.
5. वैद्य सुमन, कोठेकर शांता, आधुनिक जग, भाग 2, (1945-1980), श्री साईनाथ प्रकाशन, नागपूर, 2000, पृ.क्र.403.
6. कोलारकर श.गो., स्वतंत्र भारताचा इतिहास (1947-1980),



ISBN 978-93-85882-65-4



प्रियदर्शिनी इंदिरा गांधी : जीवन आणि कार्य

0157

53

इंदिरा गांधीचे परराष्ट्र धोरण

गणेश विश्वनाथ घोडके

शिक्षक

डॉ. बाबासाहेब आंबेडकर

मराठवाडा विद्यापीठ औरंगाबाद

गीता गंगाधर उगले

संशोधक विद्यार्थिनी

डॉ. बाबासाहेब आंबेडकर

मराठवाडा विद्यापीठ औरंगाबाद

- श्री मंगेश प्रकाशन, नागपूर, द्वितीय आवृत्ती, 1997, पृ.क्र. 130.
- वैद्य सुमन, कोठेकर शांता, आधुनिक जग, भाग 2, (1945-1980), श्री साईनाथ प्रकाशन, नागपूर, 2000, पृ.क्र. 405.
 - तांबोळी एन.एस., पवार व्ही.पी., आधुनिक भारत (1750-2009), निराली प्रकाशन, पुणे, 2010, पृ.क्र. 17-32.
 - कोलारकर श.गो., स्वतंत्र भारताचा इतिहास (1947-1980), श्री मंगेश प्रकाशन, नागपूर, द्वितीय आवृत्ती, 1997, पृ.क्र. 123.
 - पूर्वोक्त
 - वैद्य सुमन, कोठेकर शांता, आधुनिक जग, भाग 2, (1945-1980), श्री साईनाथ प्रकाशन, नागपूर, 2000, पृ.क्र. 396.
 - कोठेकर शांता, आधुनिक भारताचा इतिहास (1947-2000), श्री साईनाथ प्रकाशन, नागपूर, 2008, पृ.क्र. 111.

संदर्भ ग्रंथ:

- कोठेकर शांता, आधुनिक भारताचा इतिहास (1947-2000), श्री साईनाथ प्रकाशन, नागपूर, 2008.
- कोलारकर श.गो., स्वतंत्र भारताचा इतिहास (1947-1980), श्री मंगेश प्रकाशन, नागपूर, द्वितीय आवृत्ती 1997.
- कवि माधवो, साठ महामानव, विद्याभारती प्रकाशन, लातूर, 2008.
- विश्वनाथ विश्वनाथ, आधुनिक भारताचा इतिहास (1757-2005), के.एन. प्रकाशन, पुणे, 1994.
- तांबोळी एन.एस., पवार व्ही.पी., आधुनिक भारत (1750-2009), निराली प्रकाशन, पुणे, 2010.
- वैद्य सुमन, कोठेकर शांता, आधुनिक जग, भाग 2, (1945-1980), श्री साईनाथ प्रकाशन, नागपूर, 2000
- Nagar N.S.] Women and Politics, V house] Ne.I Publishing w Delhi, 2008.

□□□

परराष्ट्र संबंध हा अतिशय महत्वाचा विषय असून प्राचीन कालखंडापासूनच परराष्ट्र धोरणाविषयी माहिती मिळते. कौटील्याने अर्थशास्त्र ग्रंथामध्ये परराष्ट्र धोरणाविषयी माहिती दिलेली आहे.

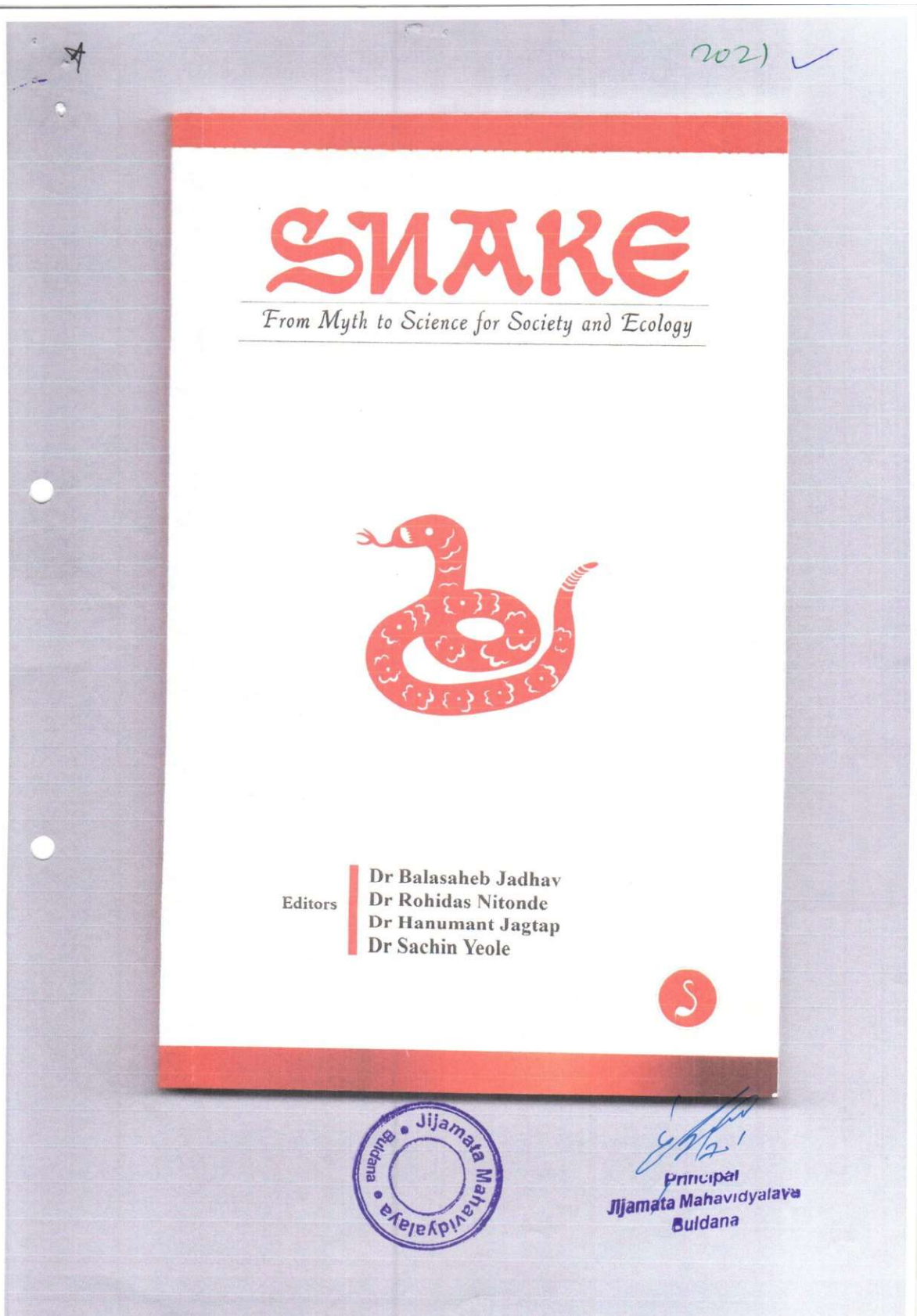
भारताला स्वातंत्र्य मिळाल्या नंतर पाहिले पंतप्रधान पंडित जवाहरलाल नेहरू यांनी अलिप्ततावादी नीतीचा अवलंब करून आदर्शवादी परराष्ट्र धोरणाचा स्वीकार केला. इंदिरा गांधींनी मात्र भारताच्या परराष्ट्र धोरणाला आदर्शवादा बरोबर व्यावहारिक पातळीवर आणण्याचं काम केलं. त्यांनी राष्ट्रीय हीताला अनुसरून निर्णय घेतले. जागतिक महासत्ता बरोबरच शेजारी राष्ट्रांसोबत त्यांनी संबंध प्रस्थापित करतांनी वेळोवेळी स्वतंत्र निर्णयाचा परिचय करून दिला.

पंतप्रधान झाल्यानंतर प्रथमच मार्च १९६६ मध्ये इंदिरा गांधी यांनी अमेरिकेचा दौरा केला. या दौऱ्यामध्ये त्यांनी भारत आणि अमेरिकेचा दौरा केला. या दौऱ्यामध्ये त्यांनी भारत आणि अमेरिका सारख्या आदर्शांच्या आणि ध्येयासंबंधी न्यूयार्क आशिया सोसायटीच्या परिषदेत भाषण देताना सांगितले होते.

ISBN 978-93-85882-65-4

Principal
Jijamata Mahavidyalaya
Buldhana





ISBN: 978-93-91998-00-4

Title: Snake : From Myth to Science for Society and Ecology

Editors: Dr Balasaheb Jadhav
Dr Rohidas Nitonde
Dr Hanumant Jagtap
Dr Sachin Yeole

First Published: November 2021

© Principal, Shri Shivaji College, Parbhani

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without the written permission of the copyright owner.

Published by

Snehal Publications,
Shivram Nagar, Parbhani- 431401.
Mob. + 91 9730721393, +91 9420079975

Typesetting: Mohan Patil

Cover Designing: Dr. Kalyan Gangarde

Price: Rs. 395/-

Printed at

Snehal Printers and Book Binders,
Shivram Nagar, Parbhani- 431401
Mob. + 91 9730721393

published under UGC Scheme Paramasrsh

Facts, views and opinions published by the author in the book express solely the opinions of the author. Authors are responsible for their content, citation of sources and the accuracy of their references. The publisher cannot be held responsible for any lacks or possible violations of third parties' rights.



[Signature]
Principal
Jijamata Mahavidyalaya
Buldhana



CONENTS

- Mechanics Of Snakes' Slithering
Dr Balasaheb Jadhav
- Snake Death: Known But Ignored Causes And Solut
Shivaji Prabhakar Chavan
- Snake: Some Misconceptions
Ranjit Karegaonkar
- Snake Venom: Mechanism Of Action On Their Prey Human
H. S. Jagtap
- Snakes : Riskless, Risky And The Lethal
Dr. Sachin Manikrao Yeole
- Ecological Role Of Snake In Economic Activity
Dr. S. S. Bhalerao
- Study Of Different Snakes In Beed District
Dr. B. S. Thorat
- Superstitions, Saperas And Snake Charming
Dr. Sirsat C. V.
- Snake Species Diversity And Their Distribution In Kodyalmale Reserve Forest, Bantwal, Dakshina Kanna Karnataka, India
Supreet Kadakol
- Some Facts About Snakes
Niture S. D.
- Some Remedies On Snake Bite And Myths And Facts A Snakes
Jayvardhan V Balkhande And Shaikh Azeem Issak
- Ecological Role Of Snake : An Overview
Dr. Hema Digamberrao Makne
- Sea Snakes: Biology, Ecology And Diversity
Dr Rajshree M Yewale
- Some Interesting Myths And Superstition About Snakes
Dr. Vaishali Panchwate (Tinkhede)

- Diversity Of Snakes In Ambad Dist- Jalna, Maharashtra
Dr. Vijay Suryawanshi And Dr. Dinesh Kharate 87
- The Snakes : An Indicators And Monitors Of Ecosystem
Dr. Shaikh Hafiz Mahmud 96
- Biology Of Snake
Dr. Seemavirbhan Keswani 106
- An Overview Of Snakes And Its Conservation
Dr. Dhanraj B. Bhure And Dr. Sanjay S. Nanware 116
- Snake As A Farmers' Friend
Dr. Mahesh S. Pentewar 122
- Review On Myths And Amazing Facts About Snakes
Sajid S. Shaikh And J. D. Shaikh 128
- Ecological Role Of Snake For The Welfare Of Mankind
P. P. Joshi And Chanda Ingle 133
- Snake Bite And Herbal Medicine
Dr. Mrs. Sabiha V. Syed (Bagwan) 140
- Role Of Snakes In The Ecosystem And Their Conservation
Anil Khole 143
- Some Important Myths Of Snakes In India
Barve M. B. And Deshmukh Shaziya S. K. A 151
- Snake Bite: Effects & Control Measure
Ms. Shweta Sachin Varade 157
- Some Facts About Cobra
Dr. Niture S. D. 162
- Role Of Snake Friend In Society And Ecology
Pavan L. Jadhav And Dr. R. P. Mali 169
- Snake Bite: Curative And Preventive Measures
Dr. Rajanigandha Gawande And Dr. Sachin Yeole 174
- Diversity Of Non-Venomous Snakes
Deshmukh Shaziya Sultana K. A 179
- Snakes In Literature
Vivek H. Thaware And Dr. Anil M. Mane 190

ed or transmitted in the copyright

iss solely the opinions of rses and the accuracy of cks or possible visitations



Principal
Jijamata Mahavidyalaya
Buldana

13.

SEA SNAKES: BIOLOGY, ECOLOGY AND DIVERSITY

Dr Rajshree M Yewale
Jijamata Mahavidyalaya, Buldana (MS)

Introduction

Sea snakes, or coral reef snakes, are a subfamily of elapid snakes, the Hydrophiinae, that inhabit marine environments for most or all of their lives. All sea snakes have paddle-like tails and many have laterally compressed bodies that give them an eel-like appearance. Unlike fish, they do not have gills and must surface regularly to breathe. Along with whales, they are among the most completely aquatic of all air-breathing vertebrates.

Most are venomous, except the genus *Emydocephalus*, which feeds almost exclusively on fish eggs. Sea snakes are extensively adapted to a fully aquatic life and are unable to move on land, except for the genus *Laticauda*, which has limited land movement. They are found in warm coastal waters from the Indian Ocean to the Pacific and are closely related to venomous terrestrial snakes in Australia.

Among this group are species with some of the most potent venoms of all snakes. Some have gentle dispositions and bite only when provoked, while others are much more aggressive. Currently, 17 genera are described as sea snakes, comprising 69 species.

Evolving from Land to Sea

Sea snakes also could become established by making evolutionary transitions from terrestrial or freshwater habitats to marine habitats in the island systems of the Caribbean. We know that elapid snakes – a family of venomous snakes with short, fixed-front fangs, such as cobras – have done this in the Coral Triangle region.

Indeed, most of today's sea snakes originated and evolved into different species in this part of the globe between 2 to 16 million years ago. At that time, this region was a vast wetland complex associated with Southeast Asia and the Australasian archipelago.



Land and sea are interlaced throughout the Coral Triangle, and have been so for several million years. This region is also characterized by high rainfall, low and variable water salinity, and relatively stable tropical warm temperatures. Throughout much of its geological past, sea levels rose and fell many times, opening and closing marine corridors and causing mangrove fringes and mud flats to form and disappear. All of these conditions are favorable for evolutionary transitions from land to sea, and stable, shallow marine habitats have persisted for the past 3 million years.

Similar changes occurred in the Caribbean, but the Coral Triangle is a much larger and more complex system. Multiple ancestral lineages of snakes occur in Southeast Asia, and there are four to five times more viviparous (live-bearing), estuarine species within the Coral Triangle than occur in the Caribbean.

Indeed, the Coral Triangle, broadly defined, appears to be the only region where viviparity is characteristic of the majority of estuarine snakes. These snakes live in coastal waters contacting freshwater habitats, and they were most likely to undergo an evolutionary transition from terrestrial or freshwater to marine habitats and give rise to sea snakes.

Description

The majority of adult sea snakes species grow to between 120 and 150 cm (4 and 5 ft) in length, with the largest, *Hydrophis spiralis*, reaching a maximum of 3 m (10 ft). Their eyes are relatively small with a round pupil and most have nostrils located dorsally. The skulls do not differ significantly from those of terrestrial elapids, although their dentition is relatively primitive with short fangs and (with the exception of *Emydocephalus*) as many as 18 smaller teeth behind them on the maxilla.

Most sea snakes are completely aquatic and have adapted to sea environments in many ways, the most characteristic of which is a paddle-like tail that has improved their swimming ability. To a varying degree, the bodies of many species are laterally compressed, especially in the pelagic species. This has often caused the ventral scales to become reduced in size, even difficult to distinguish from the adjoining scales. Their lack of ventral scales means they have become virtually helpless on land, but as they live out their entire lifecycles at sea, they have no need to leave the water.



The only genus that has retained the enlarged ventral scales is the sea kraits, *Laticauda*, with only five species. These snakes are considered to be more primitive, as they still spend much of their time on land, where their ventral scales afford them the necessary grip. *Laticauda* species are also the only sea snakes with internasal scales; that is, their nostrils are not located dorsally.

Since a snake's tongue can fulfill its olfactory function more easily under water, its action is short compared to that of terrestrial snake species. Only the forked tips protrude from the mouth through a divided notch in the middle of the rostral scale. The nostrils have valves consisting of a specialized spongy tissue to exclude water, and the windpipe can be drawn up to where the short nasal passage opens into the roof of the mouth. This is an important adaptation for an animal that must surface to breathe, but may have its head partially submerged when doing so.

The lung has become very large and extends almost the entire length of the body, although the rear portion is thought to have developed to aid buoyancy rather than to exchange gases. The extended lung possibly also serves to store air for dives. Most species of sea snakes are able to respire through the top of their skin. This is unusual for reptiles, because their skin is thick and scaly, but experiments with the black-and-yellow sea snake, *Pelamis platura* (a pelagic species), have shown this species can satisfy about 25% of its oxygen requirements in this manner, which allows for prolonged dives.

Like other land animals that have adapted to life in a marine environment, sea snakes ingest considerably more salt than their terrestrial relatives through their diets, and when seawater is inadvertently swallowed. Because of this, a more effective means of regulating the salt concentration of their blood is required. In sea snakes, the posterior sublingual glands, located under and around the tongue sheath, allow them to expel salt with their tongue action.

* Scalation among sea snakes is highly variable. As opposed to terrestrial snake species that have imbricate scales to protect against abrasion, the scales of most pelagic sea snakes do not overlap. Reef-dwelling species, such as *Aipysurus*, do have imbricate scales to protect against the sharp coral. The scales



genera together in the Elapidae, with no taxonomic subdivisions, to reflect the work that remains to be done.

Conservation Status

Sea snakes are exploited for their skin, organs, and meat. Although some species are taken in great numbers, they are not protected by CITES (A Washington convention). Since 1934, meat and skin of sea snakes have been used commercially in the Philippines and local protection of sea snakes became necessary to avoid overexploitation.

Sea snakes are also exploited in Australia, Japan, Taiwan Province of China, Thailand, and Vietnam. The local government in Queensland, Australia has introduced a special license to collect sea snakes. However, most sea-snake fisheries in the Indian and Pacific oceans have not been reported in the literature and are not controlled by local governments. With the exception of the Philippines, the impact of exploitation on populations of sea snakes is almost unknown and some populations may already be in danger of extinction. Monitoring and control of the commercial catch is the only way to maintain a sustainable yield, giving local governments a chance to intervene before a catastrophic collapse of local populations occurs.

However, management of sea-snake fisheries and protection of the endangered species is not possible without a basic knowledge of the group and the ability to identify to the species level.

Most sea snakes are not on the CITES protection lists, however, one species, *Laticauda crockeri*, is classified as vulnerable. Several species of *Aipysurus* are listed with conservation status of greater concern, the Timor species *A. fuscus* is known to be endangered, and two others found in seas north of Australia, the leaf-scaled *A. foliosquama* and short-nosed *A. apraefrontalis*, are classified as critically endangered according to the IUCN Red List of Threatened Species.



snakes, but scientific studies have yet to be performed to test these senses.

Distribution and Habitat

Sea snakes are mostly confined to the warm tropical waters of the Indian Ocean and the western Pacific Ocean, with a few species found well out into Oceania. The geographic range of one species, *Pelamis platurus*, is wider than that of any other reptile species, except for a few species of sea turtles. It extends from the east coast of Africa, from Djibouti in the north to Cape Town in the south, across the Indian Ocean, the Pacific, south as far as the northern coast of New Zealand, all the way to the western coast of the Americas, where it occurs from northern Peru in the south (including the Galápagos Islands) to the Gulf of California in the north. Isolated specimens have been found as far north as San Diego and Oxnard in the United States.

Sea snakes do not occur in the Atlantic Ocean. *Pelamis* possibly would be found there were it not for the cold currents off Namibia and western South Africa that keep it from crossing into the eastern South Atlantic, or south of 5°S latitude along the South American west coast. Sea snakes do not occur in the Red Sea, believed to be due to its increased salinity, so no danger exists of them crossing through the Suez Canal. A lack of salinity is also thought to be the reason why *Pelamis* has not crossed into the Caribbean via the Panama Canal.

Despite their marine adaptations, most sea snakes prefer shallow waters near land, around islands, and especially somewhat sheltered waters, as well as near estuaries. They may swim up rivers and have been reported as far as 160 km (100 mi) from the sea. Others, such as *P. platurus*, are pelagic and are found in drift lines, slicks of floating debris brought together by surface currents. Some sea snakes inhabit mangrove swamps and similar brackish water habitats, and two landlocked freshwater forms are found: *Hydrophis semperi* occurs in Lake Taal in the Philippines, and *Laticauda crockeri* in Lake Te Nggano on Rennell Island in the Solomon Islands.

Behavior

Sea snakes are generally reluctant to bite, and are usually considered to be mild-tempered, although variation is seen among



species and individuals. Some species, such as *P. platurus*, which feed by simply gulping down their prey, are more likely to bite when provoked because they seem to use their venom more for defense. Others, such as *Laticauda* spp., use their venom for prey immobilization. Sea snakes are often handled without concern by local fishermen who unravel and toss them back into the water barehanded, usually without getting bitten, when the snakes frequently become entangled in fishing nets. Species reported as much more aggressive include *Aipysurus laevis*, *Astrotia stokesii*, *Enhydrina schistosa*, *Enhydrina zweifeli*, and *Hydrophis ornatus*.

On land, their movements become very erratic. They crawl awkwardly in these situations and can become quite aggressive, striking wildly at anything that moves, although they are unable to coil and strike in the manner of terrestrial snakes.

Sea snakes appear to be active both day and night. In the morning, and sometimes late in the afternoon, they can be seen at the surface basking in the sunlight, and they dive when disturbed. They have been reported swimming at depths over 90 m (300 ft), and can remain submerged for as long as a few hours, possibly depending on temperature and degree of activity.

Ecology

They feed on small fish and occasionally young octopus. They are often associated with the sea snake barnacle (*Platylepas ophiophila*), which attaches to their skin.

Reproduction

Except for a single genus, all sea snakes are ovoviviparous; the young are born alive in the water where they live their entire lives. In some species, the young are quite large, up to half as long as the mother. The one exception is the genus *Laticauda*, which is oviparous; its five species all lay their eggs on land.

Venom

Like their relatives in the family Elapidae, the majority of the sea snakes are highly venomous; however, when bites occur, venom injection is rare, so envenomation symptoms usually seem nonexistent or trivial. For example, *Hydrophis platurus* has venom more potent than any terrestrial snake species in Costa



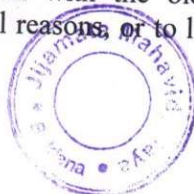
Rica based on LD₅₀, but despite its abundance in the waters off its western coast, few human fatalities have been reported. The death of a trawler fisherman in Australian waters during 2018 was reported to be the region's first sea snake fatality since a pearl diver was killed in 1935.

Bites in which envenomation does occur are usually painless and may not even be noticed when contact is made. Teeth may remain in the wound. Usually, little or no swelling occurs, and rarely are any nearby lymph nodes affected. The most important symptoms are rhabdomyolysis (rapid breakdown of skeletal muscle tissue) and paralysis. Early symptoms include headache, a thick-feeling tongue, thirst, sweating, and vomiting. The venom is very slow acting and symptoms that happen from little as 30 minutes to several hours after the bite include generalized aching, stiffness, and tenderness of muscles all over the body. Passive stretching of the muscles is also painful, and trismus, which is similar to tetanus, is common. This is followed later on by symptoms typical of other elapid envenomations, a progressive flaccid paralysis, starting with ptosis and paralysis of voluntary muscles. Paralysis of muscles involved in swallowing and respiration can be fatal.

Taxonomy and Diversity

Sea snakes were at first regarded as a unified and separate family, the Hydrophiidae, that later came to comprise two subfamilies: the Hydrophiinae, or true/aquatic sea snakes (now 16 genera with 57 species), and the more primitive Laticaudinae, or sea kraits (one genus, *Laticauda*, with five species).

Eventually, as just how closely related the sea snakes are to the elapids became clear, the taxonomic situation became less well-defined. Some taxonomists responded by moving the sea snakes to the Elapidae, thereby creating the subfamilies Elapinae, Hydrophiinae, and Laticaudinae, although the latter may be omitted if *Laticauda* is included in the Hydrophiinae. No one has yet been able to convincingly work out the phylogenetic relationships between the various elapid subgroups, and the situation is still unclear. Therefore, others opted to either continue to work with the older traditional arrangements, if only for practical reasons, or to lump all of the



themselves may be smooth, keeled, spiny, or granular, the latter often looking like warts. *Pelamis* has body scales that are "peg-like", while those on its tail are juxtaposed hexagonal plates.

Sensory Abilities

Vision, chemoreception (tongue-flicking), and hearing are important senses for terrestrial snakes, but these stimuli become distorted in water. The poor visibility, chemical dilution, and limitation of ground-borne vibrations under water suggest that sea snakes and sea kraits may have unique sensory abilities to compensate for the relative lack of other sensory cues.

Very little is known about sea snake vision. A study of retinal photoreceptors of spine-bellied, *Lapemis curtus*, and horned, *Acalyptophis peronii*, sea snakes found three classes of visual pigments all from cone cells. Despite the absence of rod cells in sea snake eyes, Simeos *et al.* found genes from rod cells (*rh1*) were still being expressed suggesting that in sea snakes some cones may be transmuted rods. However, behavioral observations indicate that vision has a limited role for catching prey and mate selection, but sound vibrations and chemoreception may be important. One study identified small sensory organs on the head of *Lapemis curtus* similar to the mechanoreceptors in alligators and aquatic snake *Acrochodus* that are used to sense the movement of fish prey. Similarly, vision appears to be of limited importance for finding mates. Shine experimented with applying skin secretions (pheromones) to snake-like objects to see if male turtle-headed sea snakes, *Emydocephalus annulatus*, are attracted to female pheromones. Shine found that although vision may be useful over short distances (less than 1 m [3 ft]), pheromones are more important once the male comes in physical contact with an object.

The olive sea snake, *Aipysurus laevis*, has been found to have photoreceptors in the skin of its tail, allowing it to detect light and presumably ensuring it is completely hidden, including its tail, inside coral holes during the day. While other species have not been tested, *A. laevis* possibly is not unique among sea snakes in this respect.

Other unique senses, such as electromagnetic reception and pressure detection, have been proposed for sea



Fun Facts

Sea snakes are front-fanged and highly venomous. A fold in the gums of a sea snake hides the fangs, and the fangs quickly emerge when biting. Sea snake fangs are fragile and may break off and remain in the wounds of their victims. To counter the problem of having weak fangs, sea snakes have potent venom that can easily paralyze, kill, and begin the digestive process of the fish they target.

Sea Snake Facts

Sea snakes evolved from two different snakes (the cobra in Asia and Australian terrestrial elapids). Marine sea snakes are viviparous: They give birth to fully-formed young at sea, without laying eggs. Sea snakes require fresh water for drinking and will dehydrate at sea without it.

They are restricted to coastal areas of the Indian and Western Pacific oceans, from the east coast of Africa to the Gulf of Panama. Except for the yellow-bellied sea snake, which is found in the open ocean from Africa eastward across the Pacific to the west coast of the Americas. All other species live mainly in waters less than 30 meters (about 100 feet) deep, as they must dive to the seafloor to find their food among coral reefs, among mangroves, or on the ocean bottom. Some species prefer hard bottoms (corals), while others prefer soft bottoms (mud or sand) in which to hunt their prey. Most sea snakes feed upon fishes of various sizes and shapes, including eels. Two primitive groups (genera *Aipysurus* and *Emydocephalus*) eat only fish eggs whereas, *Hydrophis* specialize in burrowing eels.

References

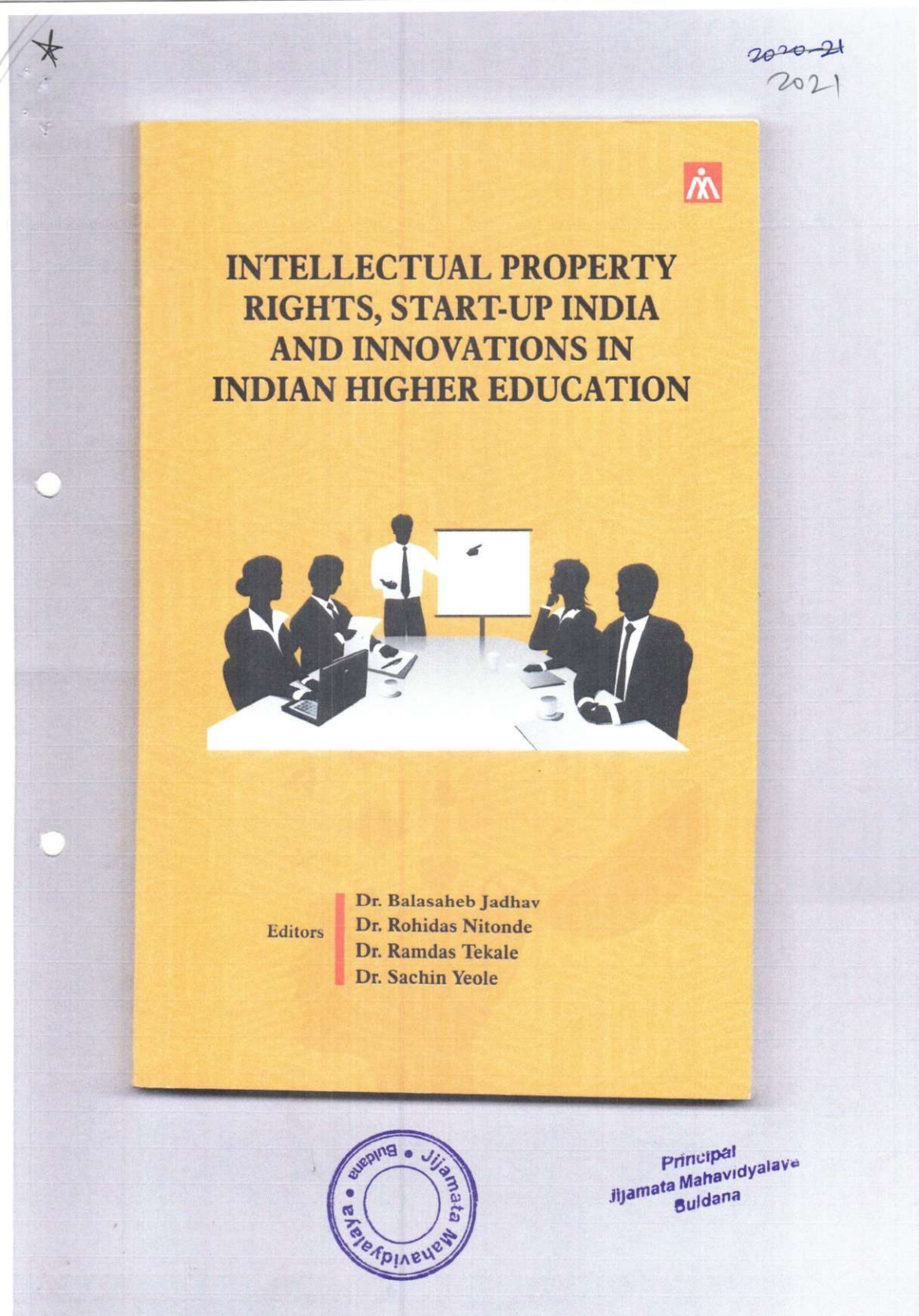
- https://en.wikipedia.org/wiki/Sea_snake
- <https://animalcorner.org/animals/sea-snakes/>
- <https://www.britannica.com/animal/sea-snake>
- <https://seaworld.org/animals/facts/reptiles/sea-snakes/>
- <https://www.thoughtco.com/venomous-sea-snakes-4160683>
- <https://www.animalsaroundtheglobe.com/sea-snakes-a-complete-guide/>




□□□


Principal
Jijamata Mahavidyalaya
Buldana





<p>ISBN: 978-81-947349-6-3</p> <p>Title: Intellectual Property Rights, Start-up India and Indian Higher Education Editors: Dr. Balasaheb Jadhav, Dr. Rohidas Nitonde Dr. Ramdas Tekale and Dr. Sachin Yeole</p> <p>First Published: 2021 © Editors</p> <p>All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without written permission of the copyright owner.</p> <p>Printed at Snehal Printers and Book Binders, 66, Ramdas Nagar, Parbhani -431401</p> <p>Published by New Man Publication, 66, Ramdas Nagar, Parbhani -431401 Email: nmpublication@gmail.com www.newmanpublication.com Mob. + 91 9730721393, +91 9420079975</p> <p><i>Typesetting and Cover Designing:</i> Kalyan Gangarde</p> <p>Price: ₹ 395/-</p> <p><small>Disclaimer: Academic facts, views and opinions published by author in the book express solely the opinions of their author. Author is responsible for their content, citation of sources and the accuracy of their references. The publisher/printer/editor cannot be held responsible for any lacks or possible violations of third parties' rights</small></p> <p># published under UGC Scheme Paramarsrh</p>		<p style="text-align: center;">CONTENTS</p> <ol style="list-style-type: none"> 1. Promoting Incubators Leads Entrepreneurship and Innovation P B L Sirisha Devi 05 2. Intellectual Property Rights (IPR) and Higher Education in 21st Century India Dr Rohidas Nitonde 16 3. History and Scope of IPR in Various Disciplines of HEIs Dr. Ganesh Chalindrawar 22 4. IPR: An Overview Dr Utkarsh B Kittekar 39 5. Present Status and Potential Future of Semiconductor Intellectual Property (SIP) Dr Surendra M. Yenorkar 44 6. Impact of Intellectual Property in Higher Education Institutions Dr H. S. Jagtap 48 7. Intellectual Property Rights and Chemical Science Gangadhar B. Gundlewad 53 8. Intellectual Property Rights and Mathematics Dr C D Bele 58 9. Intellectual Property Rights and their Importance in Indian Context Dr. Rahul Kapure 63 10. Startup India – Opportunities and Challenges Dr. M. S. Parturkar 80 11. Start-up opportunities in English language Dr. V.W. Suryawanshi & M.B. Gund 88 12. Role of Agriculture Higher Education in Start-up India M. B. Gund & Dr. V. W. Suryawanshi 98 13. Startup India : Hurdles and Potentialities Dr S M Yeole 107 14. Agritech Startup : A Boon for Indian Agriculture R. V. Gawande 111 <p style="text-align: center;">3</p>
--	---	--

38.46%, while in the year 2019, India was ranked 36th in the list of 50 countries with a score of 36.04%.

The scores of the two new countries included in the index, Greece and the Dominican Republic, are better than India. Significantly, countries like Philippines and Ukraine are also ahead of India.

However, at a slower pace, India has registered an overall increase in its ranking as compared to any other country.

The way forward :-

To sustain this growth of India, India needs to do more to bring about a transformative change in its overall intellectual property structure. Not only this, serious steps need to be taken to continuously implement strong intellectual property standards.

The United Nations Industrial Development Organization (UNIDO) has proved through a study that countries with well-organized intellectual property rights have seen rapid economic growth. Therefore, there is an urgent need for improvement.

India needs to streamline the 'Comptroller General of Patents, Designs, Trademarks and Geographical Indications'.

References:-

1. Dr.Bele Mrudula , Article on Intellectual Property Rights, The wire, 2016.
2. P.Naryan, Intellectual Property Law, Publication, 1990.
3. National Intellectual Property Rights, India Gazette 2016.
4. Cabinet Approves Intellectual Property Rights policy, The Hindu, 13 May 2016.
5. www.ipindia.nic.in



17.
Basic concept of Intellectual Property Rights (IPR)

Rajshree Manikrao Yewale
 Dept. Zoology, Jijamata Mahavidyalaya, Buldana

Related Rights or Neighboring Rights are rights that during sure respects resemble copyright. The motive of associated rights is to shield the prison pursuits of sure individuals, particularly performers, manufacturers and broadcasters, and to assist them supply their message to the public.

What is imply through IPR

Intellectual belongings is an concept, the fabricated from the human mind inclusive of creativity concepts, innovations, commercial models, emblems, songs, literature, symbols, names, brands, etc. which could in the end provide to a beneficial product and software. Intellectual Property Rights do now no longer fluctuate from different belongings rights. They permit their proprietor to absolutely gain from his/her product which changed into first of all an concept that evolved and crystallized. They additionally entitle him/her to save you others from the usage of, dealing or tampering with his/her product with out previous permission from him/her.

Intellectual Property Right

Right of an inventor to derive monetary blessings from highbrow belongings, proper is referred to as as Intellectual Property Right (IPR).



History of IPR

IPR is a antique concept. It is thought that IPR first of all commenced in North Italy at some point of the Renaissance era. In 1474, Venice issued a regulation regulating patents safety that granted an different proper for the proprietor. The copyright dates lower back to 1440 A.D. whilst Johannes Gutenberg invented the printing press with replaceable/transportable timber or metallic letters. Late withinside the nineteenth century, some of international locations felt the need of laying down legal guidelines regulating IPR. Globally, conventions constituting the premise for IPR device international were signed; Paris Convention for the Protection of Industrial Property (1883) Berne Convention for the Protection of Literary and Artistic Works (1886).

Introduction

Intellectual Property (IP) offers with any fundamental creation of human intelligence inclusive of artistic, literary, technical or clinical constructions. Intellectual Property Rights (IPR) refers back to the prison rights granted to the VVinventor or producer to shield their invention or manufacture product. These prison rights confer an different proper at the inventor/producer or its operator who makes complete use of it's his invention/product for a constrained time frame.

In different words, we will say that the prison rights limit all others from the usage of the Intellectual Property for business functions with out the previous consent of the IP right holder. IP rights encompass alternate secrets, application models, patents, emblems, geographical indications, commercial layout, format layout of integrated circuits, copyright and associated rights, and



138

The problem of highbrow belongings may be very broad. There are many distinctive kinds of rights that collectively make up highbrow belongings. IP may be essentially divided into categories, that is, commercial Property and highbrow belongings. Traditionally, many IPRs have been together called commercial assets.

It specially consisted of patents, emblems, and designs. Now, the safety of commercial belongings extends to application models, provider marks, alternate names, passes, symptoms and symptoms of supply or foundation, inclusive of geographical indications, and the suppression of unfair opposition. It may be stated that the term 'commercial belongings' is the predecessor of 'highbrow belongings'.

Types of highbrow belongings rights

Copyright and associated rights for literary works ,Trade marks, Trade secrets , alternate names and provider marks ,Geographical indication,Patents for invention ,Industrial layout, Plant variety, Layout Designs of Integrated Circuits

Copyright

Copyright regulation offers with the safety and exploitation of the expression of thoughts in a tangible shape. Copyright has developed over many centuries with appreciate to converting thoughts approximately creativity and new approach of conversation and media. In the cutting-edge world, the regulation of copyright affords now no longer simplest a prison framework for the safety of the conventional beneficiaries of copyright, the character writer, composer or artist, however additionally the guide required for the introduction of labor through important cultural industries, film; Broadcast and recording enterprise; And pc and software program industries.

140

new kinds of plants. It may be very nicely settled that IP performs an essential position withinside the cutting-edge economy.

There are many styles of highbrow belongings safety. A patent is a popularity for an invention that satisfies the standards of world innovation, and commercial software. IPR is crucial for higher identification, planning, commercialization, rendering, and therefore the upkeep of innovations or creativity. Each enterprise must broaden its speciality primarily based totally on its IPR policies, control style, strategies, and so on. Currently, the pharmaceutical enterprise has an rising IPR strategy, which desires higher consciousness and outlook with inside the coming era.

IPR is a robust tool, to shield the investment, time, money, and attempt invested through the inventor/writer of the IP, because it offers the inventor/writer an different proper for a sure time frame for using its invention/introduction. Thus, IPR impacts the monetary improvement of a rustic through selling wholesome opposition and inspiring commercial boom and monetary boom. The gift assessment provides a quick description of IPR with specific emphasis on pharmaceuticals.

Kinds of highbrow Property

IPR commonly divided into foremost categories :

Industrial Property and copyright:- commercial belongings includes rights regarding innovations emblems commercial designs and appellation of foundation copyright protects rights associated with introduction of human thoughts withinside the fields of literature song artwork and audio visible works the TRIPS Agreements of the WTO acknowledges.

139

It is living in literary, dramatic, musical and inventive works in "authentic" cinematic films, and in sound recordings set in a concrete medium. To be covered because the copyright, the concept ought to be expressed in authentic shape. Copyright recognizes each the monetary and ethical rights of the proprietor. The proper to copyright is, through the precept of honest use, a privilege for others, without the copyright proprietor's permission to apply copyrighted material. By the software of the doctrine of honest use, the regulation of copyright balances non-public and public pursuits.

Patent

Patent regulation acknowledges the different proper of a patent holder to derive business blessings from his invention. A patent is a unique proper granted to the proprietor of an invention to the manufacture, use, and marketplace the discovery, furnished that the discovery meets sure situations laid down in regulation. Exclusive proper approach that no man or woman can manufacture, use, or marketplace an invention with out the consent of the patent holder. This different proper to patent is for a constrained time simplest.

To qualify for patent safety, an invention ought to fall in the scope of the patentable problem and fulfill the 3 statutory necessities of innovation, resourceful step, and commercial software. As lengthy because the patent applicant is the primary to invent the claimed invention, the newness and necessity are through and huge satisfied. Novelty may be inferred through previous guide or previous use. Mere discovery 'can't be taken into consideration as an invention. Patents aren't allowed for any concept or precept.



141



The motive of patent regulation is to inspire clinical research, new technology, and commercial progress. The monetary cost of patent statistics is that it affords technical statistics to the enterprise that may be used for business functions. If there's no safety, then there can be sufficient incentive to take a loose experience at any other man or woman's investment. This cappotential of loose-driving reduces the inducement to invent some thing new due to the fact the inventor might not sense inspired to invent because of loss of incentives.

Trademark or Trade Secret

A trademark is a signal of foundation. It is a particular signal used to make the supply of products and offerings public on the subject of items and offerings and to differentiate items and offerings from different entities. This establishes a hyperlink among the owner and the product. It portrays the character and first-class of a product. The crucial feature of a hallmark is to signify the foundation of the products to which it's miles connected or on the subject of which it's miles used. It identifies the product, ensures first-class and facilitates promote it the product. The trademark is likewise the goal image of goodwill that a commercial enterprise has created.

Any signal or any aggregate thereof, able to distinguishing the products or offerings of any other undertaking, is able to developing a hallmark. It may be a aggregate of a call, word, phrase, logo, image, layout, image, form, colour, private call, letter, number, figurative detail and colour, in addition to any aggregate representing a graph. Trademark can be indefinitely renewable.



142

Geographical indication

It is a call or signal used on sure merchandise which corresponds to a geographic region or foundation of the product, using geographical region might also additionally act as a certification that the product possesses sure traits as in keeping with the conventional method. Darjeeling tea and basmati rice are a not unusualplace instance of geographical indication. The dating among items and region turns into so widely known that any connection with that region is harking back to items originating there and vice versa.

It plays 3 functions. First, they pick out the products as foundation of a specific area or that area or locality; Secondly, they recommend to customers that items come from a area in which a given first-class, recognition, or different traits of the products are basically attributed to their geographic foundation, and third, they sell the products of manufacturers of a specific area. They recommend the patron that the products come from this region in which a given first-class, recognition or different traits of products are basically because of the geographic area.

It is important that the product obtains its traits and recognition from that region. Since the ones houses depend upon the geographic region of production, a particular hyperlink exists among the goods and the region of foundation. Geographical Indications are covered beneath the Geographical Indication of Goods (Registration and Protection) Act, 1999.

Industrial layout

It is one of the kinds of IPR that protects the visible layout of the item which isn't always simply utilized. It includes

143

the introduction of capabilities of form, configuration, pattern, ornamentation or composition of traces or colors implemented to any article in or 3-dimensional shape or aggregate of 1 or greater capabilities. Design safety offers with the outer look of an editorial, inclusive of decoration, traces, colors, form, texture and materials. It might also additionally encompass 3-dimensional capabilities inclusive of colors, shapes and form of an editorial or -dimensional capabilities inclusive of shapes or floor textures or different combinations.

Plant variety

A nev sort of plant breeder is covered through the State. To be eligible for plant variety safety, variety ought to be novel, awesome and much like present types and its crucial traits beneath the Plant Protection and Protection Act, 2001 must be uniform and stable. A plant breeder is given a license or unique proper to do the subsequent on the subject of distinctive styles of promotional material

References:

- <https://briewerlong.com/information/business-law/four-types-of-intellectual-property/>
- <https://www.inquartik.com/inq-intellectual-property-rights/>
- <https://www.dubaicustoms.gov.ae/en/IPR/Pages/>
- <http://ipindia.nic.in/act-1999.htm>
- <https://www.legalbites.in/basic-concept-of-intellectual-property-ipr/>
- <https://www.dubaicustoms.gov.ae/en/IPR/Pages/WhatIsIPR.aspx>



144

18.

Importance of the Intellectual Property Right

Dr. Sutawane Parimal Arvind

Head, Department of History, Shri Shivaji College, Parbhani

It is necessary to protect the Intellectual property of every one. It is a property of nation also. The sustainable development of society is depend upon the technical development and scientific development Scientific and Technical development took place with the Intellectual property. Now it is possible to protect the intellectual property. Intellectual property is a base of future development. To prevent the copying of the research work the Intellectual Property right is must. The economic development of a country is essential for the societal development. The efforts to protect the Intellectual property regarding the trade are implemented worldwide.

Intellectual Property Right :

This right gives wide protection for the intellectual activities within the country and worldwide. In India the copyright Act was passed and enforced. This Right also protects the individual property Rights. The IPR also gives the healthy atmosphere to do the research work. The innovations discoveries and explorations are the areas where this Right works effectively. To establish and protect one's ownership on his own achievements in the field of research and innovations is the main objective of Intellectual Property Right.

Importance of the Intellectual Property Right

The significance of the Intellectual Property Right is explained as follows.



145



Dr. Balasaheb Jadhav has been leading MSP Mandal's Shri Shivaji College, Parbhani as Principal since 2010. Before that, he has taught Physics at the same institution for twenty years. He has many research papers on Physics and Higher Education to his credit. He is a Recognised Research Supervisor. He is known for his academic integrity and commitment to excellence in higher education. He has received several awards including Best Principal Award by SRTM University and Maharashtra State Government. He is also associated with NAAC as a trained Assessor.

Dr. Rohidas Nitonde is Associate Professor at the Post Graduate Department of English, MSP Mandal's Shri Shivaji College, Parbhani. He is known for his a monograph on Manju Kapur In Search of a Feminist Writer. He is a Recognised Research Supervisor. He has two Minor Research Projects to his credit. He is a practising translator and prolific public speaker. Also, he is working as a Co-ordinator, Internal Quality Assurance Cell (IQAC) since 2011. He has addressed several national and international conferences as a keynote / invited speaker. He is a recipient of many awards including "Bharatiya Shiksha Ratan Award". He is Project Co-ordinator for UGC-STRIDE (Component 1).

Dr. Ramdas Tekale is Librarian of MSP Mandal's Shri Shivaji College, Parbhani. His research area is library and Information Science. He has many research publications to his credit. He is the institutional Co-ordinator for e-learning activities through LMS. He is connected with many IITs in the country through NPTEL initiatives. He has played a vital role in popularising e-learning through MOOCs in the region.

Dr. Sachin Yeole is Assistant Professor at the Post Graduate Department of Zoology, MSP Mandal's Shri Shivaji College, Parbhani. He is a university recognised Research Supervisor. He has several research publications to his credit.



www.newmanpublication.com

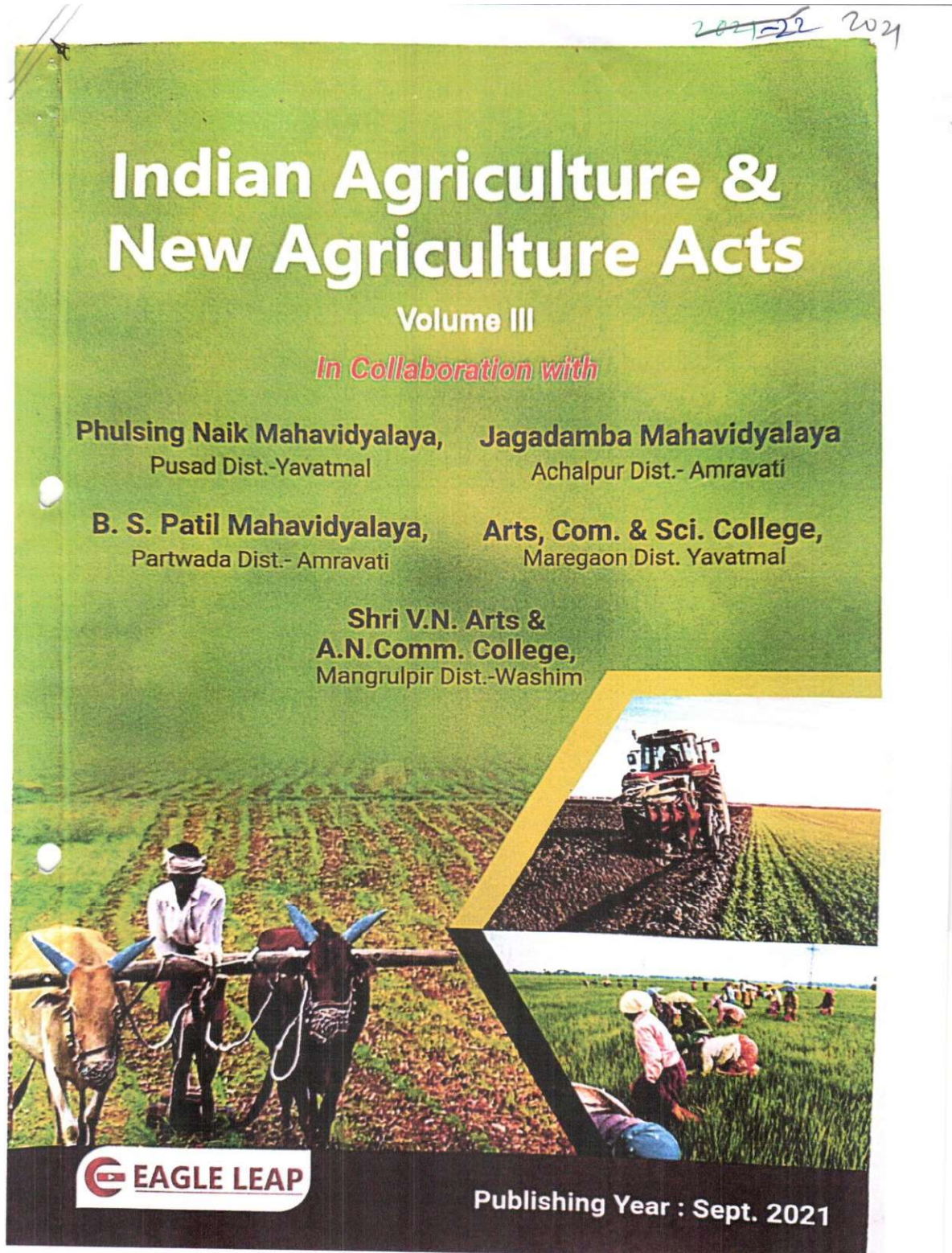
ISBN 978-81-947349-6-3




9 788194 734963


Principal
Jijamata Mahavidyalaya
Buldana







सुभेकार

वाणिज्य आणि व्यवस्थापन विषयान्तर्गत 'Indian Agriculture and New Agriculture Acts' या विषयान्तर्गत संपादित केलेल्या जगजाग्या यंत्रणेमध्ये आपले योगदान देण्याचा संपूर्ण प्रायास करू आणि मिनिमीन व संशोधकांना सादर नमस्कार.

श्री वसंतराव माईक कला व श्री अमरसिंह माईक वाणिज्य महाविद्यालय मंत्रालयाने जिन्हावा येथे स्वीडिश युद्धकारांनी संत गाडगे बाबा अमरावती विद्यापीठ अमरावती अंतर्गत येण्याचा पाठ महाविद्यालयांनी एकत्रित येऊन हा ग्रंथ संपादित केलेला आहे. त्याबद्दल बरेचदाचे सन्माननीय पायाचे आणि संपादक मंडळाला आपल्या योगदानाचे मजा पूर्णक अभिनंदन! संपादनाच्या माध्यमातून अकारण आलेला हा ग्रंथ वर्तमान काळातील अनेक जवळपास राहणारी शेती विषयसंदर्भातील नवीन काव्यद्वाराची विस्तृत उच्च मांडण्यासाठी प्रिंटरात प्रसन्न आहे याची मजा करावी आहे.

भारतीय अर्थव्यवस्थेचा 21वा शतकात देखील शेती हा एक महत्त्वाचा कारक आहे. शेती क्षेत्रात अनेक महत्त्वाचे बदल येण्याच्या भविष्यकाळात वेळ घातलेले आहेत. त्या बदलाची मांडी म्हणजेच कॅन्ट्रॅक्ट फार्मिंग संदर्भात घेतिलेले तसेच महत्त्वाचे विषय आहेत.

या तीन महत्त्वाचे संदर्भात संदर्भात भारतीय जनमानस आणि शेतीकरी वगैरे प्रश्न संपादनाचे संघर्षाचे वातावरण आहे. या संघर्षाच्या आणि अविवासाच्या वातावरणाचा छेद देण्यासाठी हा ग्रंथ प्रसन्न करण्यात आलेला आहे.


शेती क्षेत्र 21 व्या शतकात अनेक महत्त्वाचे आव्हानांना सामोरे जात आहे. या आव्हानांमध्ये जगातील वातावरणातील बदल, सरकारच्या धोरणात होणारे बदल, आयात-निर्यात संदर्भातील नवीन नियमावली आणि यासारख्या अनेक बाबी यांमध्ये समाविष्ट करून घेतिले.

या आव्हानांमध्ये शेती क्षेत्रात कठीण परिस्थितीचा सामना करून घेणे हेही आहे. ही भाव, कृषी मालाचे विपणन, कृषी मालाची वाढणारी साठवणूक, साठवणूक करून घेणे, अतिरिक्त पाऊस, बदलत जाणारे हवामान, जमिनीचा दिवसेंदिवस घटत जाणारा पौर या सारख्या अनेक बाबी अत्यंत कठीण होत आहे. या सर्व बाबींचा संशोधकांकडून आपल्या कव्याकरीता या ग्रंथात प्रसन्न करण्यात आलेला आहे.


श्री संत गाडगेबाबा अमरावती विद्यापीठ अंतर्गत येण्याचा पाठ कॉलेज आणि संशोधक निमाण्या संकुत आणि अखंड प्रयत्नातून साकारलेला हा संपादित ग्रंथ शेती क्षेत्रात महत्त्वाची उपलब्धी आहे.

शेती क्षेत्रात होणारे बदल आणि असणारे आव्हान यांना एकत्रितून अर्थव्यवस्थातून त्यांचे एक विवेकीय विचार आणि दिशा देण्याचे कार्य हा संपादित ग्रंथ करेल अशी आशा आहे.

हा ग्रंथ मूले व्यवस्थापन येण्यासाठी पयल करणारा संपूर्ण संशोधक व प्रकाशक मंडळी सह संपादक मंडळाचे मी अभिनंदन करता आणि या क्षेत्रात आशा करतो अनेक कॉलेजेस एकत्र येऊन त्यांनी एक विशिष्ट विषयवार समाजास दिशा दाखवण्याचे कार्य आणि यंत्रणेची निर्मिती करावी अशी अपेक्षा करून या ग्रंथ निमितीच्या कार्यसत भरभरून प्रसन्न देते.



श्री. लक्ष्मण के. कांबळे
श्री यंत्रणेचा सहायक संपादक व अतिरिक्त सहायक
वाणिज्य महाविद्यालय अमरावती, जिन्हावा - महाराष्ट्र



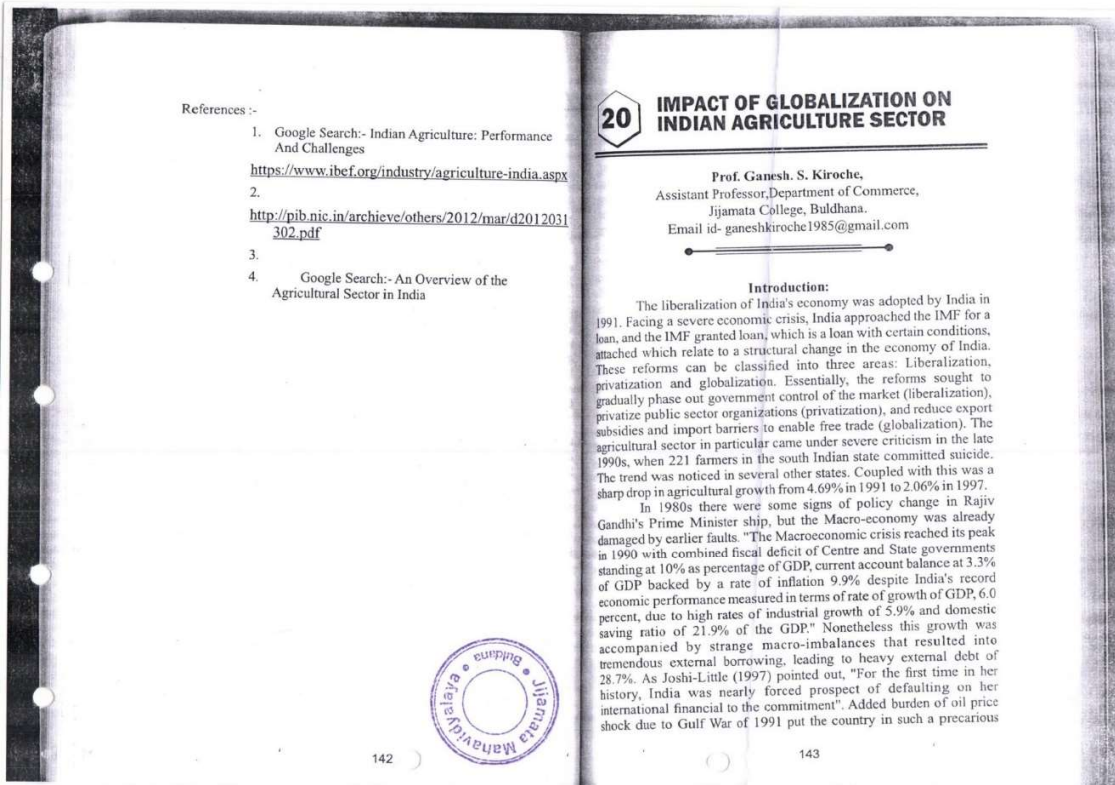
INDEX

Sr.No.	Name of participants	Title of paper	P. No.
1.	Mr. Vishwanath P. Hissal,	New Agricultural Act and Impact on Indian Agriculture	4
2.	Memon Sohail Mohd Yusuf, Dr. Kathar Ganesh. N.	New Agriculture Act And Empowerment Of Farmers	11
3.	Dr. Sanjay Ramkrushna Bhojar	Performance of Institutional Finance for Agricultural Development	21
4.	Dr. Pravin P. Kulkarni	Indian Agriculture: Performance And Challenges	30
5.	Dr Kailas .Arjunrao Thombre, Dr Sannake A.C	Indian Agricultural Labour	38
6.	Abhinav Raosaheb Pundkar	New Agriculture Act And Contract Farming	50
7.	Dr. Prashant S. Vairalkar	Agriculture Sector of Indian Economy	54
8.	Qureshi Shaikh Nawaz Shaikh Nazeer, Dr Padmapani Bhagwan Sawai	New Agriculture Act And Contract Farming	61
9.	Dr. Subhash P. Jadhao	Concept of Agriculture Marketing And Its On Agricultural Sector	69
10.	Mr. Sandip Balu Rathod	Agriculture Marketing And Rural Development	75
11.	Dr Memon Ubed Yusuf,	The Aggravating Crisis of the Indian Agricultural Sector with Emphasis on the New Indian Agricultural Bills	82
12.	Sangeeta Patel.	Faced By Farmers And Significance Of Micro - Finance In India Challenges	90
13.	Dr. Bapurao D. Watode	A Review on Indian Agriculture and Labor Problem	95
14.	Dr Vinod Ratiram Bansile, Dr Laxminarayan Chandryya Kurpatwar,	Impact of India's New Farm Act, 2020 on Farmers and Markets	102

15.	Prof. Santosh M. Chavhan	Recent Agriculture Development and Its Issue	107
16.	Dr. Suraj K. Rodde	Indian Agriculture and Financial Institutions	115
17.	Dr. Kishor P. Bholane	Recent Trends and Prospects for Agricultural Marketing in India	122
18.	Dr. Lakshkaushik Dattatraya Puri	The Essentials of Accounting for Farming and Agriculture	129
19.	Prof. Dinesh Mahadeo Dhage	Recent Agriculture Development and Its Issue	137
20.	Prof. Ganesh. S. Kiroche,	Impact of Globalization on Indian Agriculture Sector	143
21.	Dr. Laxman Kisan Karangale	Roll Of Agriculture In Indian Economy	147
22.	Prof. Dr. Waman N. Wirkhade	Economic Reform and Agriculture	158
23.	Dr. Sandeep B. Gaikwad, Dr. Sandeep Laxman Kotkar	Agricultural Bill 2020	167
24.	श्री. दत्ता बन्सीराम जाधव	कृषी सुधारणा विधेयक : फायदे व तोटे	172
25.	प्रा. डॉ. एन. एन. पोंगडे	नवीन कृषी कायदे - अपेक्षा आणि चारित्र्य	178
26.	पुरुषोत्तम कुटे	सिंचन आणि कृषी विकास	185
27.	प्रा. एस. बी. कर्डक	कृषी विपणन	189
28.	डॉ. सुनिल राटोड	भारतीय कृषी सुधारणा विधेयकाचे फायदे आणि तोटे	196
29.	डॉ. शशिकांत लक्ष्मणराव भोज	भारतीय शेती आणि कामगार	202

30.	डॉ. मनीष नरेशराव मोहरील	नवीन कृषी धोरण	212
31.	प्रा. सतोष एकनाथ कर्डक	कृषी विपणन	219
32.	प्रा. डॉ. गजानन लिंबारव सोडनर	महाराष्ट्रातील शेती आणि कामगार	227
33.	डॉ. मनिषा कारमारी आहेर	कृषी विपणन आणि ग्रामीण विकास	233
34.	डॉ. दिपक निवृत्ती कारे	नवीन कृषी कायदे आणि करार शेती	241
35.	डॉ. सुरेश टी. गवळी	नई कृषी नीती २०२० के पक्ष और विपक्ष	249
36.	प्रा. डॉ. रमेश एम. कुन्हेकर	जुना, नवीन कृषी कायदा व शेतकरी	254
37.	Mr. Rahul O. Oza	Opportunities and Challenges in Agriculture Startup	261





References :-

1. Google Search:- Indian Agriculture: Performance And Challenges
<https://www.ibef.org/industry/agriculture-india.aspx>
2. <http://pib.nic.in/archive/others/2012/mar/d2012031302.pdf>
- 3.
4. Google Search:- An Overview of the Agricultural Sector in India

20

IMPACT OF GLOBALIZATION ON INDIAN AGRICULTURE SECTOR

Prof. Ganesh S. Kiroche,
Assistant Professor, Department of Commerce,
Jijamata College, Buldhana.
Email id- ganeshkiroche1985@gmail.com

Introduction:

The liberalization of India's economy was adopted by India in 1991. Facing a severe economic crisis, India approached the IMF for a loan, and the IMF granted loan, which is a loan with certain conditions, attached which relate to a structural change in the economy of India. These reforms can be classified into three areas: Liberalization, privatization and globalization. Essentially, the reforms sought to gradually phase out government control of the market (liberalization), privatize public sector organizations (privatization), and reduce export subsidies and import barriers to enable free trade (globalization). The agricultural sector in particular came under severe criticism in the late 1990s, when 221 farmers in the south Indian state committed suicide. The trend was noticed in several other states. Coupled with this was a sharp drop in agricultural growth from 4.69% in 1991 to 2.06% in 1997. In 1980s there were some signs of policy change in Rajiv Gandhi's Prime Minister ship, but the Macro-economy was already damaged by earlier faults. "The Macroeconomic crisis reached its peak in 1990 with combined fiscal deficit of Centre and State governments standing at 10% as percentage of GDP, current account balance at 3.3% of GDP backed by a rate of inflation 9.9% despite India's record economic performance measured in terms of rate of growth of GDP, 6.0 percent, due to high rates of industrial growth of 5.9% and domestic saving ratio of 21.9% of the GDP." Nonetheless this growth was accompanied by strange macro-imbalances that resulted into tremendous external borrowing, leading to heavy external debt of 28.7%. As Joshi-Little (1997) pointed out, "For the first time in her history, India was nearly forced prospect of defaulting on her international financial to the commitment". Added burden of oil price shock due to Gulf War of 1991 put the country in such a precarious

condition that foreign reserves of worth "only 3 weeks of imports" were left in the treasury. Something drastic had to be done.

In June of 1991, when the current Prime Minister Dr. Manmohan Singh was the Finance Minister (and Mr. Narasinha Rao was the Prime Minister), country received first significant shock of globalization and liberalization. This was also the product of strong demand by some well known economists and policy planners for significantly changing the policy structure. While the declared plan reduced the Rupee value significantly by devaluing it by 21% in one day, it also made it abundantly clear that the old ways of high tariff rates were almost completely over.

The tariff rates were slashed, more foreign direct investment (FDI) was invited and import quotas were demolished. There were essentially 2 parts of the liberalization program: Structural and Stabilization. Stabilization measures were supposed to be of short-term nature, including such policies as the "austerity in governmental budgets", which was supposed to bring about the decline in aggregate demand and therefore lower the inflation rate. The structural adjustment was to be of a long-term nature with such measures as the convertibility on current account of the balance of payment, lower restrictions on domestic business and export promotion.

Crisis facing Indian Agriculture:

The biggest problem Indian agriculture faces today, and the number one cause of farmer suicides is debt. Forcing farmers into a debt trap are soaring input costs, the plummeting price of produce and a lack of proper credit facilities, which makes farmers turn to private moneylenders who charge exorbitant rates of interest. In order to repay these debts, farmers borrow again and get caught in a debt trap.

Beneficiaries of Globalization:

Several studies have indicated that in many developing countries, freer trade, better communication, and more rapid movement of goods and technology have raised living standards and reduced poverty, but benefits accrued mainly in urban areas. Farmers in general and small farmers in particular are least benefited. In developing countries large farmers appears to be taking advantage of reaping the benefits of agricultural markets of developed countries. With their economic and political influence, they are able to get best technologies from research stations, grow cash crops, negotiate agreements, and move their products. On the other hand, the small farmers are hand to mouth farmers feeding their families with meager produce they yield.

Effect of Globalization on Agriculture Sector

It is clear that the liberalization policies adopted by the

government of India played a dominant role in the agrarian crisis that is now being played out. However, this is not to say that privatization, liberalization, and globalization are per say bad, or inherently inimical to an economy. It is the one size fits all brand of liberalization adopted by the IMF and the World Bank which forces countries to privatize, liberalize and globalize without exception which has failed. Without taking into account the state of an economy, and in this case, the state and nature of the agricultural sector in India, the IMF and the World Bank, with the cooperation of the Indian government embarked on mismatched reforms, which have caused misery and despair among millions of Indian farmers, driving large numbers of them to suicide. It is also essential to break the link between aid and liberalization, which caused India in the first place to accept the conditions of the IMF. Remember that India was on the brink of a financial crisis in 1991 when it applied for the IMF loan and accepted its conditions perhaps the course of economic reform in India would have taken a very different course if there was no urgent need to borrow from the IMF. The start to this process may have already occurred: recognizing the failure of its liberalization policies, the Blair government of Britain announced in 2004 that it will no longer make liberalization and privatization conditions of aid. In another blow to the neo-liberal lobby. The battle, however, has not yet been won. It is essential for the rest of the GB to follow Britain's example in order to influence World Bank and IMF policy towards India to ensure blind liberalization is not pursued, and so that countries like India can adopt tailor-made reforms to suit their economy.

Seventy per cent of our population derives their livelihood from agriculture and 80 percent of the farmers are small and marginal category. Our post-harvest and sanitary infrastructure is very poor and massive investment in this area will be essential if we are to ensure a level-playing field in external trade in agriculture. The subsidies and other support measure should be continued by designating these under the Livelihood box to tide over the initial problems but could be revoked at a subsequent time, say, after 10-15 years. Restraints on subsidy to farmers can be overcome by canalizing support through Commodity Boards as is being done in the developed countries. But such support is granted not through direct subsidies to facilitating sustainable production through building infrastructure. India has immense biodiversity and natural resources.

There is no dearth of knowledge and farmers are hard-working in spite of this, the small farmers? gains from agriculture are not commensurate to the efforts put in and agriculture cost inputs. This is going to affect the agricultural productivity and food security of the



nation. The globalization has helped in the mobility of foreign flowers in India and Indian mangoes abroad. The developments in ICT too have facilitated just in time access to global agriculture knowledge. What is lacking is strategy and agility on the part of government machinery to put the existing infrastructure to best possible use, identify gaps and quickly attend to the problem areas. The private sector steps in where the public sector keeps thinking only. The success story of ITC's e-copulas in rural India indicates that a lot of potential for development exists in rural India. The development process will hasten if agricultural development and small farmers' development go hand in hand. There is a need to constantly build and improve rural infrastructure such as improving irrigation, electric supply and building a type of public libraries that may act as local gateways to global knowledge. Such public libraries will not only provide access to desired knowledge but also keep the rural youth away from many social evils, help them to realize their true potentialities and keep them aware of opportunities that are existing for them.

Conclusion:
Rural development in India should be a mission accomplished through synergy of many ongoing efforts and coordination of various activities where speedy transfer of knowledge and information for various developmental activities should be an important component. There is an urgent need for imparting information literacy to farmers and build their capacities so that they can competently face new developments in agriculture. There is also need for cross disciplinary communication of information from related areas such as ethno-botany, biotechnology, environmental sciences for sustainable agriculture development so that agricultural productivity can be increased, and farmers' economic position improved without degradation of planet earth. Mahatma Gandhi said that earth provides enough to satisfy every man's need, but not every man's greed. In this Way Globalization very important to agriculture sector.

References:
(1) <https://www.un.org>
(2) <https://agricoop.nic.in/>
(3) <http://www.indiatogether.org/2006/jun/>
(4) Isaac, Report 2005, "The globalization gap". Pearson Education Inc, New Jersey.
(5) Land and Livestock Holdings Survey, NSS Forty-Eighth Round, 1991, Government of India.
(6) Government of India (2001): Economic Survey (various issues), Ministry of Finance, New Delhi.

Principal
Jijamata Mahavidyalaya
Buldhana

146

21 ROLL OF AGRICULTURE IN INDIAN ECONOMY

Dr. Laxman Kisan Karangale
Shri V. N. Arts and A. N. Commerce College Mangrulpir,
Dist.-Washim
E-mail: lok.bbc@gmail.com Mobile: 9423446821

Abstract-
The Indian agricultural research system is the culmination of a process that began in the nineteenth century and culminated in the Imperial (now Indian) Council of Agricultural Research (ICAR) being established in 1929 on the proposal of a Royal Commission on Agriculture. This paper will also include the experiences of agricultural labourers and the struggles they are waging in a period when Indian agriculture is becoming increasingly integrated into global markets. It claims that global finance and globalisation forces are currently attempting to appropriate, reorganise and redefine the shift that is currently taking place carried performed in the context of agriculture. Rather than eliminating existing feudal and patriarchal connections in Indian agriculture, it examines how globalisation has accepted and changed them to meet its needs in a number of locally unique ways. It also addresses the political aspect of agricultural labour movements, which are forced to be progressive rather than defensive, projecting a vision of social and economic transformation, which leads to a questioning of unequal connections among those fighting for change. Despite the fact that agriculture is the most important sector of the Indian economy.

Keywords: - Indian Agriculture, ICAR, Agricultural labour,

147


chapter in BOOK 2021-22

“Indian Agriculture and New Agriculture Acts”

EDITED BOOK

In Collaboration with

Phulsing Naik Mahavidyalaya, Pusad Dist.-Yavatmal
B. S. Patil Mahavidyalaya, Paratwada Dist. – Amravati
Jagadamba Mahavidyalaya, Achalpur Dist.-Amravati
Arts, Commerce and Science College, Maregaon Dist.-Yavatmal
Shri V. N. Arts and A. N. Commerce College Mangrulpir Dist.-Washim



This is certify that Dr./Mr./Mrs **Prof. Ganesh. S. Kiroche** of **Jijamata College, Buldhana** has Contributed Chapter/Research Article in “Indian Agriculture and New Agriculture Acts” published on 28 September, 2021. With ISBN No. 978-81-951599-7-0

He / She Contributed Book Chapter / Research Paper entitled **Impact of Globalization on Indian a Agriculture Sector**

Principal
Eagle-Leap Printers and Publishers Pvt. Ltd.
Buldhana

Chief Editor
Mr. Bhushan S. Mangate

Co-Editor
Dr. Nandkishor N. Dhondge



2020-21 2021 ✓

International Conference on Smart Data Intelligence
(ICSMDI 2021)

Early Detection of Cancer using Nano-Fabrication Technology MEMS Cantilever Sensor

Lakshman K^a, Siddharth B. Dabhade^b, Y.S. Rode^c, Avinash Pawar^d, S.Deshmukh^e, Ranjan Maheshwari^f

^aNIELIT Aurangabad, Dr. B. A. M. U. Campus, Aurangabad (MS), India
^bMGM's, Dr. G. Y. Pathrikar College of Computer Science and IT, MGM Univrity, Aurangabad (MS)
^cJijamata Mahavidyalaya, Buldhana, MS, India
^dRTU, Kota (RJ), India
 lakshman.korra@gmail.com, dabhade.siddharth@gmail.com, ys.rode@gmail.com

ABSTRACT

Lots of available biosensor are not portable for the detection of disease for that bulky instruments are required. To overcome these problems, we can use microstructure based biosensor. The sensor is Micro electro Mechanical Sensor (MEMS) based cantilever. Here, in this article simulating cantilever by changing chemical materials and parameters. For the different cancer diseases like Brest cancer cu(copper) and for heart cancer gold material were used to simulate cantilever. Laser beam and photo detector technology are bulky and costly also. Instated of that cantilever having dimension are width 1 micro meter, length 4 micrometer and height of cantilever is varies in between 25 to 50 nm which gives huge sensitivity. In this paper simulation of the cantilever based on various materials as per the changes in resistance and capacitance effect analysis, cancer tissues behaviour, and identify the exact state of cancer.

Keywords: Micro electro Mechanical Sensor (MEMS), Cancer, Cantilever Sensor, Nanofabrication, Copper

1. Introduction

Oral cancer is spreading worldwide with heighten serious troubles. Out of 135 cr. People's more than 1.1 million people get affected by the cancer and 0.7 million peoples are deaths due to the cancer. As per the IARC report cancer is one of the widely spread disease [1]. Most common cancer type in India is breast cancer in women and oral cancer in men. In India all ages' females who suffering from breast cancer is 27.2 % and men's who suffering from oral cancer is 16.1 %. Breast and Oral cancer rank is 1 and 2 in India. Due to more utilization of tobacco in various Indian states the oral cancer is cases are comes under observation [2]. India has 33.33% active oral cancer cases as compare to world and men's having 50 ages is generally affected by the oral cancer [3][4]. Incident and morality rates for breast cancer is 24.1% and 13.4% similarly lip and oral cavity Incident and morality rates are 9.1% and 5.6% are shown in the Figure 1 and 2[1]. Due to small in size, low cost, fast growing with highly precision MEMS devices provides measuring tissues density and temperature and improves the surgical outcomes [5]. In 1900's peoples uses microscope and electron microscope to see small thing but facing problems to see very small things.

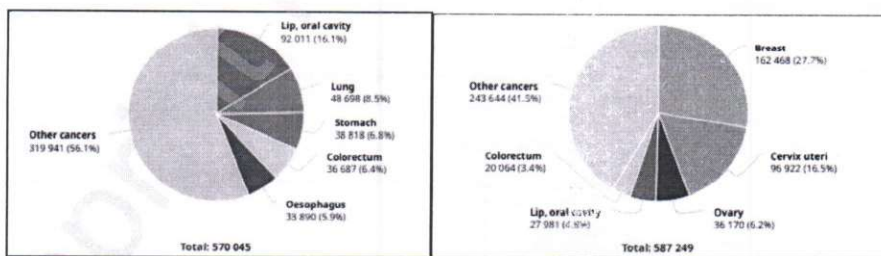


Fig. 1:- In India Total number of cancer new cases in males all age groups [1].

(Signature)
Principal
Jijamata Mahavidyalaya
Buldhana



This preprint research paper has not been peer reviewed. Electronic copy available at: <https://ssrn.com/abstract=3851169>



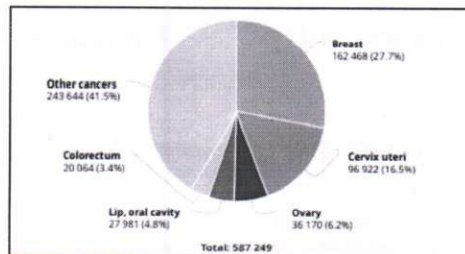


Fig. 2:- In India Total number of cancer new cases in women's all age groups [1]

If people's wants very advanced technology they use MRI Machine and obtain huge sensitivity detection of various types of anomalies. But MRI Machine is not a biosensor. Biosensors are newly called as nano biosensor. These nano biosensors are even smaller, can detect lower concentration things also. Human body hierarchy of structure is start with DNA, intercellular process running within cell then there is various collection of organ. Various cancer diseases has already manifested in the organs. Due to less sensitivity devices and losses which can identify very late exact stage of diseases (cancer). Nano biosensor allows us to indentify exact stage of early cancer development. By selecting 25 to 50 nm cantilever height we can obtain extra ordinary sensitivity which detects early stage of cancer detection.

2. Biopsy

Biopsy is typically indicated for obtaining a final diagnosis on the basis of histopathological features [6] with the assistance of this final diagnosis, treatment planning is completed. Biopsy also plays a very important role in establishing prognosis of malignant and premalignant lesions and conditions. Also knowing the prognosis helps in determining the morbidity and mortality of a patient also as efficacy of the treatment. [7]

Working of Biopsy

Doctor recommends biopsy when he find suspicious while physical exam or test. Biopsy is main way to diagnosis the cancer treatment. To perform biopsy doctor need small tissues from human body to remove tissues doctor requires surgery sometime.

Image-Guided Biopsy: When the affected area is deeper inside the body at that time doctor uses Images-Guided biopsy method. With help of imaging techniques using needle doctor guides affected area location in human body. This depends on the amount of tissues needed, possible diagnosis and other factors. Doctor uses one of the following types of imagining techniques to find the affected area from body

A. Ultrasound:

It helps doctor to look the tumors when not visible in the X ray. For biopsy method doctor often uses needle. Ultrasound is usually used for the quick and most don't require special preparation.

B. CT scan:

Using CT scan we can identify the exact state of cancer but it is bulky and costly instrument.

MEMS: These devices used to identify the early stage of cancer. Due to more sensitive materials

3. Working and Selection of Material for Micro cantilevers:

To obtain extra ordinary sensitivity we used cantilever based sensor generally it detects these nano gram to pico gram level material related easily. When we deal with such very low level concentration it requires amplification before the molecule can be detected. Using this sensor technology in vacuum we should able to measure 100s of zepto-gram level masses. Human cells are larger as nano gram as compare to virus and bacteria.

Why cantilever based Biosensor:

The key point is MEMS don't need reference electrode and MEMS gives huge sensitivity and it is very popular in different nanofabrication technology.

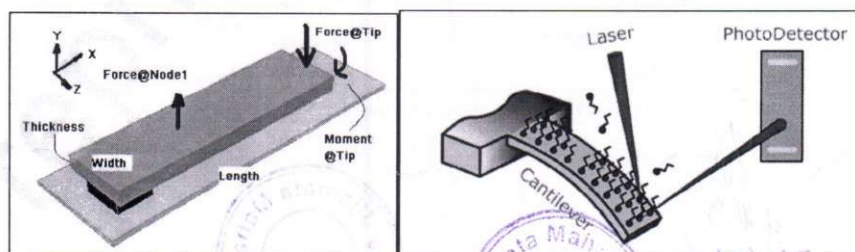


Fig. 3: - Cantilever based Biosensor.

This preprint research paper has not been peer reviewed. Electronic copy available at: <https://ssrn.com/abstract=3851193>



Dimension of cantilever are width is 1 micro meter and length is 4 micro meters to obtain huge sensitivity cantilever height is in between 25 to 50 nano meter. Once bio modules have landed on cantilever surface bounce off a laser beam and use a photo detector to measure the location. By comparing flat cantilever and bended cantilever the position of photo detector changes. After biomolecules reached on the surface of cantilever oscillation starts in the cantilever then photo detector observes the changes in the laser beam and calculate how much deflection takes place. To measure the deflection we should calculate change in the resonant frequency. The assembly of laser and photo detector are bulky in nature so it is difficult to miniaturize. By observing cantilever sensor change in resistance we can identify whether biomolecule landed or not. As we know that capacitor is inversely proportional to distance between two parallel plate using same formulas we can observe the deflection in cantilevers.

How Does cantilever works:

1. Change in deflection before landing biomolecule Mathematical model

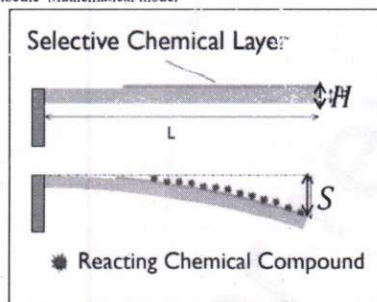


Fig. 4: - Cantilever Reacting Chemical Compound Works

Originally it's undeflected and green layer is that the selective layer which recognizes the molecule a bit like DNA layer was present and target DNA came and sure to it or an antibody could be present so as to catch that focus on bacteria. that's the green which is that the receptor layer then once the red biomolecules have are available , the mass has changed and therefore the whole is deflected in engineering so as to know what proportion deflection takes place. Calculate the external force associated with it using formula given below.

$$\frac{d^2y}{dt^2} + \gamma \frac{dy}{dt} + k(y - y_0) = F_{ext}$$

2. Readings of cantilever:

All readings taken under sugar cantilever simulation tool this tool can do statics and parameter sweep analysis for cantilever with customized geometry and load distribution. Algorithm sugar is based on the nodal analysis which is faster than finite element analysis with comparable accuracy within linear region.

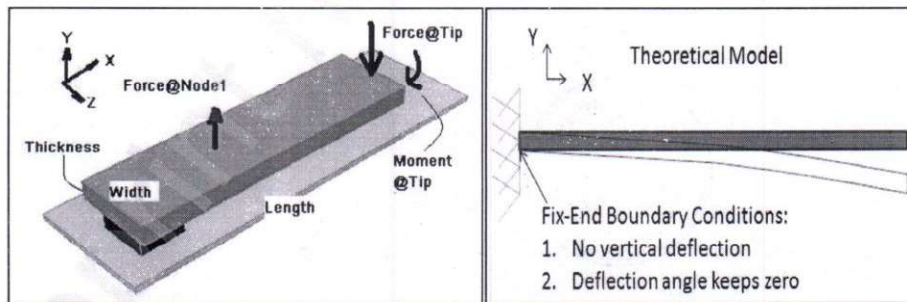


Fig. 5 - Experimental Model.



This preprint research paper has not been peer reviewed. Electronic copy available at: <https://sem.com/abstract/385n193>



Table 1 Design Cantilever with mention parameters

Material Name: Au (Gold)		Material Name: Cu(Copper)	
Material Property			
Poisson Ratio	0.415		0.34
Youngs Modulus	7.9e+10		121x 10 ⁹
Geometric Property			
Length	100e-6		100e-6
Width	2e-6		2e-6
Thickness	2e-6		2e-6
Statics Analysis			
Azimuth	37.5		37.5
Elevation	30		30

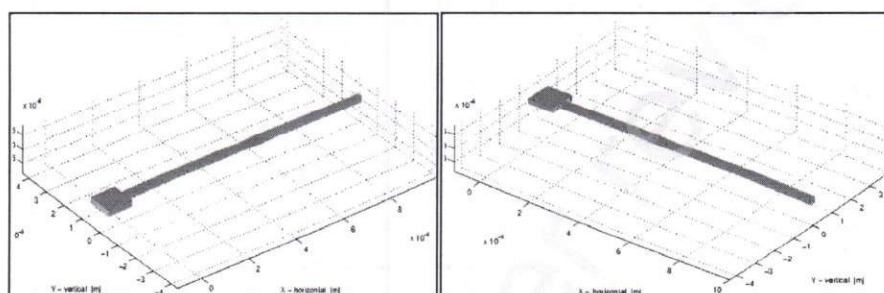


Fig. 6 – Reading of Cantilever.

Conclusion:

The tissues taken from the body is observing under microscope and after analysis of result doctor can able to understand the origin of the cancer and defines the cancer grade in between 1 to 4 scales. Low-grade (grade 1) cancers are generally the least aggressive and high-grade (grade 4) cancers are generally the most aggressive. Here we use MEMS cantilever having dimension width is 1 micro meter, length is 4 micro meter and height is 25 to 50 nm. Which show extra ordinary sensitivity and detects nano gram to pico gram level material easily. MEMS cantilever are identify very early stage of the cancer using gold and copper material and dimension. Here we observe that cantilever sensor measure changes in mass and stiffness of the beam flowing the capture biomolecules. Due to nanofabrication technology we can deal with very small concentration of masses and diagnose the patient properly. This is very difficult in the conventional cancer detection instruments. Due to early detection of cancer stage doctor can diagnoses the patient and provides suitable medicine at very stage.



This preprint research paper has not been peer reviewed. Electronic copy available at: <https://ssrn.com/abstract=3851193>



REFERENCES

- [1] Kurmendral Rajesh Kumar² MEMS based cantilever biosensors for cancer detection using potential bio-markers present in VOCs: a survey *Microsystem Technologies* (2019) 25:3253–3267
- [2] François Hubera , Hans Peter Langa , Jiayun Zhanga , Donata Rimoldib , Christoph Gerbera Nanosensors for cancer detection Review article | Published 9 February 2015, doi:10.4414/smw.2015.14092
- [3] Johnson NW, Amarasinghe HK. Epidemiology and aetiology of Head and Neck Cancers. In: Benier J ed. *Head and Neck Cancer: Multimodality management*. London: Springer, 2011, pp 01-40.
- [4] Sheno R, Devrukkar VC, Sharma BK, et al. Demographic and clinical profile of oral squamous cell carcinoma patients: a retrospective study.; 2012; *Indian J Cancer*. ;49(1):21-6.
- [5] Coelho KR. Challenges of the Oral Cancer Burden in India. *J Cancer Epidemiol*. 2012; Volume 2012, Article ID 701932. doi:10.1155/2012/701932
- [6] Design and fabrication of a flexible MEMS-based electro-mechanical sensor array for breast cancer diagnosis
- [7] Poh C.F, Ng Samson, Berean K.W., Williams P.M., Rosin M.P., Zhang L. Biopsy and histopathologic diagnosis of oral premalignant and malignant lesions. *JCDA*. 2008; 74:283-288.
- [8] Ephros H, James W.D. Oral Tissue Biopsy. <http://emedicine.medscape.com/article/1079770>
- [9] SUGARCube cantilever 10.4231/D3Z02Z93N
- [10] Changing Trends in oral cancer – a global scenario, Alam, Principles of Nanobiosensors, 2013
- [11] Ramandeep Kaur Sohil , Karandeep Singh Sandhu A Paradigm Shift of Global Trends of Oral Cancer-A Call to Action *International Journal of Research in Health and Allied Sciences* ISSN: 2455-7803
- [12] Cancer incidence and mortality patterns in Europe: estimates for 40 countries in 2012. Ferlay J, Steliarova- Foucher E, Lortet-Tieulent J, Rosso S, Coebergh JW, Comber H, Forman D, Bray F *Eur J Cancer*. 2013 Apr; 49(6):1374-403.
- [13] GLOBOCAN: Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012. *International Agency for Research on Cancer [online] 2012; [cited 2016 July 16].*
- [14] Global epidemiology of oral and oropharyngeal cancer. *Wamakulasuriya S Oral Oncol*. 2009 Apr-May; 45(4- 5):309-16.
- [15] Johnson NW, Amarasinghe HK. Epidemiology and aetiology of Head and Neck Cancers. In: Benier J ed. *Head and Neck Cancer: Multimodality management*. London: Springer, 2011; pp 01 - 40.
- [16] Wamakulasuriya S. Global Epidemiology of oral and oropharyngeal cancer. *Oral oncol* 2009. April- May;45 (4-5):309-16.
- [17] Coelho KR. Challenges of the Oral Cancer Burden in India. *Journal of Cancer Epidemiology*. 2012;2012:701932. doi:10.1155/2012/701932.
- [18] Oral Cancer: Indian pandemic B.Gupta & N.W. Johnson *BDJ* Volume 222, Page 497 (07 april,2017).
- [19] Global Incidence of oral and oropharyngeal cancer in young adults:a systematic review F.Leusink, A. Hussein, M.helder, T . forouzanfar (2017).


Principal
Jijamata Mahavidyalaya
Buldana



This preprint research paper has not been peer reviewed. Electronic copy available at: <https://ssrn.com/abstract=3851193>



Proceedings of online "International Conference on Intelligent Systems Electrical and Communication Technology" (ICISECT-21) on 09th & 10th April, 2021

PAPER ID: ICISECT21-CS0064

Comparative Analysis of Breast Cancer Detection through Thermal Images Using K-Nearest Neighbour, Adaboost, Logistic Regression

¹Lakshman K, ²Siddharth B Dabhade, ³Dr. Yogesh S. Rode, ⁴Pawan Alhat, ⁵Sachin Deshmukh, ⁶Ranjan Maheshwari

^{1,4} NIELIT Aurangabad, Dr. B.A.M.U. CAMPUS, Aurangabad, MS

² MGM's, Dr. G.Y. Pathrikar College of Computer Science and IT, Aurangabad, MS

³ Jijamata Mahavidyalaya, Buldana, MS

⁵ Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, MS

⁶ Rajasthan Technical University Kota, RJ, India

¹lakshman.korra@gmail.com

Abstract—Breast cancer can be found in both men and women. Though it's rare in men, breast cancer in women has increased significantly and as per WHO cancer statics 2018 report of Breast Cancer recorded approximately 1.6 to 2 lakhs registered cases and around 90 thousand reported deaths. The detection of this cancer at higher stages (i.e. stages 3 and 4) makes it difficult for the patient to survive and thus is a reason that 50% of Indian women suffer from stages 3 and 4 of breast cancer. One more reason for less survivability is that people have less awareness on such a topic. The objective of this research paper is to present results obtained on breast cancer on basis of a comparison of K-Nearest neighbor, Adaboost, Logistic regression using 5 folds 10 folds, 20 folds on data sets. These techniques achieved an accuracy of 96.3%, 91%, and 86.3%. in that, we found KNN is better than the Adaboost and Logistic regression.

Keyword: Breast Cancer, Mammography, preprocessing, Segmentation, KNN, Adaboost, Logistic regression, Malignant.

*Corresponding Author

E-mail Address: lakshman.korra@gmail.com



109

Principal
Jijamata Mahavidyalaya
Buldana

Organized by Departments of Computer Science, Electronics, Information Technology and Electrical Engineering of St Martin's Engineering College (www.smec.ac.in).

ISBN :978-93-83470-37-2



Proceedings of online “International Conference on Intelligent Systems Electrical and Communication Technology” (ICISECT-21) on 09th & 10th April, 2021

108	ICISECT21-CS0063	Delving into Vyper: A Security Oriented Language For Smart Contract Development Palak Aar ¹ , Jawahar Thakur ²	108
109	ICISECT21-CS0064	Comparative Analysis of Breast Cancer Detection Through Thermal Images Using K-Nearest Neighbour, Adaboost, Logistic Regression Lakshman K ¹ , Siddharth B Dabhade ² , Dr. Yogesh S. Rode ³ , Pawan Alhat Sachin Deshmukh ⁴ , Ranjan Maheshwari ⁵	109
110	ICISECT21-CS0066	Potential of Machine Learning and Deep Learning for Mining The Opinions Mikanshu Rani ¹ , Jaswinder Singh ²	110
111	ICISECT21-CS0067	Multi Convert System Using Python Edigalingappa ¹	111
112	ICISECT21-CS0068	To Select A Best Mini Server in P2p Using Rsvp Protocol and Firefly Algorithm Dr.M.Narayanan ¹ , Dr Leena Samantray ² , Sushree Sonam Mohapatra ³	112
113	ICISECT21-CS0069	Cloud Based Efficient Privation Conjunctive Queries with Ind-Cka Security Mrs.Sucheta H ¹	113
114	ICISECT21-CS0071	A Review on Rain Full Prediction Using Machine Learning and Ann Techniques Ch.Sathyannarayana ¹	114
115	ICISECT21-CS0072	IoT And Machine Learning Based Smart Agri -Farming System P. Laxmi Devi ¹	115
116	ICISECT21-CS0073	Scheduling Security-Critical Real-Time Applications on Clusters Y. Chandra Mouli ¹	116
117	ICISECT21-CS0074	A Machine Learning Approach for Enhancing Defence Against Global Terrorism Dr.Korra Srinivas ¹	117
118	ICISECT21-CS0075	A Detailed Investigation into The Product Evaluating Data Mining Process Using Twitter Data Gali Venu Babu ¹ , S Krupamai Yendrapati ² , Dr K Gurnadha Gupta ³	118
119	ICISECT21-CS0076	Smart Anti Theft- Detection System for Vehicle Using IoT A.Shivajyothi ¹ , T. Poongothai ²	119
120	ICISECT21-IT0001	A Secure Anti-Collusion of Data Sharing Scheme for Dynamic Cloud Group. Pagadala Ganeshkumar ¹ , RegondaNagaraju ² , Gandla shivakanth ³ , A.Veera Babu ⁴	120
121	ICISECT21-IT0004	Secure Data Group Sharing and Conditional Dissemination with Multi-Owner in Cloud Computing Gandla Shivakanth ¹ , Regonda Nagaraju ² , P. Ganesh Kumar ³ , J.Vinoda ⁴	121
122	ICISECT21-IT0005	Privacy and Security Issues in the Environment of Distributed Computing Amudala Bhasha	122
123	ICISECT21-IT0006	Survey on Datamining Approaches for Healthcare. J.Vinoda	123
124	ICISECT21-IT0008	A Review on Battle against COVID for Future Research Guidance S. Veeresh Kumar	124
125	ICISECT21-IT0011	Collective Classification of Spam Campaigners on Twitter. G. Priya ¹ , S.Nishitha ² , Pooja Singh ³ , M.Sannith ⁴ , Abhishek Jena ⁵	125
126	ICISECT21-IT0012	An Enhanced Gaussian Road Traffic Speed Prediction Gandla Sivakanth ¹ , Srikar Thodupunoori ² , K.Ruthvik Reddy ³ , Sana Naaz ⁴ , D.Prajwal Yadav ⁵	126
127	ICISECT21-IT0013	A Dynamic Approach for Encryption and Decryption of Medical Record Transactions in the Cloud Data D. Babu Rao ¹ , B. Pavani ² , B. Laya ³ , K. Sai Likith Reddy ⁴ , G. Neeraj ⁵	127

xii

Organized by Departments of Computer Science, Electronics, Information Technology and Electrical Engineering of St Martin's Engineering College (www.smeec.ac.in).

ISBN :978-93-83470-37-2



Proceedings of online "International Conference on Intelligent Systems Electrical and Communication Technology" (ICISECT-21) on 09th & 10th April, 2021

PAPER ID: ICISECT21-CS0057

Breast Cancer Identification via Thermography Image with Naïve Bayes & Neural Network classifier

¹Lakshman K, ²Siddharth B. Dabhade, ³Y. S. Rode, ⁴Yogesh Shejwal, ⁵S. Deshmukh, ⁶Ranjan Maheshwari,
^{1,4}NIELIT Aurangabad, Dr. B. A. M. U. Campus, Aurangabad (MS), India
²MGM's, Dr. G. Y. Pathrikar College of Computer Science and IT, MGM Univrity, Aurangabad
³Jijamata Mahavidyalaya, Buldhana, MS, India
⁴UDCSIT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS), India
⁵RTU, Kota (RJ), India
¹lakshman.korra@gmail.com, ²dabhade.siddharth@gmail.com, ³ys.rode@gmail.com

Abstract— Breast cancer is known as the most common offensive cancer type between women and men. Programmed breast cancer discovery classifications are in demand for that, various machine learning techniques have been proposed to detect breast cancer. In this paper we are performing with two different operations. One of these techniques is the Bayes classifier Naïve Bayesian (NB) which is based on the Bayes theorem and the second one is the methodology and techniques used are based on a deep Convolution Neural Network model to predict breast cancer from thermal images. Thermal images are pre-processed, segmented and classified using a deep neural network. The research mainly concludes with to get 95.8% accuracy of prediction achieved for breast cancer based on the output spectrum using training data of 680 thermo grams. We are taking the different readings of both samples by using 5,10,20 folds dataset & also compare in between the two classifiers which will be more relent or efficient to detect breast cancer in an early stage by using thermal images.

Keywords: Naïve Bayesian, Thermal Images, Neural Network, Breast Cancer, Classifiers.

*Corresponding Author
E-mail Address: lakshman.korra@gmail.com



Principal
Jijamata Mahavidyalaya
Buldhana

103

Organized by Departments of Computer Science, Electronics, Information Technology and Electrical Engineering of St Martin's Engineering College (www.smec.ac.in).
ISBN :978-93-83470-37-2



Proceedings of online "International Conference on Intelligent Systems Electrical and Communication Technology" (ICISECT-21) on 09th & 10th April, 2021

87	ICISECT21-CS0039	QOS-Aware Multi-Objective Load Balancing and Honed Routing in Cloud Computing Environment Ashok Kumar Bhoi ¹ , Manas Ranjan Kaba ² , Purna Chandra Sethi ³ , Suwendu Chandan Nayak ⁴	87
88	ICISECT21-CS0040	Flower Detection Using Real Time Object Detection YOLO S.Swetha ¹	88
89	ICISECT21-CS0041	A Strong Automated System for Collision Detection on Rail Track Using IoT Thirukumar ¹ , C Lingaeswaran ² , A Samuel ³ , B Karthikeyan ⁴ , S Ashok.P ⁵	89
90	ICISECT21-CS0042	Technological Interventions: An Enabler for Work Teams to Survive Virtually Amidst Pandemic (A Study In The Context Of UAE) Garima Madaan Dua ¹ , Sugandha Agarwal ²	90
91	ICISECT21-CS0043	DCNN: Elderly People Fall Detection in Indoor Video G. Prabhakar Reddy ¹ , M. Kalaiselvi Geetha ²	91
92	ICISECT21-CS0044	Predicting Depression Level of Students N. Deepitha ¹ , S. Padma Shree ² , M. S. Madhupriyas ³ , Rajeshkumar ⁴	92
93	ICISECT21-CS0045	Storm Prediction Dashboard R. Pungalagam ¹ , B. Priyadharshini.M ² , T. Kanagalakshmi ³ , Nithyasree ⁴	93
94	ICISECT21-CS0046	Joint Hypergraph Learning: Retrieval of Tag-Based Image Dr. B. Rajalingam ¹ , Dr. R. Santhoshkumar ² , Dr. R. Muruganantham ³	94
95	ICISECT21-CS0047	Deep Convolutional Neural Network: Emotion Recognition from Whole Body Movements Dr. R. Santhoshkumar ¹ , Dr. B. Rajalingam ² , Dr. R. Muruganantham ³	95
96	ICISECT21-CS0048	SMART Book Reader: Text Extraction from Image using Tesseract OCR and Comparison with Google Cloud Vision API Vishnu Prasath. R ¹ , Nikhil. R ² , Mohamed Ashik ³ , R Sankhasubhra Nanda ⁴ , Ashok. P ⁵	96
97	ICISECT21-CS0050	Realistic Future Flying Car Using Machine Learning U.Nagaiiah ¹	97
98	ICISECT21-CS0052	Categorization and Identification of Attentive Students Using Support Vector Machines to Tailor Learning Systems Zaheda Parveen ¹	98
99	ICISECT21-CS0053	AI-Aided Framework for Improving Learning Outcomes of Education System in India Harshali Patil ¹ , Vaishali Patil ²	99
100	ICISECT21-CS0054	Ground Level Testing Softwares Pranay Kumar ¹	100
101	ICISECT21-CS0055	Trends of Internet of Things in India Ch.Malleswar Rao ¹	101
102	ICISECT21-CS0056	Isolated Marathi Word Recognition using Deep Convolutional Neural Network (DCNN) Somnath Hase ¹ , Sidharth More ² , Dr. Sunil Nimbhore ³	102
103	ICISECT21-CS0057	Breast Cancer Identification via Thermography Image with Naïve Bayes & Neural Network classifier Lakshman K ¹ , Siddharth B Dabhade ² , Y. S. Rode ³ , Yogesh Shejwal ⁴ , S. Deshmukh ⁵ , Ranjan Maheshwari ⁶	103
104	ICISECT21-CS0058	Reflection of SH-Waves by a Spherical Cavity Embedded in an Inhomogeneous Medium Aditya kumar Patnaik ¹ , Sapan Kumar Sama ² , Nirakara Pradhan ³ , Basanta Kumar Swain ⁴	104
105	ICISECT21-CS0059	Smart Transformation-ETL Framework for Real-Time Analytics on Document-Oriented Databases for Data Warehouse Modernization Monika Patel ¹ , Dr. Dhiren B. Patel ²	105
106	ICISECT21-CS0060	Exploring the Potential of Artificial Intelligence and Machine Learning in HealthCare Kirti ¹ , Jaswinder Singh ²	106
107	ICISECT21-CS0061	Blockchain Technology for Curbing Input Tax Credit Fraud in India Palak Aar ¹ , Jawahar Thakur ²	107

xi

Organized by Departments of Computer Science, Electronics, Information Technology and Electrical Engineering of St Martin's Engineering College (www.smec.ac.in).

ISBN :978-93-83470-37-2



Proceedings of online "International Conference on Intelligent Systems Electrical and Communication Technology" (ICISECT-21) on 09th & 10th April, 2021

TABLE OF CONTENTS

S.No	Paper ID	Title of the Paper with Author Name	Page No.
1	ICISECT21-EC0001	Low Power Multiplier Design Using Dynamic Voltage and Frequency Scaling <i>Amena Farhat¹, Siddesha K², Kavitha Narayan B M³</i>	1
2	ICISECT21-EC0005	Bit Error Attentive Lossless Color Image Solidity <i>Santhosh Singireddy¹, P Pushpa², T Sri Lakshmi³</i>	2
3	ICISECT21-EC0007	Water Trash Collector Using Solar Power <i>K.Anitha¹, T.Sowmya², G.Ramesh³</i>	3
4	ICISECT21-EC0008	Voice Controlled Elderly Assistive Device <i>Cheekati Harini¹</i>	4
5	ICISECT21-EC0009	Evaluation of 16-Bit, 32-Bit Multiply-Accumulate Units Using Vedic Multiplier <i>G.L.Priyanka¹, D.Navya², V.srija³</i>	5
6	ICISECT21-EC0010	Security Assistance System for Women with GPS Tracking and Messaging System <i>T.Sowmya¹, K. Anitha², Garla Ramesh³</i>	6
7	ICISECT21-EC0011	Gas Detection Robot in Mines <i>P. Kiranmayee¹, Ch. Swathi², Dubasi Kirtana³</i>	7
8	ICISECT21-EC0012	Autonomous Vehicles by using Image Processing Techniques <i>R. Alekya¹, Aleti Soumya², B. Shiny Sucharitha³</i>	8
9	ICISECT21-EC0013	Proposal Simulation and Execution of Embedded Scheme centered Dual Horn by Wireless Technology <i>Chakali Swathi¹, P.Kiranmayee², Dubasi Kirtana³</i>	9
10	ICISECT21-EC0014	Monitoring and Controlling the Intensity of Light Using Embedded System <i>Dubasi Kirtana¹, Potaparathi Kiranmayee², Chakali Swathi³</i>	10
11	ICISECT21-EC0015	A Review on GPU Implementation using CUDA Parallel Programming <i>K.Naga Venkateshwara Rao¹, T.Sudheer Kumar²</i>	11
12	ICISECT21-EC0016	Recognition of Obstacle by Using Robot <i>B. Shiny Sucharitha¹, Aleti Soumya², R.Alekya³</i>	12
13	ICISECT21-EC0017	Modified Gate Replacement Technique for CMOS VLSI Circuit Using Leakage Current Reduction <i>Aleti Soumya¹, R.Alekya², B. Shiny Sucharitha³</i>	13
14	ICISECT21-EC0019	Image Segmentation by Using Adaptive Algorithm <i>P.Pushpa¹, Santosh Singireddy², T. Srilaxmi³</i>	14
15	ICISECT21-EC0020	Smart Plug Boards <i>Vidadala Srija¹, G.Laxmi Priyanka², D.Navya³</i>	15
16	ICISECT21-EC0023	Grating Lobes Phase Array Antenna with High Gain <i>Dr.Anand Anbalagan¹, Dr.Chaitanya Krishna²</i>	16
17	ICISECT21-EC0024	IOT Based Fall Detection System in Military Application Using Wearable Technology <i>Dr.A.Chaitanya Krishna¹, Dr.B.Hari Krishna², Dr. Anand Anbalagan³</i>	17
18	ICISECT21-EC0025	Programmed Fire Extinguishing Robot <i>M Govind Raj¹, Dr.A.Chaitanya Krishna², Dr.B.Harikrishna³</i>	18
19	ICISECT21-EC0026	Evaluating MPPT Converter Topologies Using a Matlab PV Model <i>Gattadi Vinatha¹</i>	19
20	ICISECT21-EC0027	Wavelet Based Image Compression to Gray Scale Images using SPIHT, EZW and SOFM <i>Mr.S.P.Manikanta¹, B.Shubhaker², D.Prasad³</i>	20
21	ICISECT21-EC0028	Medical Image Segmentation: An Multi-Agent Systems Initiative <i>Nishakar Kankalla¹, B.Shubhaker²</i>	21
22	ICISECT21-EC0029	Reduced Mutual Coupling MIMO Antenna <i>M Thirupathi¹, Dr. P. Santosh Kumar Patra², Dr.B.Hari Krishna³</i>	22

vii

Organized by Departments of Computer Science, Electronics, Information Technology and Electrical Engineering of St Martin's Engineering College (www.smec.ac.in).

ISBN :978-93-83470-37-2



Proceedings of the Fifth International Conference on Trends in Electronics and Informatics (ICTEI)
IEEE Xplore Part Number: CFP21112-ART, ISBN 978-1-6654-1571-2

Identification of Breast Cancer from Thermal Imaging using SVM and Random Forest Method

Lakshman K¹, Siddharth B. Dabhade², Y. S. Rode³, Karan Dabhade⁴, S. Deshmukh⁵, Ranjan Maheshwari⁶

^{1,4} NIELIT Aurangabad, Dr. B. A. M. U. Campus, Aurangabad (MS), India

² Dr. G. Y. Pathrikar College of Computer Science and IT, MGM University, Aurangabad (MS)

³ Jijamata Mahavidyalaya, Buldhana, MS, India

⁵ UDACSIT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS), India

⁶ RTU, Kota (RJ), India

¹ lakshman.korra@gmail.com, ² dabhade.siddharth@gmail.com, ³ ys.rode@gmail.com

Abstract—In the recent years, the carcinoma disease in women has significantly observed and it has also caused deaths as per WHO 2018 report of carcinoma statistics recorded approximately 2 lakhs registered cases and around 90000 reported deaths. The speed of survival has become very difficult at higher stages of growth and quite 45% of women's in India suffer from stage 3 and 4 of carcinoma. The target of this research is to deliver a report on carcinoma on the basis of the performance of Support Vector Machine [SVM] methodology and random forest using 5 folds, 10 folds, 20 folds with a training set size 50, 60, 70, 80 and 90 respectively. These techniques have achieved an accuracy of 94.5% and 98.40% through the cross validation of Support Vector Machine [SVM] and Random Forest [RF] method.

Keywords—Thermography, preprocessing, SVM classifier, Random Forest, Breast, Cancer, Malignancy

I. INTRODUCTION

The X-ray diagnosis approach is known as Mammography which is of low powered was used for early stage detection and diagnosis of cancer using Support vector machine (SVM) there are two main approaches initially to detect tumors having suspicious regions & weak contrast in background and how to extract features which will categorize tumours[1]. Hence SVM is meant for classification and a good method of statistical learning has made significant achievement in various fields. This method describes the way to detect of tumour in mammogram images with than 85% of accuracy using SVM. Objective of this paper is to identify differentiate benign breast tumour from malignant by computer aided diagnostic system two stages involved in RF initial step is backward elimination which is used for feature selection and next step is using random forest are hybridized and in first stage data reduction process leads to reduction in which gives fast results. Our proposed method has averagely obtained 98.4% so, here, both SVM and Random forest techniques are compared to show the result obtained and shown the results, which are compared among SVM methods and Random Forest methodology, where the graphs and values are covered in this paper.



II. LITERATURE SURVEY

This analysis created at terribly early son detection of growth of port cancer. S. Thamarai detection & work focuses on 2 things: characteristic region of growth with minimum distinction conjointly methodology to get the options from these regions to reason tumors Jawad confer, X-ray photograph segmentation supported automatic technique. The analysis of SVM classifier has been thought-about. First of all, tumors are detected from mammograms with the assistance of morphological process of breast pictures. The GLRLM associated distinction of Gaussian (DoG) options that are extracted from the chosen region, where these options are utilized by SVM; the rule has achieved an accuracy of eighty nine.11% mistreatment SVM classifier. The Y. Ireaneus Pakistani monetary unit Rejani et. al. had planned system that focuses on the solution[3]. Hence to find tumors with a weak distinction at background as a suspicious region and another could be a thanks to extract options that reason tumors. The growth detection methodology follows the theme of (I) sweetening of X-ray photograph (II) The growth space segmentation (III) The extraction of options from the metameric growth space. (IV) Use of SVM classifier could also be outlined as conversion of the image quality to a stronger and additional perceivable level [4][5]. SVM i.e. Support Vector Machine was introduced by Vapnik & his colleagues in 1990's that well-trying to effective & promising techniques for process (Peng et al. 2008 Yang, Wu 2006).

III. PROPOSED METHODOLOGY

To obtain good accuracy in results, research work has been done in SVM or random forest algorithm.

A. Random forest

The random forest belongs to family of classification methods. The following main steps describe construction of RF.

1. From obtained raw or natural data we draw a n tree bootstrap samples.
2. Second step is to grow tree and for each data set and node, a select m-try variables randomly used for



Proceedings of the Fifth International Conference on Trends in Electronics and Informatics (ICOEI),
 IEEE Xplore Part Number:CFP21J32-ART; ISBN:978-1-6654-1571-2

- splitting the tree in order that every single terminal should have no fewer than node size cases.
3. Third step is for brand spanning new data prediction the combination information of n tree is completed.
 4. Fourth step is to use data which isn't in bootstrap sample to calculate OOB error rate. With such a lot of missing values RF can handle no of variables.

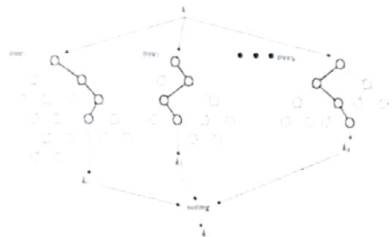


Fig. 1 Random Forest Architecture

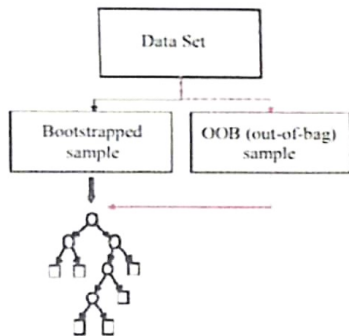


Fig. 2 Random forest sample and out of bag n

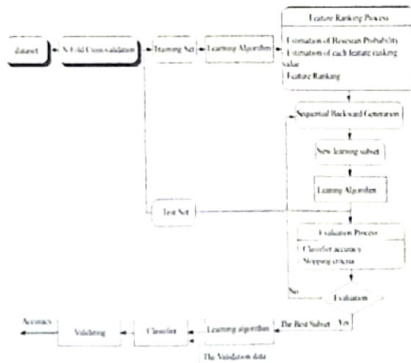


Fig. 3 Existing RF methods

The OOB data is used as test set, test set error estimate by RF and also for importance of variables these two estimates are useful elements for RF out of four the two variable measures

which are of node impurity and classification accuracy for OOB data on GINI index [15].

$$G(t) = 1 - \sum_{k=1}^Q p^2(k | t) \quad (1)$$

Where, 't' is node

P is estimated class probabilities

This can be 2 phase method within which the phase one is of learning algorithm RF were trained & so as to urge the simplest features

To evaluate contribution for features to classifier backward elimination were applied. So on improve the classification accuracy

The Four-step classification algorithm as following:

- 1: Employment of n-fold crosses validation
 - 2: The Feature ranking value estimate and rank the features.
 - 3 Begin with tiniest feature within the feature ranking list and eliminate features use backward elimination approach
 - 4: Verify the stop criteria;
- And jump to Step 1 if not else stop the strategy.

B. Support Vector Machine

The three essential elements of svm like the principle of maximal margin, dual theory, and kernel trick makes SVM successful

Neural Networks having the underside in (SLT) and also the optimization methods are considered as powerful tools to resolve the problems of machine learning.

(n-1) dimension is hyper plane. In higher dimension hyper plane isn't visualized but the notion of an (n-1).

To maximum-margin hyper planes to get nonlinear classifier P-dimensions a kernel trick need to be applied, a hyper plane is described as follows.

The hypothetical values are $\beta_0, \beta_1; \beta_2$ and X_p are the Data points in sample space.

Feature Selection via SVM:

It's important in machine learning is features of subset which contribute to classification The two fold is benefits of feature selection can leads expensive models which are usually used in many scientific problems and provides classification accuracy.

Tuning of several parameters is key success of Support vector machine which may affect the generalization error which is considered as effective approach.

As estimator is reduces choosing these parameters is to estimate the generalization error and then search for parameters. While which will generalize well SVMs have been successfully applied economics, finance and management and various fields. In financial forecasting problems there are applications of SVM which have been reported. Some applications in the field of economics including environmental risk assessment e-banking website quality assessment can also be explored by SVM.



IV. EXPERIMENTAL WORK

The Wisconsin Diagnosis carcinoma is dataset obtained from (UCI) an repository of Machine Learning Repository which is usually employed by researchers for purpose of assorted methods in field of machine learning methods for carcinoma Wisconsin carcinoma (WBC) and name of Breast cancer whose data obtained by UCI dataset [11]. Around 1000 instances were available during this dataset where the cases are labelled as either benign or malignant and 458 (65.50%) of the cases are benign and 241 (34.50%) which are found malignant & hence the partition of dataset is done into two parts referred as classes here 2 denotes the benign class and 4 denotes the malignant class [17]. Performed cross-validation method on 5, 10 and 20 fold on 50,60,70, training set we've got compared the results of both SVM classifier and RF algorithm to indicate the most effective approach with accuracy stance here an odd number is chosen as datum if the amount of classes is 2.

TABLE I
COMPARISON BETWEEN SVM AND RF CLASSIFIER

Classifier	5 Fold Cross validation				
	50	60	70	80	90
Support Vector Machine	0.878	0.889	0.915	0.939	0.944
Random Forest	0.956	0.952	0.973	0.974	0.979
10 Fold Cross validation					
Support Vector Machine	0.879	0.884	0.912	0.944	0.937
Random Forest	0.951	0.947	0.971	0.979	0.984
20 Fold Cross validation					
Support Vector Machine	0.879	0.89	0.906	0.945	0.94
Random Forest	0.962	0.950	0.974	0.972	0.974

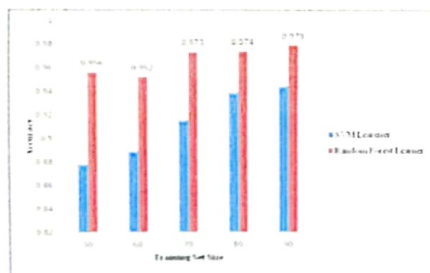


Fig. 4 Comparison SVM and RF with 5 Fold

Then compared the results of Support vector Machine Classifier and Random forest Classifier in proposed model we found that Precision and Recall columns shown below of SVM is lowered value on compared with the RF. In Table I we compared Support vector Machine Classifier & Random Forest Classifier with 5,10 and 20 fold dataset to show result in SVM results on compared with RF, is Low in each of 5 fold 10 & 20 fold table as seen.

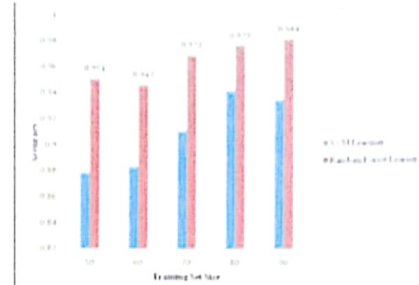


Fig. 5 Random graph on 10 fold Comparison SVM and RF

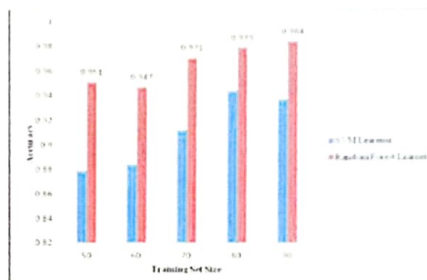


Fig. 6 Random Graph on 20 fold Comparison SVM and RF

Comparison of both methods results are shown in the Table 1. Our proposed paper focus on performance of the SVM learner and Random forest Learner methods among 5 fold, 10 fold and 20 folds each with 50, 60, 70, 80 & 90 training dataset size. As shown in the tables above it is observed and analyzed that the random forest learner method gives 98.4% highest accuracy.

V. CONCLUSION

The proposed paper predicts most severe cancer as Breast cancer, which causes many deaths of girls/women's in the world. Hence early detection of disease will save plenty of lives. The proposed system identifies breast cancer by SVM Random forest methods. This paper concentrates on comparison of the 2 SVM and RF methods. By use of Python, SVM classifies the dataset on implementation gives accuracy of 96.68% in training phase. RF has accuracy 98.4% on the average. This research work has compared the Random graph values, which was obtained on 5,10 and 20 folds dataset also the graph shown states the accuracy level of the RF method over the SVM. Researchers and engineers in data processing can have the benefit of this survey. Hence, this research work has concluded by comparing the graph and results obtained that, random forest is way superior to SVM methodology for the detection of carcinoma.



Proceedings of the Fifth International Conference on Trends in Electronics and Informatics (ICOEI).
IEEE Xplore Part Number: CFP21J32-ART; ISBN: 978-1-6654-1571-2

PROFILE OF AUTHORS



Lakshman(lakshman.korra@gmail.com) Received M.Tech Degree in Computer Science from Jawaharlal Nehru Technological University Anantapur (2007) and BTech (2005) from JNTU Hyderabad. Currently working as a Scientist "D" in NIELIT Aurangabad. Current research interest areas are in, Image Processing.



Siddharth B. Dabhadre, he has completed M.Sc. Information Technology (2009), M.Phil. Computer Science (2012), Ph.D. Computer Science (2018). He has published more than 30 research articles in reputed national, international conferences and journals. He is member of various learn bodies like IEEE, ISCA, IAPR, CSTA, AITP, IACSIT, IAENG, IAPR, European Association for Signal Processing, etc. On the basis of his research work he has got 16 distinct awards like Young Scientist Award, Best Paper presentation, excellent paper, etc. Financially he has funded by UGC, DST-SERB IIS International Association for Pattern Recognition (IAPR), Morpho and Eurasip, therefore, he has visited Italy, Japan, Malaysia countries to represent his research work.



Y S Rode is currently working as a Assistant Professor and Head, Department of Computer Science and IT, Jijamata Mahavidyalaya, Buldhana, MS, India



Karan dabhadre, Received M.E. in CSE, presently working as Junior Faculty at NIELIT, Aurangabad



Dr. Sachin N. Deshmukh is currently working as a Professor and Head, Department of Computer Science and IT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (MS), India. He is also working as a Director, IQAC and Director, Bhoj Incubation Center. He has worked as Director, University Network & Information Center (UNIO), Director, Center for Vocational Education and Training, Chief Coordinator of Spoken Tutorial Project of IITB and PET-2014 Coordinator, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, (MS), India



Dr. Ranjan Maheshwari, (ranjan@rtu.ac.in) Ph.D, Professor at RTU, Kota, India. He is also worked as Director of NIELIT Aurangabad and principal of Government Engineering college Ajmer

[6] Issam El-Naqa, Yongyi Yang, Miks N. Wemick, Nikolas P. Galatsanos, Robert M. Nishikawa "Support Vector Machine Approach for Detection of Micro calcifications" IEEE Transactions On Medical Imaging, Vol. 21, No. 12, December 2002

[7] M. K. Hasan, M. M. Islam and M. M. A. Hashem, "Mathematical model development to detect carcinoma using multigene genetic programming 2016 5th International Conference on Informatics, Electronics and Vision (ICIEV), Dhaka, pp. 574-579, 2016

[8] E.C.Fear, P. M. Mennay, and M. A. Stuchly, "Microwaves for carcinoma detection", IEEE potentials, vol.22, pp.12-18, February-March 2003.

[9] N. Acr, "A support vector machine classifier algorithm supported a perturbation method and its application to ECG beat recognition systems" Expert systems with application big apple, vol.31, pg. 150-158 July 2006.

[10] Satish Sumi and Ritu Vijay, "Design and Analysis of carcinoma Detection System Using Mammogram Features Extraction", in International Journal of Electronics and computing Engineering, Vol. 3, Number 4, 2015, pp.406-409.

[11] J. Blagojce, K. Ivan, T. Katarina, D. Ivkica and L. uzana, "Mammographic Image Classification Using Texture Features", 9th conference for Informatics and data Technology, (2012).

[12] Cuong Nguyen , Yong Wang, Ha Nam Nguyen, " Random forest classifier combined with feature selection for carcinoma diagnosis and prognostic" J. bioscience and Engineering, 2013, 6, 551-560 Published Online May 2013

[13] Yingjie Tian , Yong Shi , Xiaohui Liu " Recent Advances on Support Vector Machines Research Technological and economic development of Economy 2012 Volume 18(1):5-33

[14] Vikas Chaurasia , Saurabh Pal , BB Tiwari, "Prediction of benign and malignant carcinoma using data processing techniques " Journal of Algorithms & Computational Technology 2018, Vol. 12(2)119-126.

[15] Reka Toth, Heiko Schiffmann, Claudia Hube-Magg, Franziska Bischeck, Doris Höflmayer, Sören Weidemann, "Random forest-based modelling to detect biomarkers for glandular cancer progression" Toth et al. Clinical Epigenetics (2019) 11:14

[16] Sebastien Jean Mambou, Petra Maresova, Ondrej Krejcar, Ali Selamat, Kamil Kuca "Breast Cancer Detection Using Infrared Thermal Imaging and a Deep Learning Model" 2018 Aug 25. DOI: 10.3390/s18092799

[17] Suma, V. "A Novel Information retrieval system for distributed cloud using Hybrid Deep Fuzzy Hashing Algorithm." JTDW 2, no. 03 (2020): 151-160

[18] Vijayakumar, T. "Posed Inverse Problem Rectification Using Novel Deep Convolutional Neural Network." Journal of Innovative Image Processing (JIIP) 2, no. 03 (2020): 121-127.

REFERENCES

[1] Karthikeyan, S. Venkateshkrishnan " carcinoma Classification using SVM Classifier" International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-4, November 2019

[2] Md. Mijan Islam, Hasib Iqbal, Md. Rezwanul Haque, and Md. Kamrul Hasan " Prediction of carcinoma Using Support Vector Machine and K-Nearest. 2017 IEEE Region 10 Humanitarian Technology Conference (R10-HTC) 21 - 23 Dec 2017, Dhaka, Bangladesh.

[3] Y. Irenaeus Anna Rejani "Early Detection Of carcinoma Using Svm Classifier" International Journal on technology and Engineering Vol.1(3), 2009, 127-130

[4] Simon Tong, Daphne Koller, "Support Vector Machine Active Learning with Applications to Text Classification" Journal of Machine Learning Research (2001) 4:5-66. DOI: 10.1162/153244302760185243

[5] Theodoros Evgeniou, Massimiliano Pontil "Support Vector Machines: Theory and Applications" Conference: Machine Learning and Its Applications, Advanced Lectures January 2001. DOI: 10.1007/3-540-44673-7_12

