

3.3.3: Number of Books & Chapters in Edited volumes/books published & papers published in National/International Conference Proceedings per Teacher during year 2022-23

Sl. No.	Name of the Teacher	Title of the book/ chapters Published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN /ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	Dr. Shivaji R. Tate	Vaigyanik Drustikon: Samajik Janivjagruti	Impact of Superstitions on Indian Society	Vaigyanik Drustikon: Samajik Janivjagruti	Vaigyanik Drustikon : Samajik Janivjagruti	National	2022-23	978-93-9288042-1	KVM, Wai	Lokayan Prakashan , Satara
2	Dr. Rahul H. Waliv	Vaigyanik Drustikon: Samajik Janivjagruti	A Case of Gender Violence Under the mask of vigilantism in India : Witch Hunting	Vaigyanik Drustikon: Samajik Janivjagruti	Vaigyanik Drustikon : Samajik Janivjagruti	National	2022-23	978-93-9288042-1	KVM, Wai	Lokayan Prakashan
3	Dr. Mrs. M. V. Ingawale	Vaigyanik Drustikon: Samajik Janivjagruti	Mahavidyalayin Vidyarthyanmadhe Asnarya Andhshradhancha Chikistak Abhyas	Vaigyanik Drustikon: Samajik Janivjagruti	Vaigyanik Drustikon : Samajik Janivjagruti	National	2022-23	978-93-9288042-1	KVM, Wai	Lokayan Prakashan , Satara
4	Prof. (Dr) S.R.Sawant	Vaigyanik Drustikon: Samajik Janivjagruti	Fostering Scientific Temper to Sustain the Clear Stream of Reason	Vaigyanik Drustikon: Samajik Janivjagruti	Vaigyanik Drustikon : Samajik Janivjagruti	National	2022-23	978-93-9288042-1	KVM, Wai	Lokayan Prakashan , Satara
5	Dr. B.B. Agedkar	Vaigyanik Drustikon: Samajik Janivjagruti	Saint Kabit Ki Wani me Vaigyanik Drusti	Vaigyanik Drustikon: Samajik Janivjagruti	Vaigyanik Drustikon : Samajik Janivjagruti	National	2022-23	978-93-9288042-1	KVM, Wai	Lokayan Prakashan , Satara
6	Dr. S.P. Kamble	Vaigyanik Drustikon: Samajik Janivjagruti	Role of Education in Developing Scientific Temper in Students	Vaigyanik Drustikon: Samajik Janivjagruti	Vaigyanik Drustikon : Samajik Janivjagruti	National	2022-23	978-93-9288042-1	KVM, Wai	Lokayan Prakashan , Satara
7	Dr. S.G. Thorat	Vaigyanik Drustikon: Samajik	Andhshradha Nirmulan	Vaigyanik Drustikon:	Vaigyanik Drustikon	National	2022-23	978-93-92880	KVM, Wai	Lokayan Prakashan , Satara

		Janivjagruti	Chalvalitil Shahir Vijay Jagtap Yanche Yogdan	Samajik Janivjagruti	: Samajik Janivjagruti			42-1		
8	Dr. B. M. Birajdar	Transforming HEIs Through NEP:2020	Transforming Indian Higher Education: A Historical Perspective	Transforming HEIs Through NEP:2020	Transforming HEIs Through NEP:2020	National	2022-23	--	KVM, Wai	KVM, Wai
9	Prof. (Dr) S.R.Sawant	Transforming HEIs Through NEP:2020	Transforming HEIs Through Outcome Based Education	Transforming HEIs Through NEP:2020	Transforming HEIs Through NEP:2020	National	2022-23	--	KVM, Wai	KVM, Wai
10	Dr. Mrs. M. V. Ingawale	Transforming HEIs Through NEP:2020	Women Education & NEP: 2020	Transforming HEIs Through NEP:2020	Transforming HEIs Through NEP:2020	National	2022-23	--	KVM, Wai	KVM, Wai
11.	Dr. Mrs. M. V. Ingawale	Innovative Trends in Biological Science	Biodiversity Of Bacillariophyceae From Thoseghar, Satara District (Maharashtra)	Innovative Trends in Biological Science	---	National	2022-23	978-93-5704-927-6	KVM, Wai	Blue Rose Publishers

स्वातंत्र्याच्या अमृतमहोत्सवी वर्षानिमित्ताने
जनता शिक्षण संस्थेचे

किसन वीर महाविद्यालय, वाई

शिवाजी विद्यापीठ, कोल्हापूर

आणि

अखिल भारतीय अंधश्रद्धा निर्मूलन समिती, शास्त्र

यांच्या संयुक्त विद्यमाने आयोजित

दोन दिवसीय राष्ट्रीय विज्ञान परि

वैज्ञानिक दृष्टिकोण : सामाजिक जाणीवजागृती



जनता शिक्षण संस्थेचे कार्यकारी मंडळ



कै. आबासाहेब वीर
संस्थापक अध्यक्ष



भा. प्रतापराव भोसले (भाऊ)
विश्वस्त



भा. मदन भोसले (बाबा)
अध्यक्ष



भा. शंकरराव पाटीले
उपाध्यक्ष



भा. केशवराव पाटीले
संचालक



भा. सुरेश पाटील
संचालक



भा. मिलिंद जाधव - पार्टील
संचालक



भा. ज्योत्सनाराव फडणिस
सचिव



भा. नारायणराव फडणिस
सचिव



भा. अरुण, डॉ. शुभनाथ फडणिस
पत्रसिद्ध सदस्य



1.

Dr. Shivaji R. Tate

राष्ट्रीय विज्ञान परिषद-२०२२
वैज्ञानिक दृष्टिकोण : सामाजिक जाणीवजागृती

संपादक : डॉ. विलास खंडाईत
कार्याध्यक्ष
राष्ट्रीय विज्ञान परिषद

प्राचार्य, डॉ. गुरुनाथ फगरे
स्वागताध्यक्ष
राष्ट्रीय विज्ञान परिषद

लोकायत प्रकाशन

राष्ट्रीय विज्ञान परिषद

प्राचार्य डॉ. गुरुनाथ फगरे; डॉ. विलास खंडाईत

RASHTRIYA VIDNYAN PARISHAD

Principal Dr. Gurunath Fagare ; Dr. Vilas Khandait

पहिली आवृत्ती	:	ऑगस्ट २०२३
सर्वाधिकार	:	© प्राचार्य डॉ. गुरुनाथ फगरे आणि डॉ. विलास खंडाईत
प्रकाशक	:	लोकायत प्रकाशन राकेश आ. साळुंखे लोकायत, १३, यशवंतनगर गेंडामाळ, सातारा ४१५ ००२ दूरध्वनी : (०२१६२) २५०७२५ मोबा. : ८४८४९७७८९९ email : lokayatprakashan@yahoo.com www.lokayatprakashan.co.in
ISBN	:	978-93-92880-42-1
अक्षरजुळणी व मुद्रक	:	लोकायत प्रिंटस्, सातारा
मुखपृष्ठ	:	अमोल कांबळे
मुद्रितशोधक	:	विकास धुळेकर, सातारा

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. साळुंखे - उद्घाटन भाषण	१५
२	अॅड. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबळे अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
----	---	-----

मराठी

१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंत्रुषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ थोरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२

3. Impact of Superstitions on Indian Society

Dr. Shivaji Tate

Department of Mathematics

Kisan Veer Mahavidyalaya, Wai, Dist. Satara, Maharashtra, 412803

Abstract :

Most superstitions from the past have been proven by science as unnecessary, ineffective or just plain silly, but are still practiced by normal intelligent people today. Every country has its own localized take on superstitions. If people dive into superstitions blindly, they may suffer greatly. This paper aims to estimate the effects of superstitions on Indian society, social and psychological nature of superstitions. The types and causes of superstitions are also extensively explored in this paper, and important suggestions are provided.

Keywords : Society, Superstitions, Causes, Impact, Consequences, Suggestions.

INTRODUCTION :

As Aristotle said, 'Man is a social animal'. He cannot survive in isolation. Therefore, human beings interact with each other on a daily basis, having a deep impact on each other's life. Though all men have the freedom of speech and the freedom of having an opinion, yet they still have some limitations, legal as well as social. Society is nothing but a web of relationships between different individuals as social beings. Especially, a group of people who share a common culture, occupy a particular territorial area, and constitute a unified and distinct entity is called a society. Each society has its

राष्ट्रीय विज्ञान परिषद/ ९१

Conclusion:

It will be challenging to handle superstitions in a country like India with such enormous diversity and people from all traditions coexisting. The only way to get rid of unneeded superstitions is through education, awareness, the development of critical thinking skills, the growth of a scientific mindset, and logical analysis of situations. The younger generation should take the necessary actions to abolish these practices from the root, and media outlets like movies and television should take up the challenge of battling this evil.

References

1. Bodising, N., Ranjit T. (2020) : Impact and Consequence of Superstition on Society Especially in the Field of Living Context, *International Journal of Creative Research Thoughts (ijert)*, 8(18), 713-717
2. Shankar Rao, C.N. (2013) : *Sociology of Indian Society*, Published by S. Chand & Company LTD, RamNagar, New Delhi - 110055.
3. Dr. Sarani, M.K. (2013) : *Sociological Foundations of Education*, Published by SriPradyan Hazarika, MBA, Banalata, Dibrugarh-785676.
4. Rai, B.C. (2008) : *Social Psychology*, Published by Prakashan Kendra, Railway Crossing, Sitapur Road, Lucknow — 226020.
5. Singh, K.S. (2004) : *Fundamentals of Sociology*, Published by Janata Prakashan, Post Box No.1062, New Delhi - 110006.
6. M.R. Jais (1997) : *Human Rights and Indian Values*, New Delhi, NCTE, Ministry of Human Resource development.
7. Das, K.N. (2000): *Indian Society and Social Institutions*, -Published by Surjeet Book Depot, Naisarak, New Delhi - 110006.
8. Website: <https://www.iasexpress.net/superstition-in-india/>

राष्ट्रीय विज्ञान परिषद/ ९२

4. A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting

Rahul Hanmant Waliv,
Assistant Professor,
Dept. of Statistics,
Kisan Veer Mahavidyalaya, Wai

Abstract :

Gender violence is a troubling topic that is widespread in today's times, regardless of national boundaries, in every society. Despite the fact of human civilization, despite advances in science, there are still many who believe in witchcraft and hunting in various cultures and locations. A common example of gender violence is witch hunting, ugly, yet often unnoticed and unaddressed. In the past, people in India were engaged in witchcraft hunting to prevent evil, but also due to socio-political causes, such as vigilantism, land grabbing, gender-based violence, and electoral advantages. A number of legal deterrents in India have expanded to more bizarre proportions and dehumanising techniques.

Women are being abused under the guise of vigilante justice. More disheartening are government indifference, police carelessness, and media underreporting, in addition to a lack of education about the horrors of witchcraft and flagrant human rights breaches at the institutional and educational levels. This research article aims to examine witch hunts in India with a particular reference to Jharkhand in light of skewed media coverage, pertinent laws, current issues, and difficulties.

to as tonhas. Women are frequently referred to as "witches." The majority of victims in witch killings are women, which implies that it is a gender attribution and that witchcraft practices are viewed from a gender perspective. The attribution of unique supernatural abilities to a person by others is a general characteristic of the term "witch," regardless of its many usages and interpretations. An accusation of being a witch is almost always unfavourable, terrifying, and harmful. Witchcraft has historically been proven to be a social evil that is frequently practised due to ignorance and indigenous belief systems. Witchcraft is essentially a sort of black magic or sorcery in which demonic spirits are summoned through rituals recognised by religious texts as impure spirits or forces of the devil. Witchcraft was widely practised in prehistoric and mediaeval societies in Europe and the Americas. The barbaric behaviour was not unknown in the oriental regions either. Women have been the most frequently targeted witches in every century and community, despite the fact that men have also fallen victims to witch hunting or witch slaying.

Many thousands of women are thought to have been tortured and executed as witches throughout Europe up until the 18th century, frequently by being burned at the altar. Witch hunting crimes primarily take place in the forests and hinterlands of states in central and northeastern India because these regions are densely forested and mineral-rich, but they also fare abysmally poorly in terms of economic development, with little or no access to primary healthcare and education. The majority of these locations are inhabited by naxalite people, or forest tribes, who fight for forest resources and fundamental human rights against law enforcement, special task forces, and corporate industries. Witchcraft is referred to by a variety of names in Indian languages, including banamati, "evil eye," dayan, chudail, and bhootni. (Singh, Rakesh K., et al. 5.) In such economically underdeveloped areas, witch hunting is common because the populace has strong superstitious beliefs.

राष्ट्रीय विज्ञान परिषद/ १०१

to as tonhas. Women are frequently referred to as "witches." The majority of victims in witch killings are women, which implies that it is a gender attribution and that witchcraft practices are viewed from a gender perspective. The attribution of unique supernatural abilities to a person by others is a general characteristic of the term "witch," regardless of its many usages and interpretations. An accusation of being a witch is almost always unfavourable, terrifying, and harmful. Witchcraft has historically been proven to be a social evil that is frequently practised due to ignorance and indigenous belief systems. Witchcraft is essentially a sort of black magic or sorcery in which demonic spirits are summoned through rituals recognised by religious texts as impure spirits or forces of the devil. Witchcraft was widely practised in prehistoric and mediaeval societies in Europe and the Americas. The barbaric behaviour was not unknown in the oriental regions either. Women have been the most frequently targeted witches in every century and community, despite the fact that men have also fallen victims to witch hunting or witch slaying.

Many thousands of women are thought to have been tortured and executed as witches throughout Europe up until the 18th century, frequently by being burned at the altar. Witch hunting crimes primarily take place in the forests and hinterlands of states in central and northeastern India because these regions are densely forested and mineral-rich, but they also fare abysmally poorly in terms of economic development, with little or no access to primary healthcare and education. The majority of these locations are inhabited by naxalite people, or forest tribes, who fight for forest resources and fundamental human rights against law enforcement, special task forces, and corporate industries. Witchcraft is referred to by a variety of names in Indian languages, including banamati, "evil eye," dayan, chudail, and bhootni. (Singh, Rakesh K., et al. 5.) In such economically underdeveloped areas, witch hunting is common because the populace has strong superstitious beliefs.

राष्ट्रीय विज्ञान परिषद/ १०१

and any tragedy or misery that may befall them—such as displacement, ruined crops, epidemics, and the sudden, unexplained deaths of children or relatives—is frequently attributed to the evil “witch.” The majority of its victims are middle-aged widows, elderly ladies, single women, and occasionally lonely women who are left alone after the passing of men. In backward areas where scientific temper is completely absent due to ineffective or scarce healthcare and education, the major facilitators of witch hunting are a local ojha (an incompetent medical professional who may be a woman), a tantrik or sorcerer, and a priest.

NATURE OF WITCH HUNTING

Studies show that the topic of witch hunts is primarily investigated from a socioeconomic or law and order standpoint. It is insufficiently debated from a “gender” perspective. Witch hunts are a terrible form of gender violence that our society’s hierarchical framework silently condones. Since it is typically dalit or adivasi women who are killed during witch hunts, witch hunting is essentially a history of gender violence. In this situation, patriarchy seeks to make it evident to the oppressed women that their safety and freedom depend on their continuing to be subordinate or submissive to the male residents of their town, community, or even their own family. Anytime a lady has the guts to speak up or question masculine dominance, prejudice, or deprivation, and resist against being oppressed, she is captured by strong men who rob her of her wages, animals, and even her ancestral property. She is officially labelled a *dayan* or witch with the help of ojha. Docility is praised and opposition is punished. The Panchayat system, which is male, essentially oversees law and order in villages. To commit crimes against women with impunity and under the guise of vigilante justice, men take advantage of women’s poverty and ignorance.

Due to their dread of being lynched, the majority of victims who do survive witch hunting’s atrocities choose not to report their situation

१०२/ राष्ट्रीय विज्ञान परिषद

to the local authorities. So they remain mute as they experience agony and trauma. The witch is forced to leave her home after being stripped naked, having her hair and head tonsured, her face covered in cow dung or blackened, being paraded through the village in her undies, having her nose cut off, having her teeth pulled out (believe it or not, she is defanged), and being beaten with sticks and chappals. To her great terror, she is occasionally made to consume human excrement before being expelled from the hamlet and forced to seek refuge in a nearby forest, lynched to death, or buried alive. Unbelievably, such horrifying brutalities take place in broad daylight and in front of a cheering crowd.

TRENDS IN WITCH HUNTING

Witch hunting is frequently regarded as a primitive crime committed by rural or tribal people. However this image is completely unfounded. Most of the time, it is determined that women who are slain for being witches are actually being disowned of their land, homes, and animals, and in some circumstances, they are being avenged for refusing to court upper class men. Sometimes their own family members are implicated in the crimes, but neighbours are frequently the perpetrators. Due to his mother’s financial situation, a married son can view his mother’s advancing years as an unneeded burden and attempt to inherit her assets by having her killed. Alcohol also plays a negative role. Greedy land speculators may entice many men with alcohol and money in order to get rid of the woman by branding her a witch, which, in common vernacular, justifies the act without conviction or concern for punishment. Witch-hunters are essentially land snatchers from or outside the target’s family who perpetrate the crime with the help of ojhas. These ojhas are prominent public figures in very underdeveloped rural areas who have a significant impact on public health issues in the lack of an effective government healthcare system. Numerous instances where the local ojha takes a bribe to label a woman as a witch have been revealed through police investigations.

राष्ट्रीय विज्ञान परिषद/ १०३

Caste systems or upper-caste hegemony are maintained by labelling dalit and adivasi women as witches. The tribal traditions have traditionally included witchcraft.

MEDIA REPORTAGES ON WITCH HUNTING

In rural and tribal India, distant and inaccessible areas, media has done an excellent job of reaching out to people and assisting them in getting their voices heard by their governments and fellow citizens living in mainland, metropolitan India. Health, education, and security issues, which are their main concerns, rarely make headlines in the media. Theft by corporations of forest lands and resources and egregious police rights violations are topics that the media occasionally cover, but these stories are rare and usually published as inside-page news, which discourages readers from participating in public debate. Witch hunting is one such social evil that occurs in remote areas of underdeveloped Assam, Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and West Bengal, of which Jharkhand has the unsavoury distinction of having the highest number of witch killings over the past ten years. Witch hunting has been more widely known as a result of media coverage, and the subject has attracted the attention of both the state and the intelligentsia. According to the National Crime Record Bureau, Jharkhand is responsible for 54 of the 160 homicides in 2013 in which women were killed in the name of witchcraft, and 400 women have been killed with the same intent since the state was created in 2001.

COUNTER-WITCH HUNTING LAWS

Although there are numerous laws in India that offer security, freedom, and justice to women against gender-based crimes, their efficiency is disappointing because the number of convictions is pitifully low. This weakness in the law-and-order enforcement institutions, such as the police, encourages criminality against women throughout the entire nation. There are clauses that ensure the right to life in the Indian Constitution. Government

१०४/ राष्ट्रीय विज्ञान परिषद

has to create regulations to address the threat because witch hunt crimes have increased in some eastern Indian states. Even though it is the most underdeveloped state in India, Bihar was the first to enact a legislation prohibiting witchcraft, The Witch (Daayan) Practices Prevention Act of 1999. And it passed 'The Jharkhand Prevention of Witch Hunting Practices Act, 2001'. The Chhattisgarh Tonhi Pratarna Bill 2005 (also known as the Chhattisgarh Prevention of Atrocities against Women in the Name of Tonhi) was drafted in a similar manner.

In 2006, Rajasthan also passed a similar law. A key provision of the anti-witchcraft laws states that "any person or community...would be considered to have committed a crime when...it intentionally or unintentionally abets, conspires, aids and instigates the identification of a woman as a witch leading to her mental and physical torture and humiliation." Unfortunately, the laws now in place are unable to deter such heinous crimes or instil fear in the hearts of those who do them. Similarly, Jharkhand did. Threats of punishment and conviction haven't worked as a deterrent because the criminals—always men and generally higher caste Hindus who receive political favors—know they won't be held accountable for what will be perceived as an act of vigilante justice.

CONCLUSION

Because of the aforementioned problems and difficulties, witch hunts in India, particularly in places with dense forests like Jharkhand, have similar roots and effects. Although there are laws that govern its prevention, other elements, such as sociocultural belief systems based on ignorance about witchcraft and witch hunting, are deeply ingrained in faith. People living in these hinterlands lack access to some necessities, such as education, appropriate healthcare, and effective governance. To outsiders, including government officials, this makes them rebellious. Such heinous crimes against women frequently occur for reasons that are strongly influenced by the socioeconomic development and welfare gaps between rural and urban areas.

राष्ट्रीय विज्ञान परिषद/ १०५

has to create regulations to address the threat because witch hunt crimes have increased in some eastern Indian states. Even though it is the most underdeveloped state in India, Bihar was the first to enact a legislation prohibiting witchcraft, The Witch (Daayan) Practices Prevention Act of 1999. And it passed 'The Jharkhand Prevention of Witch Hunting Practices Act, 2001'. The Chhattisgarh Tonhi Pratarna Bill 2005 (also known as the Chhattisgarh Prevention of Atrocities against Women in the Name of Tonhi) was drafted in a similar manner.

In 2006, Rajasthan also passed a similar law. A key provision of the anti-witchcraft laws states that "any person or community...would be considered to have committed a crime when...it intentionally or unintentionally abets, conspires, aids and instigates the identification of a woman as a witch leading to her mental and physical torture and humiliation." Unfortunately, the laws now in place are unable to deter such heinous crimes or instil fear in the hearts of those who do them. Similarly, Jharkhand did. Threats of punishment and conviction haven't worked as a deterrent because the criminals—always men and generally higher caste Hindus who receive political favors—know they won't be held accountable for what will be perceived as an act of vigilante justice.

CONCLUSION

Because of the aforementioned problems and difficulties, witch hunts in India, particularly in places with dense forests like Jharkhand, have similar roots and effects. Although there are laws that govern its prevention, other elements, such as sociocultural belief systems based on ignorance about witchcraft and witch hunting, are deeply ingrained in faith. People living in these hinterlands lack access to some necessities, such as education, appropriate healthcare, and effective governance. To outsiders, including government officials, this makes them rebellious. Such heinous crimes against women frequently occur for reasons that are strongly influenced by the socioeconomic development and welfare gaps between rural and urban areas.

However, in both villages and forests, anti-social forces have also used the practice of witch hunts for selfish and evil ends. A few unsettling tendencies over the years as these crimes take place in the form of mob justice or vigilantism are personal hatred, retribution for resisting sexual requests, and land and property grabbing.

In order to effectively reduce witch hunting offences, several immediate steps are therefore required. To dispel the beliefs about witches, witchcraft, and witch hunting, broad awareness campaigns and initiatives are fundamentally required. For the aim of launching any pilot programme for sensitization against the harms of the prevailing habit, the witch hunting sensitive areas should be topographically marked out and specific mapping should be done. People's attitudes toward witches need to alter, and to do this, we should start in the classroom. It is important to inform the communities who will be the focus of witch hunts about the legal restrictions that already exist. Law by itself can never be effective.

In order to support such a socio-cultural practice, education is the greatest option. If primary healthcare infrastructure is enhanced, stakeholders from both the public and private sectors can affect change. Additionally, access to food supplies in inhospitable locations, basic sanitation, and connectivity between rural and urban areas are guaranteed. People wouldn't blindly place their faith in ojhas or unqualified medical professionals as a result of this. Restructuring rural law enforcement is vitally needed, as is educating officers on the gravity of witch hunt crimes and the necessity for accountability. A significant social impact of witch-hunting is the absence of a centralised structure for the victims' rehabilitation as of yet. Rural residents need to be encouraged to adopt a scientific mindset. The anti-witch laws should be put into effect according to appropriate rules. It is important to ensure witness and testimony confidentiality. Every district police station should have special

police officers or judicial officers. Reports of incidents need to be properly monitored and followed up on. It is necessary to offer assistance and restitution to witchhunt victims. The implementation of counselling and rehabilitation programmes for witch hunts victims is necessary.

REFERENCES :

1. Nigam, Shalu. *Domestic Violence in India: What One Should Know?* We The People Trust, New Delhi, 2008. p. 3.
2. Merry, Sally Engle. *Gender Violence – A Cultural Perspective*, Wiley Blackwell, United Kingdom, 2009. p. 2.
3. Ibid., p. 5.
4. Chatterjee, Shib Shankar. *Witch-Hunting in Northeast*, Uday India, URL: http://www.udayindia.org/english/content_15june2013/special-report.
5. Singh, Rakesh K, *Witch Hunting: Alive and Kicking*, Women's Link, Vol. 17, No. 1, January-March, 2011. p.16.
6. Ibid., p. 1
7. Chakraborty, Joya and Borah, Anjuman. *Witch Hunting in Assam : Strategising Alternative Media for Women Empowerment and Overcoming Superstition*, *Journal of North East India Studies*, Vol. 3(2). July-December, 2013. pp. 15-24.
8. Mohammad Tarique Iqbal, *Witch Hunting: A Case Of Gender Violence In The Garb Of Vigilantism In India*, *International Journal of Advanced Research in Management and Social Sciences*, Nov 2015, Vol. 4, No. 11, p. 109.

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. सालुंखे - उद्घाटन भाषण	१५
२	अॅड. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
मराठी		
१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतींच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ धोरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२

3

Dr. Mrs. M. V. Ingawale



अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. साळुंखे - उद्घाटन भाषण	१५
२	अॅड. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिश चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपाचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
----	---	-----

मराठी

१.	डॉ. मणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ थोरात - अंधश्रद्धा निर्मूलन चळवळीतील साहोदर विजय जगताप यांचे योगदान	१३२

२. महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास

डॉ. मंजूषा इंगवले
वनस्पतिशास्त्र विभाग,
किसन बौर महाविद्यालय, वाई

१. सारांश :

रोज समाजातील घटना पेंपमध्ये वाचून असे लक्षात येते, की आजही समाजात अंधश्रद्धा व भौदुगिरीचे प्रमाण वाढलेले आहे. महाविद्यालयातील विद्यार्थ्यांमध्ये या विषयाबाबत पूर्णपणे जाणीवजागृती झालेली दिसत नाही. विद्यार्थ्यांमध्ये अंधश्रद्धेबाबतचे सर्वेक्षण केले असता हे प्रकथन जाणवले. महाविद्यालयीन विद्यार्थी म्हणजेच आजचा युवक हा उद्याचा सुजाण नागरिक आहे. विद्यार्थ्यांच्या मनातील श्रद्धा-अंधश्रद्धा बाबतचे सर्व शंकांचे निरसन व्हावे, विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टिकोन रुजावा व त्यांच्यामध्ये असलेल्या विविध गुणांचा विकास व्हावा, म्हणूनच प्रश्नावलीच्या माध्यमातून सर्वेक्षण करून सदर विषयाबाबतची असणारी मते विद्यार्थ्यांकडून जाणून घेतली. यासाठी किसन बौर महाविद्यालयातील सायन्स विभागात विद्यार्थ्यांकडून त्याची मते जाणून घेतली. विद्यार्थ्यांमध्ये असलेले गैरसमज समजावून घेतले. विद्यार्थ्यांकडून आलेल्या उत्तरांचे विश्लेषण व त्यावर तयार केलेले स्पष्टीकरण याचा सदर संशोधनपर लेखामध्ये उद्घापोह केला आहे.

२. बीज संज्ञा : अंधश्रद्धा, श्रद्धा, गैरसमजाचे स्पष्टीकरण.

३. प्रस्तावना : करपेवाडी, तालुका पाटण येथील महाविद्यालयीन विद्यार्थिनी कुमारी भाग्यश्री माने हिची गळा निरून हत्या करण्यात आली होती. हे साडेतीन वर्षांनी सिद्ध झाले, की हा अंधश्रद्धेचा नरबळी होता. आज आपण वर्ष २०२२ मधील प्रगत विज्ञान व संगणकाच्या युगात जगत आहोत. जिथे मानवाने आधुनिक साधनांचे संपूर्ण जगाला एक क्लिकमध्ये एकत्र केले आहे. तरीही आपल्याला अंधश्रद्धेबद्दल सामाजिक जाणीवजागृती करण्याची गरज भासत आहे. अंधश्रद्धा म्हणजे आंगठ्या विश्वास जो मानवी समाजाला मिळालेला शाप आहे. ज्यामध्ये माणूस आपली विचारशक्ती हरवून बसलेला आहे. त्याचा आजही मंत्र-तंत्र, जादूटोणा, शकुन-अपशकुन, तांत्रिक-मांत्रिक, पुजारी-ज्योतिषी, ग्रह-नक्षत्र यावर पूर्ण विश्वास आहे. अंधश्रद्धा म्हणजे कोणताही विचार न करता एखाद्या गोष्टीवर पूर्ण विश्वास ठेवणे होय. याने मुख्य कारण म्हणजे त्यांच्या मनामध्ये असलेली भीती, पैसा

राष्ट्रीय विज्ञान परिषद/ २२३

न मिळणे व ती झटपट कसा मिळेल अशी अनेक उदाहरणे आहेत, की ज्यात एखाद्या व्यक्तीला प्रचंड असुरक्षित वाटते. ही भीती आपल्यात अंधश्रद्धेची बीजे पेरते आणि ही अंधश्रद्धा पिढ्यान् पिढ्यात सुरू राहते. त्याच वेळी त्याला स्वार्थी व समाजकंटक मान्ये खतपाणी घालतात. अशी माणसे बुवा, बाबा, साधू, महंत, तांत्रिक-मांत्रिक यांचेकडून फसली जातात. ही माणसे सहजपणे आपला स्वार्थ साधून घेतात व पैसा कमावतात. या विज्ञानाच्या युगात ही श्रद्धाळू मंडळी बुवांच्या चमत्कारावर विश्वास ठेवतातच कसा हे कळत नाही. याचा अर्थ अंधश्रद्धेचा फगडा आपल्या समाजातून पूर्णपणे गेलेला नाही.

आज तर सगळ्यांच्या हातात मोबाईल आहे. सर्वांचे व्हॉटसॲप ग्रुप आहेत. त्यावरही रोज एक संदेश आसा असतो, की त्यामध्ये देवतांचा फोटो असतो. सोबत एखादा मंत्र असतो. त्यामध्ये लिहिलेले असते, की हा संदेश १० जणांना पाठवा म्हणजे तुम्हाला आनंदाची बातमी कळेल. पण जर नाही पाठवला तर काहीतरी वाईट घडेल. वाईट घडेल या भीतीनेच तो संदेश १० जणांना पाठवला जातो; अशी आहे सध्याची समाजातील आधुनिक अंधश्रद्धा.

ज्ञान हा बुद्धीचा प्रान्त, तर श्रद्धा-अंधश्रद्धा हा मनाचा प्रान्त. आपल्या जगण्याचा अर्थ आपल्याला बुद्धी व मन या दोघांच्या समन्वयातून सापडत असतो. जसजसे ज्ञान वाढेल व वैज्ञानिक दृष्टिकोन रुजेल तसतशा अंधश्रद्धा कमी होण्यास नक्कीच मदत होईल.

४. हेतू

अंधश्रद्धेविषयी विद्यार्थ्यांमध्ये असणारे गैरसमज दूर करणे.

५. उद्दिष्टे

१. महाविद्यालयीन विद्यार्थ्यांमध्ये अंधश्रद्धाविषयक असलेले गैरसमज जाणून घेणे.

२. महाविद्यालयीन विद्यार्थ्यांमध्ये अंधश्रद्धाविषयक असलेले गैरसमज दूर करण्यासाठी त्यावर समर्पक संदर्भासहित स्पष्टीकरण देणे.

६. परिकल्पना

महाविद्यालयीन विद्यार्थ्यांमध्ये अंधश्रद्धाविषयक गैरसमज आहेत. त्यावर योग्य ते स्पष्टीकरण मिळाल्यास अंधश्रद्धा दूर होण्यास मदत होईल.

७. उद्याप्ती व मर्यादा

प्रस्तुत संशोधन हे अंधश्रद्धा संदर्भात आहे. तसेच विद्यार्थ्यांनी प्रश्नावलीला दिलेल्या

२२४ / राष्ट्रीय विज्ञान परिषद

प्रतिमादावर निष्कर्ष अवलंबून आहेत. प्रस्तुत संशोधन हे शिवाजी विद्यापीठ, कोल्हापूर कार्यक्षेत्रातील सातारा जिल्ह्यातील चाई तालुक्यातील किसन वीर महाविद्यालय, विज्ञान शाखेमध्ये शिक्षण घेत असलेल्या विद्यार्थ्यांपुरतेच मर्यादित आहे.

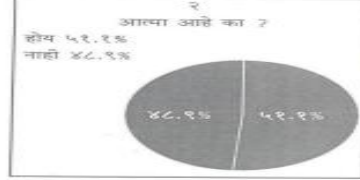
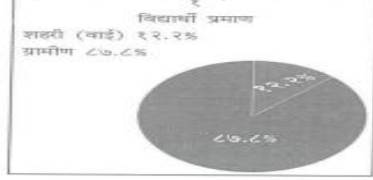
८. संशोधनाची कार्यपद्धती

अंधश्रद्धेविषयी असलेल्या प्रश्नांची प्रश्नावली तयार केली.

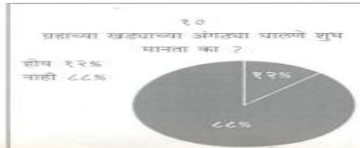
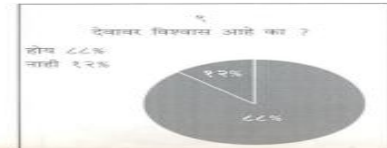
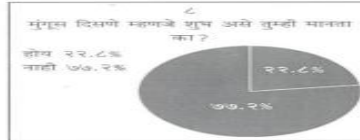
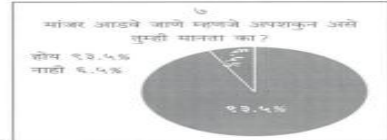
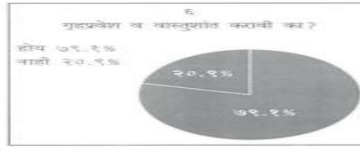
अंधश्रद्धेवर आधारित प्रश्न

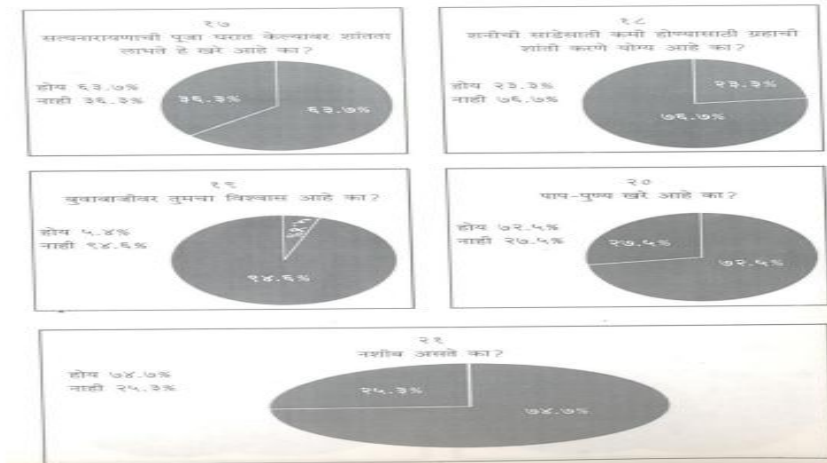
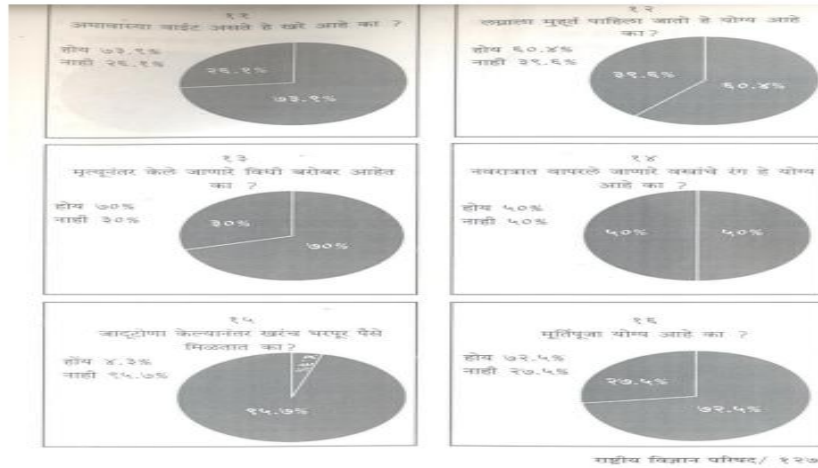
१. आत्मा आहे का ?

२. पुनर्जन्म होतो का ?



राष्ट्रीय विज्ञान परिषद/ १२५





३. प्रहावर विश्वास आहे का ?
४. लग्न करताना मुला-मुलीची पत्रिका बघावी का ?
५. गृहप्रवेश व वास्तुशांत करावी का ?
६. मांजर आडवे जाणे, म्हणजे अपशकुन तुम्ही मानता का ?
७. मुंगूस दिसणे म्हणजे शुभ असे तुम्ही मानता का ?
८. देवावर विश्वास आहे का ?
९. प्रहाच्या खड्याच्या अंगठ्या हातात घालायला शुभ असे तुम्ही मानता का ?
१०. अमावास्या ही वाईट असते, हे खरे आहे का ?
११. लग्नाला मुहूर्त पाहिला जातो हे योग्य आहे का ?
१२. मुलुंंतर केले जाणारे विधी हे बरोबर आहेत का ?
१३. नवरात्रात वापरले जाणारे कव्याचे रंग जसे सोमवार पांढरा रंग हे योग्य आहे का ?
१४. जादूटोणा केल्यानंतर खरव भरपूर रुपये मिळतात का ?
१५. मूर्तिपूजा योग्य आहे का ?
१६. सत्यनारायणाची पूजा घरात करावी म्हणजे शांतता लाभते हे खरे आहे का ?
१७. सनीची साडेसाती कमी होण्यासाठी ग्रहांची शांती करणे योग्य आहे का ?
१८. बुवाबाजीवर तुमचा विश्वास आहे का ?
१९. पाप-पुण्य खरे आहे का ?
२०. नशीब असते का ?

१. नमुना
प्रस्तुत संशोधनासाठी किशन वीर महाविद्यालय, चाई, ता. चाई, जि. सातारा येथील सायन्स शाखेत शिकणाऱ्या बी.एससी. भाग-१,२,३ विद्यार्थ्यांची निवड केली. ती अहवाल पुढीलप्रमाणे आहे. त्याचे स्वरूप खालीलप्रमाणे :-

एकूण विद्यार्थ्यांपैकी १२.२% एवढे विद्यार्थी हे चाई शहरात राहत असून ८७.०८% एवढे विद्यार्थी राष्ट्रीय विज्ञान परिषद/ १२९

हे ग्रामीण भागातील आहेत. ५१.१% विद्यार्थ्यांचा आत्मा आहे यावर विश्वास आहे. ३१.५% विद्यार्थ्यांना वाटते, की पुनर्जन्म होतो. ४७.०७% विद्यार्थ्यांचा ग्रहांवर विश्वास आहे. ५२.०२% मुलामुलींना लग्न करताना पत्रिका बघूनच लग्न ठरवावीत असे वाटते. ७९.१% विद्यार्थ्यांचा गृहप्रवेश व वास्तुशांती यावर विश्वास आहे. ९३.५% विद्यार्थी हे मांजर आडवे जाणे हा अपशकुन मानतात. ७७.२% विद्यार्थ्यांना मुंगूस दिसणे शुभ वाटत नाही, परंतु २२.८% विद्यार्थी मुंगूस दिसणे शुभ साकून मानतात. ८८% विद्यार्थ्यांचा देवावर विश्वास आहे तर १२% विद्यार्थ्यांचा देवावर विश्वास नाही. ८८% विद्यार्थ्यांचा ग्रहांवर विश्वास नाही, परंतु १२% विद्यार्थ्यांचा विश्वास प्रहाच्या अंगठ्या परिधान करण्यावर आहे. अमावास्या वाईट असते असे ७३.९% विद्यार्थ्यांना वाटत नाही. ६०.४% विद्यार्थ्यांना लग्न हे मुहूर्तवर करावे असे वाटते. ७०% विद्यार्थ्यांना मुलुंंतर वेगवेगळे विधी करणे योग्य वाटते. ५०% विद्यार्थी नवरात्रात असणाऱ्या नऊ रंगाचे कप परिधान करणे पसंत करतात. ९५.७% विद्यार्थ्यांचा जादूटोणा यावर विश्वास नाही. ७२.५% विद्यार्थी मूर्तिपूजा करतात. २३.३% विद्यार्थी साडेसातीला घाबरतात. सत्यनारायणाची पूजा ६३.७% विद्यार्थ्यांना करावीशी वाटते. ९४.६% विद्यार्थ्यांचा बुवाबाजी पटत नाही परंतु ५.४% विद्यार्थ्यांचा बुवाबाजीवर विश्वास आहे. ७२.५% विद्यार्थ्यांचा पाप-पुण्यावर विश्वास आहे. ७४.७% विद्यार्थ्यांचा नशिबावर विश्वास आहे.

वरील माहिती अभ्यासना अजूनही महाविद्यालयातील सायन्स विभागात शिकणाऱ्या विद्यार्थ्यांच्या मनात अंभ्रश्रद्धा आहेत. पूर्वीपणे त्यांचे निर्मूलन झालेले नाही. त्यांना मार्गदर्शनाची गरज आहे.

१०. निष्कर्ष
 १. निराशावादाकडून आशावादाकडे वळण्याचा प्रयत्न केला पाहिजे
प्रत्येकाच्या जीवनात काही समस्या रोजच येत असतात. त्यामुळे निराशा न होता त्या सोडवण्यासाठी आपण प्रयत्नशील राहिले पाहिजे.
 २. विज्ञाननिष्ठ ज्ञानीज्यापुती केली पाहिजे
मानव जन्माला आल्यापासून त्याला विस्मृतीतील वेगवेगळ्या घटना नवीन व आश्चर्यकारक वाटतात. उदा. भूकंप, सूर्यग्रहण, चंद्रग्रहण, वनस्पतीला बहर देणे, कळीचे उमलणे, पक्ष्यांचे होणारे पुंजन, जन्म व मृत्यू या व अशा विविध गोष्टींचा विज्ञानाच्या दृष्टिकोनातून अभ्यास केला पाहिजे व त्याची समाजजापुती केली पाहिजे.

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. साळुंखे - उद्घाटन भाषण	१५
२	अॅड. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
----	---	-----

मराठी

१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ धोरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२



अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. सालुंखे - उद्घाटन भाषण	१५
२	डॉ. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ क्षीरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. सालुंखे - उद्घाटन भाषण	१५
२	अॅड. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
----	---	-----

मराठी

१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ थोराल - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर शिवाय जगताप यांचे योगदान	१३२

संत कबीर की वाणी में वैज्ञानिक दृष्टि

डॉ. सोनकांबले अरुण अशोक, सहायक प्राध्यापक
डॉ. भानुदास भिकाजी आगोडकर, प्राध्यापक एवं अध्यक्ष,
हिंदी विभाग, किसन वीर महाविद्यालय, वाई - ४१२८०३

शोध सारांश

मध्यकालीन संतकाव्य में निर्गुण संतकाव्य महत्वपूर्ण है। संत कबीर भारतीय संतकाव्य के निर्गुण संतकवि के रूप में स्थापित है। उनकी वाणी नदी के प्रवाह जैसी प्रवाहित है। उनमें सदाचार और समानता दृष्टिगोचर होती है। मध्ययुगीन काव्य में आधुनिक विचार नवीनता और वैज्ञानिकता का चित्रण कबीर के काव्य में हुआ है। इन्होंने मूर्तिपूजा, बाह्याडंबर, कर्मकांड, तीर्थाटन, जातिभेद एवं अंधविश्वासों का खुलकर विरोध किया एवं तर्कपूर्ण विचारों से अपनी वाणी के माध्यम से लोगों को जगारूक किया। भारतीय जीवन-दर्शन में विभिन्न धर्म-विचारधाराओं का निवास है। कट्टरतावादी विचारों से समाज को अंधेरे में धकेलकर विषमता को उत्पन्न किया जाता है, तो विज्ञान सम्मत विचार प्रकाश की ओर अग्रेषित कर समाज में समानता स्थापित करते हैं। प्रस्तुत शोधालेख कबीर की वाणी में वैज्ञानिक दृष्टि पर आधृत है।

कूट शब्द

संत कबीर, अंधविश्वास, पद, दोहा, निर्गुण, अस्पृश्यता, हिन्दू, मुसलमान, धर्म, रूढ़ि-परंपराएँ और वैज्ञानिक आदि।

संतकवि का अर्थ सत्य का उद्घाटन करनेवाला कवि और विज्ञान अर्थ विशिष्ट ज्ञान, जिससे सत्य की खोज की जाती है। मध्ययुगीन भारत में सत्य बोलना काफी धैर्य का काम था, जो संत लोगों के द्वारा किया जा रहा था। जिसमें कबीर शीर्षस्थान पर है। कबीर की वाणी का संकलन 'बीजक' नाम से संकलित साखी, सबद और रमैनी के माध्यम किया गया है। समग्र वाणी में वैज्ञानिक विचारों का चित्रण नजर आता है। कबीर के काव्य रसास्वादन से यह ज्ञात होता है कि अंधविश्वास, अस्पृश्यता, आडंबर का मूल धार्मिक कट्टरता ही है। भेदभाव के कारण धर्म की अवैज्ञानिक सोच मनुष्य को गलत रास्ते पर ले जाकर जीवन का सत्यानाश करती है, यह प्रमाणसहित कबीर ने सिद्ध

राष्ट्रीय विज्ञान परिषद/ १०९

किया है। पोथी पढ़कर मनुष्य पंडित नहीं होता, वेद अज्ञान की ओर ले जाते हैं बल्कि सदगुरु ज्ञान की ओर ले जाते हैं। अल्लाह का नामस्मरण करने के लिए जोर-जोर से लाउडस्पीकर लगाने की जरूरत नहीं है, अल्लाह प्रकृति एवं मानव के कण-कण में समाहित है। पत्थर का भगवान कैसे होता है ? जिसको पूजना चाहिए उसे छोड़कर हम दूसरों को ही पूजते हैं। रोजा (व्रत) के नाम पर गाय काटकर खानेवाले, धर्म की आड़ में वेश्या के साथ सोकर छुआछूत माननेवालों का खुलकर विरोध कबीर की वाणी में दिखाई देता है, जो वैज्ञानिक दृष्टि की पुष्टि करता है। कबीर की तेजस्विता से अनेक उच्च तथा निम्नवर्ग के साधकों ने कबीर को गुरु के रूप में ग्रहण कर समाज में समानता स्थापित करने का प्रयास किया है। ब्राह्मण, शूद्र भेदभाव पर आधारित धर्म एवं संस्कार समाज में व्याप्त भाईचारा और स्वस्थ राष्ट्र के लिए अहितकर होता है। कबीर ने केवल एक धर्म को ही नहीं टोका है, उन्होंने हिन्दू-मुसलमानों में व्याप्त कुटीतियों का भंडाफोड़ किया है।

वर्तमान युग में धर्म के आधार पर अंधविश्वास को फैलाया जा रहा है। पाप धुलने के लिए लोग काशी या हज जैसे अनेक धार्मिक स्थलों की यात्रा करते हैं, जिससे पुण्य प्राप्त होता है, यह भोली-भावना, विज्ञान और तकनीकी ने इतनी प्रगति करने के बाद भी मनुष्य का लोकविश्वास तथा अंधविश्वास पर गहरा विश्वास है तथा वे उसका अनुपालन करते हैं। कबीर ने उस समय भी अपनी वाणी के माध्यम से इसका विरोध कर वैज्ञानिक दृष्टि की ओर लोगों को खींच लिया था। उनके वैज्ञानिक विवेक एवं सोच के बारे में डॉ. राजदेवसिंह लिखते हैं- 'अतः कबीर अकेले थे। उनका एकमात्र साथी था अपना जाग्रत विवेक। आधुनिक व्यक्ति के पास इस विवेक के अतिरिक्त कोई दूसरी कसौटी ही नहीं होती, जिस पर कसकर वह खरे-खोटे की पहचान कर सके। सत्य की राह में न परम्परा साथ देती है न समाज, न वेद सहायक होता है न पुराण, न धर्म रास्ता बताता है न शास्त्र। व्यक्ति यहाँ अकेला होता है।' वैज्ञानिक दृष्टिकोण आधुनिकता की अवधारण का मुख्य बिंदु माना जाता है। जिसमें हम विवेक के सहारे सही और गलत का पता लगा सकते हैं, साथ ही यह प्रतीत होता है कि सत्य कटू होता है, जिससे अनेक परेशानियों का सामना करना पड़ता है मसलन उसे समूह से अलग रहकर अकेलापन में जीवन बिताना पड़ता है लेकिन अंततः सत्य की ही जीत होती है। गलत राह पर चल रहे समाज को दिशा देने का काम अपना विवेक जाग्रत रखनेवाला व्यक्ति ही कर सकता है। विवेक का आधार वैज्ञानिक दृष्टि का विकास होता है।

संत कबीर की वाणी में विवेक का जागरण हुआ दृष्टिगोचर होता है जो द्रष्टव्य है-

“अरे, इन दोऊन रहा न पाई।

११०/ राष्ट्रीय विज्ञान परिषद

Scanned with OKEN Scanner

हिन्दू अपने करे बड़ाई, गागर छुवन न देई ॥
 वेश्या के पाँयन तरे सोवे यह देखो हिंदूआई।
 मुसलमान के पीर औलिया गुररी मस्या खाई ॥
 खाला केरी बेटी व्याहें, घरहि में करे सगाई।
 बाहर से यक मुरदा लाए, धोय-धाय चढवाई ॥
 सब सखियाँ मिलि जेवन बैठी, घर-भर करे बड़ाई।
 हिंदू की हिंदूआई देखी, तुरूकन की तुरूकाई।
 कहे 'कबीर' सुनो भइ साधो, कौन राह है जाई।'' २

प्रस्तुत पद में हिन्दू-मुसलमान की गलत रूढ़ि-परंपरा और अहंकार को प्रस्तुत किया है। हिन्दू में अमानवीय अस्पृश्यता व्याप्त है, जैसे समाज के अनेक लोग आहत हैं, मानव बनकर भी पशु से बदतर जीवन उनके नसीब में हैं, यह तर्कहीन सोच अस्वस्थ समाज का लक्षण है। यह हिन्दू जो अपनी घगरी छूने नहीं देते और वे वेश्या के पाँवों में जाकर गिरते हैं। वेश्या के साथ वे शारीरिक संबंध बनाते हैं लेकिन अछूतों के साथ सामाजिक व्यवहार नहीं करना चाहते क्योंकि वे सामाजिक दृष्टि से अस्पृश्य है, जो चातुर्वर्ण्य व्यवस्था का उदाहरण है। मनुष्य होकर मनुष्य का अपमान कर उनके आत्मसम्मान को ठेंस पहुंचाने का काम करते हैं। कबीर ने केवल हिन्दुओं की गलत धारणाओं को ही नहीं टोका है, मुसलामानों की गलत रूढ़ियों और धारणाओं को भी टोकने की कोशिश की है। जैसे मुसलमान समुदाय में गाय और तत्सम जानवरों का मांस खाकर अपने धर्म का बड़प्पन सभी के सामने रखते हैं, घर में ही शादी ब्याह रचाते हैं, अपनी मौसी की बेटी के साथ ब्याह करते हैं, इसके मूल में अंधविश्वास है। इस अंधविश्वास की जड़ धार्मिक कट्टरता है, जो समाज को एक दृष्टि से अपमान की ओर खींचने का कार्य करती है। कबीर हिन्दू की हिन्दूआई और तुरूकन की तुरूकाई को समाज के सामने रखकर आलोचना कर सत्य के मार्ग पर चलकर समाज को स्वस्थ बनाने की कोशिश करते हैं। जितनी ज्यादा आलोचना हो जाए उसमें परिवर्तन संभव है, सुधार की संभावना बढ़ती है लेकिन एक ओर समाज को एक दृष्टि से पूरी तरह से भेदभाव के आधार पर तोड़ने की कोशिश की गई है। मनुष्य का जीवन सुखकर बनाने के लिए हमें सत्य के मार्ग पर चलना है। प्रेम, ज्ञान एवं ऊँच-नीच को दशाति हुए कबीर का एक पद महत्वपूर्ण है -

राष्ट्रीय विज्ञान परिषद/ १११

Scanned with OKEN Scanner

“पोथी पढ़ी-पढ़ी जग मुवा पंडित भयान कीइ

एके आखर प्रेम का पढ़े सौ पंडित होइ

X X X X X X X X X X X X X X X

ऊँचे कुल का जनमिया जे करनी ऊँचि न होइ

सोब्रन कलस सुरे भरा साधुन निंदा सोइ ”३

प्रस्तुत पद में अतार्किक आधार पर मनुष्य को तोड़कर परंपरागत ऊँच-नीच व्यवस्था को समाज के सामने दिखाकर केवल ऊँची जाति का व्यक्ति जिनमें कोई गुण नहीं वह पंडित नहीं बन सकता बल्कि जिसमें प्रेम दया भाव समाहित है, वह पंडित बन सकता है। केवल पोथी को पढ़कर इन्सान बड़ा नहीं होता है बल्कि उसमें प्रेम होना चाहिए। ऊँची जाति में जन्म लिया है यह महत्वपूर्ण न होकर कर्म कितना महान और महत्वपूर्ण है, यह महत्व का है। कबीर की वाणी में हर समय समानता के तत्व पर कसकर समाज में समता स्थापित करना वैज्ञानिक दृष्टि को प्रमाणित करता है। साहित्य के माध्यम से जन-जागरण का कार्य करनेवाले महान संतकवि के रूप में कबीर का स्थान है। मुख्य बात यह है कि मनुष्य जन्म से श्रेष्ठ न होकर उसके द्वारा किए गए कार्यों से महान होता है। संत कबीर वैज्ञानिक सोच को समाज के सामने रखते हैं, एक उदाहरण महत्वपूर्ण है -

“झूठे तन कौं क्या गरबावै ।

मरै तो पल भारी रहन न पावै ॥ ”४

इससे ज्ञात होता है कि मनुष्य का शरीर मरने के बाद क्षणभर में नष्ट होता है। मानवीय देह क्षणभंगुर है लेकिन मनुष्य इस देह पर झूठा गर्व करता है। गर्व मनुष्य की नशा है, इस नशा में मनुष्य यह भूलता है कि मानव शरीर मरने के बाद जलकर राख बनता है और उसे नदी में बहाया जाता है। मरने के बाद वह स्वर्ग-नरक के अंधविश्वास में जकड़ जाता है। इस पर संतकवि कबीर ने बात कर अंधविश्वास को तोड़ने की कोशिश उस समय की थी, जो आज भी प्रासंगिक है। काल की दृष्टि से प्रस्तुत पंक्तियाँ मध्ययुगीन होकर भी अपने विशेष संदर्भ में आधुनिक हैं। वर्तमान में व्याप्त असत्य आचरण को सत्य आचरण की ओर ले जाने का रास्ता नजर आता है। वैज्ञानिक घरातल पर कसकर देखने के उपरान्त यह ज्ञात होता है कि मानव शरीर नाशवान है उसका प्रकृति के अन्य प्राणवान चीजों की तरह वह भी एक दिन मिट्टी में मिलनेवाला है और वह निश्चित है। जो चीज निर्मित हुई है, उसका नाश भी निश्चित है। यह बात कबीर की वाणी से निस्त होती है। समाज में अगर इस सत्य का प्रचार-

११२/ राष्ट्रीय विज्ञान परिषद

प्रकार हुआ तो निश्चित रूप से सामाजिक सुधार संभव है और यह सामाजिक सुधार भक्तिभाव, भावनाएं, संवेदनाओं पर निर्भर न होकर प्रत्यक्ष वैज्ञानिक सोच एवं व्यवहार पर निर्भर है। जिसका वर्णन कबीर की वाणी में दृष्टिगोचर होता है। धर्म के नाम पर मुसलमान जो पर्यावरण का ध्यान नहीं रखते तथा पूजनीय गाय की हत्या करते हैं, कबीर उसका खुलकर अभिधार्थ शैली में समाचार लेते हैं-

“कांकर पाथर जोरि के मस्जिद लई चुनाय ।
ता चढ़ी मुल्ला बांग दे क्या बहरा हुआ खुदाय ॥
दिनभर रोज रखत है, राति हानत है गाय ।
यह तो खून वह बन्दगी कैसे खुसी खुदाय ॥” ५

प्रस्तुत काव्य पंक्तियों में कट्टर धर्म के सहारे जोर-जोर से नमाज अदा करनेवाले जिन्हें अन्य लोगों का ध्यान नहीं रहता, जिससे लोगों को काफी तकलीफ होती है, यह आज भी विद्यमान है। मुसलमान समुदाय के लोग एक माह का रोजा रखते हैं, रोजा रखना कोई बुरी बात नहीं लेकिन इसके नाम पर गाय का मांस खाना बुरा है। कबीर ने इसकी ओर ध्यान आकृष्ट कर समाज में प्रचलित इस प्रथा का विरोध किया, जिससे वैज्ञानिक तथ्यों का प्रत्यक्षीकरण दृष्टिगोचर होता है।

संत कबीर ने धर्म एवं वर्णव्यवस्था के नाम पर भेदभाव करनेवाले समाज का चित्रण अपनी वाणी में किया है। इस संदर्भ में डॉ. भागीरथ मिश्र लिखते हैं - “कबीर की चेतन दृष्टि और सूक्ष्म दृष्टि, समकालीन समाज में व्याप्त रूढ़ियों और कुरीतियों तथा अंधविश्वासों को देखकर व्याकुल हो उठती थी, जिसके परिणामस्वरूप उनकी बानी में समाज की आलोचना हमें मिलती है। उनके समय हिन्दू समाज में वर्णव्यवस्था के विकृत रूप ने घर कर लिया था। ब्राह्मण और शूद्र का भेद अर्मित था।” ६ प्रस्तुत उद्धरण से पता चलता है कि अंधविश्वास पर आधारित रूढ़ियों और कुरीतियों है, जिससे समाज में पापाचार, अनाचार को बढ़ावा मिलता है। सामाजिक अव्यवस्था एक प्रकार से समाज को अंधेरे में धकेलकर लोगों को मूर्खता की ओर अग्रेषित करती है, इसका मूल नष्ट करने के लिए वैज्ञानिक सोच और तर्क की जरूरत है। समाज एक बार अंधविश्वास की राह पकड़ता है तो वह काफी समय तक बरकरार रहता है, जिससे समाज में विषमता बढ़ती है। यही बात लोगों तक पहुंचाने का कार्य कबीर ने अपनी वाणी के माध्यम से किया है। वर्णव्यवस्था की रचना अवैज्ञानिक है, तर्कहीन और बुद्धिहीन है। मनुष्य का जन्म कभी मुख से, बाहू, जंघा और पैर से होता है क्या ? साथ ही सबसे श्रेष्ठ ब्राह्मण और सबसे निचले पायदान पर शूद्र है। ब्राह्मण का कार्य वेद पढ़ना और

राष्ट्रीय विज्ञान परिषद/ ११३

Scanned with OPEN Scanner

शूद्र का काम सेवा करना यहाँ तक की उन्हें गन्दा काम करने के लिए मजबूर करना गन्दी सोच का प्रतीक था, जो अवैज्ञानिक है।

निष्कर्ष

संत कबीर की वाणी में अध्ययनोपरोत ज्ञात होता है कि कट्टर धार्मिकता के आधार पर अंधविश्वास, पाखण्ड, गलत रूढ़ियाँ और परंपराओं आदि समस्याओं का समाधान एक ही है - वैज्ञानिक दृष्टि। वैज्ञानिक सोच प्रत्यक्ष ज्ञान एवं प्रयोग पर आधारित होती है इसलिए उसमें असत्य के स्थान पर सत्य को महत्व दिया जाता है। मानव में सुख एवं समृद्धि केवल अध्यात्म से नहीं आती, न ही विज्ञान से बल्कि दोनों के समुच्चय से जीवन बनता है, तो निश्चित रूप से मानव विकास के साथ-साथ स्वस्थ जीवन की आशा भी हम प्राप्त कर सकते हैं। संत व्यक्ति समाज में शान्ति के साथ-साथ समन्वय पर ध्यान देते हैं। कबीर ने जिस सत्य को खोज निकाला था, उसका किसी भी मानक धार्मिक पुस्तक में वर्णन नहीं मिलता। अंत में इतना ही कहा जाता है कि संत कबीर की वाणी में आधुनिक विचारों एवं वैज्ञानिकता का दर्शन दृष्टिगोचर होता है, जो समाज के लिए अनंत-काल तक हितकर होगा।

संदर्भ :

१. डॉ. राजदेव सिंह, कबीर आधुनिक संदर्भ में, लोकभारती प्रकाशन १५-ए, महात्मा गांधी मार्ग इलाहाबाद -१, संस्करण : २०००, पृष्ठ. सं-१४
२. डॉ. अर्जुन चव्हाण- संपादक हिंदी मध्यकालीन एवं आधुनिक काव्य, प्रकाशक डॉ. राजेंद्र द. कांकरिया, कुलसचिव, शिवाजी विश्वविद्यालय, कोल्हापूर -४१६००४, 'उद्धृत' पृष्ठ. सं-२
३. डॉ. राजदेवसिंह, कबीर आधुनिक संदर्भ में, लोकभारती प्रकाशन १५-ए, महात्मा गांधी मार्ग इलाहाबाद -१, संस्करण : २०००, 'उद्धृत' पृष्ठ. सं-१७८
४. डॉ. राजदेव सिंह, कबीर आधुनिक संदर्भ में, लोकभारती प्रकाशन, १५-ए, महात्मा गांधी मार्ग इलाहाबाद -१, संस्करण : २०००, 'उद्धृत' पृष्ठ. सं-१३२
५. तिवारी, रामप्यारे - हिंदी के प्रतिनिधि कवि, हिंदी साहित्य संसार, पटना-४, दिल्ली-७, प्रथम संस्करण-१९६५ 'उद्धृत' पृष्ठ. सं-२६
६. डॉ. भागीरथ मिश्र, कबीरवानी, कमल प्रकाशन, ५४, प्रिन्स यशवंत मार्ग, इन्दौर (म. प्र) ४५२००४, पृष्ठ. सं-१४

□□□

११४/ राष्ट्रीय विज्ञान परिषद

Scanned with OPEN Scanner

6

Dr. S.P. Kamble



राष्ट्रीय विज्ञान परिषद

प्राचार्य डॉ. गुरुनाथ फगरे; डॉ. विलास खंडाईत

RASHTRIYA VIDNYAN PARISHAD

Principal Dr. Gurunath Fagare ; Dr. Vilas Khandait

पहिली आवृत्ती	:	ऑगस्ट २०२३
सर्वाधिकार	:	© प्राचार्य डॉ. गुरुनाथ फगरे आणि डॉ. विलास खंडाईत
प्रकाशक	:	लोकायत प्रकाशन राकेश आ. साळुंखे लोकायत, १३, यशवंतनगर गेंडामाळ, सातारा ४१५ ००२ दूरध्वनी : (०२१६२) २५०७२५ मोबा. : ८४८४९७७८९९ email : lokayatprakashan@yahoo.com www.lokayatprakashan.co.in
ISBN	:	978-93-92880-42-1
अक्षरजुळणी व मुद्रक	:	लोकायत प्रिंटर्स, सातारा
मुखपृष्ठ	:	अमोल कांबळे
मुद्रितशोषक	:	विकास धुळेकर, सातारा

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. साळुंखे - उद्घाटन भाषण	१५
२	अॅड. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६२

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबळे अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
----	---	-----

मराठी

१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतींच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ थोरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२

2. “Role of Education in Developing Scientific Temper in Students”

By

Dr. Shivaji Pandurang Kamble

Librarian

Kisan Veer Mahavidyalaya, Wai

Abstract:

According to the Constitution of India (Article 51 A), it is our fundamental duty to inculcate 'scientific temper'. National Curriculum Framework 2005 also looks at the development of scientific temper, as one of the aims of science education. Though scientific temper is not confined to science alone, the possibility of developing scientific temper seems higher in science, as it stands as the most reliable source of knowledge and understanding. The points of education have changed from age to age and in this manner it is dynamic on the grounds that the points of life are dynamic. The responsibility of our society to the development of interests of students goes to the community to share the findings and mobilize them for policy-influencing in a highly scientific society. Science is one of those human activities that man has created to gratify certain human needs and desires. The primary goal of education should be the intellectual development of the individual. With its accelerating importance in our society science has become an increasingly important part of general knowledge. This paper highlights how the education system is to develop the scientific temper in the students of India. Education system is the boon for cultivation of values. Scientific Temper should be generated by systematic efforts.

राष्ट्रीय विज्ञान परिषद/८१

Keywords: Essential Skills, Soft Skills, Scientific temper, scientific aptitude etc.

1. Introduction :

‘Fostering Scientific Temper’ was the theme chosen for National Science Day (28 February 2014) by the Department of Science and Technology (DST). Year-long programmes and activities were built around the theme. It is interesting to know the phrase ‘Scientific Temper’ with its current attributes was first articulated by Pandit Jawaharlal Nehru in his famous book Discovery of India (1946) wherein he said : “The scientific approach and temper are, or should be, a way of life, a process of thinking, a method of acting and associating with our fellowmen”. Nehru relentlessly expanded the notion of scientific temper and strived to convince political and scientific leaderships to inculcate scientific temper among citizens.

The ultimate aim of education is for harmonious development of mankind leading to harmony in society. Students are exposed to various subjects during their academic journey. Education is a mix bag of various facts, observations, theories, processes, findings, experiments, thoughts etc. Learning outcomes are not to be quantified. Marks have become the benchmark of learning outcomes but that's not correct. Learning outcomes are to be observed in terms of transfer of learning. Transfer of learning can be described like attitude building, skill development, critical thinking, temperament etc. These qualities help to nurture and transform society.

2. WHAT IS SCIENTIFIC TEMPER ?

Scientific Temper is a term first used by Jawaharlal Nehru in 1946. It is a way of life which uses the scientific method to question, observe physical reality, test, analyse and communicate. He evoked a scientific temper in the circumstances of making science and technology a key input in National

Development. Scientific temper encompasses Rationality, Rights, and Responsibility in equal measure. In 1976, India became the first Country to include in its constitution "Scientific Temper with Humanism" as a fundamental duty of all citizens of the country (Article 51-A(H)). It is the scientific temper that helps in developing secularism, humanism & spirit of enquiry and Reform.

3. Role of Constitution and Government in furthering Scientific temper:

Government can also be a significant stakeholder in promoting scientific temper among its citizens. The Indian Science Congress is a society, under the administrative control of the Department of Science & Technology, that promotes science education and values in India. Our first Prime Minister, Mr. Jawaharlal Nehru was a great votary of scientific temper and set up various educational institutes like Indian Institute of Technology to nourish scientific temper in India.

We already have as one of our Fundamental duties, as enshrined under Article 51 A (h) in Part IV A of the Constitution of India which exhorts all of us to inculcate and promote scientific temper in all our endeavors. This can be a good starting point and a beacon of inspiration for both private citizen and the State in guidance of various activities in furtherance of scientific temper.

4. Review of Related Literature :

The work undertaken by **Shah et al. (2013)** showed how positive attitude towards learning Social Science influence the academic achievement of students. Taking a sample of 1233 students taken from 37 government schools carried out the study. Result of the study showed that higher academic achievement of students is highly influenced by the positive attitude they possess towards learning Social Science. Moreover girls had better attitude

राष्ट्रीय विज्ञान परिषद/ ८३

towards learning. **Khan and Ali (2013)** enquired about the relationship between attitudes of students towards Social Science with their academic achievement and found that both the variables are interlinked and correlated. The higher the positive attitude of students towards Social Science, the more likely to get better results in their academics. **Al-rabaani (2014)** investigated the acquisition of science process skills by Oman's pre-service social studies teachers. Data were collected using a questionnaire which consisted of 14 items covering basic and integrated science process skills. The questionnaire was distributed to all 59 social studies students teachers in the college of education at Sultan Qaboos University in the Sultanate of Oman. The results showed that they had moderate acquisition of science process skills and there was no difference due to their gender. **Bang and Baker (2013)** investigated the effect of high schools' gender organization on Korean tenth-grade students science achievements, and their attitudes towards science. Three schools, three principals, three science teachers, and 302 tenth-grade students from their respective school types responded to an initial survey, and eleven academically outstanding students were subsequently interviewed. Results indicated that the male and female students from the co-ed school had significantly higher science achievement and positive attitudes towards science.

5. Significance of Scientific Temper :

1. Scientific temper is vital as it allows civil society's participation and helps develop a democratic state in a country that leads to the promotion of welfare.
2. Scientific temper helps find solutions for abnormal weather patterns and natural disasters.
3. Scientific temper can pull people out of the pool of visually impaired confidence, strange notion and superstitions.

८४/ राष्ट्रीय विज्ञान परिषद

4. Scientific temper can lift the standards of living of citizens.

5. A nation is considered as great when it consists of great people who are examples of humanity, culture, stability, and concern towards environmental health.

6. Humanism can help eliminate social barriers such as discrimination, gender bias, religious wars, caste discrimination, etc.

7. Every sector requires humanism, political, medical, educational, financial or more.

8. Humanism leads to happiness and productivity. No human being can grow without happiness and progress.

6. Essential Skills to be inculcated by the Teachers among the students:

Here are some ways in which a Teacher can inculcate Essential Skills among the students:

Develop Spirit of inquiry- (Encourage them to ask questions)

Often, students hesitate to ask questions, either they are uncomfortable, or due to fear of the unknown. Thus, it is a duty of a teacher to create a conducive and secure environment in a classroom by valuing and respecting each and every question, Practicing Active Listening, etc. This will lead to more participation and enhanced motivation.

Develop Communication Skills -

Good communication skills and team spirit give rise to efficient collaborative skills. It leads to building trust among peers learning due to variety of skills, passion, and knowledge possessed by different members of a team. It can be done in a class room setting via assigning those projects, presentations, group work and organizing debates etc. These skills will boost students confidence and precision. Thus their intent will become crystal clear.

राष्ट्रीय विज्ञान परिषद/ ८५

Better Information Management -

Now- a -days, GEN-Z is more influenced by various Social Media platforms. If used constructively, it not only helps them to develop networking skills, but also aids them help share their innovative ideas with millions of experts in the field, who in turn provide them efficient feedback thus enhancing Learning.

Make them understand Concepts of Copyright and Plagiarism -

As part of Fulfillment of various degree programs, Many educational institutes undergo a subject called Project Research. Generally, being exposed to massive online content, they just copy-paste someone else's work as their own. Thus, Academicians shall make them aware about the problem they may suffer.

Adopt Demonstration method of Teaching-

Many-a-times, the teachers emphasize on "Learning by Doing" in their classes but fail to implement it in their teaching method. so, the demonstrator (teacher) must possess the technical knowhow. Thus Activity Based Learning, involving Case-Study, on the spot team task etc. These methods involve various senses that make learning permanent and help achieve psychomotor objectives.

Develop Analytical Skills -

This enables the students to explore answer on their own and not via spoon-feeding. It also helps them gain better insights of an all-round view of the problem at hand for better strategizing.

Inculcate Creative Thinking-

Creativity is the most difficult skill to acquire, and also the most sought after. While designing learning experiences, the teacher provides tools that give students options, voice and choice, in order to enable them to be creative.

८६/ राष्ट्रीय विज्ञान परिषद

imagination and creativity are the traits that fuel the future. Thus teaching students how to think is more important than teaching them what to think.

Adopt Digital Learning-

The digital world is increasingly penetrating all sectors. Education is no exception to it. In the knowledge - based economy, Digital Skills are highly valued; in the future, Digital Skills will be vital. GEN Z being digital natives can turn out self-educators. This Generation always feels that they are more techno-savvy than their parents and grandparents. This kind of perception may prevail in a class-room setting too. Thus, to avoid such situations a teacher must adapt to innovative ways of teaching. Rather than sticking just to conventional Chalk and Duster Teaching. This will enable more active participation and keenness of the subject being taught.

Use learning beyond the Classroom -

By using what they are learning in a creative and interesting way, students find it easier to understand and retain what they learnt in classroom.

Certain Emotional Intelligence Skills are utmost necessary to develop and sustain in this VUCA Environment. These Skills are :

- Self-Compassion & Self-Control
- Mindset Management
- Change the What if's to How Can I do the Best
- Managing Anxiety

7. Methods to inculcate Scientific Temper :

In such a situation of social and cultural malaise, a major role of Scientific Temper is to revive confidence and hope and to dispel fatalistic outlook.

राष्ट्रीय विज्ञान परिषद/ ८७

The campaign to promote Scientific Temper must inculcate values like equality and dignity of all human beings, distributive justice, dignity of labour, and social accountability of one's actions.

- Science and Scientists must have a position of pride in society which can influence many young students to move into scientific fields.
- A nationwide science policy which should be able to anticipate problem areas, devise course correction.
- Better funding of Science and Technology initiatives which would help in development of the society.
- All these are essential for bringing about social, economic and cultural transformation of our country.

8. Possible ways of improvement of Scientific Temper:

The following way we may improve scientific temper in our country –

- a) Develop more scientific spaces and communication centers both in the academic and social way of lives.
- b) Must avoid the religious symbols at public institutions that are run by public funding. It is highly necessary to separate religion from science.
- c) Propagation of science related to societal development should be done through different Govt. funded educational TV channels.
- d) It is essential that the scientists and scientific institutions should have to come out of labs and reach the society to explain various social events with logic and scientific manner.
- e) All the government agencies should encourage science communication activities as a social responsibility to promote rationality, inquiry and questioning.

८८/ राष्ट्रीय विज्ञान परिषद

f) India is a multiracial country and with tradition-bound people; so, to promote scientific temper among them a special attention to be taken for designing various programs community wise with the help of elite people from those groups.

g) The spiritual leaders of all religions should have to follow the footsteps of Swami Vivekananda, who strived hard for the promotion of rational thinking along with Vedanta instead of making the people more insipid.

h) The electronic media of the country should have to stop propagating irrational thoughts.

i) Need to form a monitoring committee for screening the spreading of unscientific information through media.

Scientific thinking would help unite India and form a common aim for the elimination of poverty. Through a combination of economic planning, democracy, and the development of a scientific temper with universal education, India can attain its goal. Thus we could overcome the biggest challenges facing India at the time - communalism, poverty as well as casteism and flourish Indian democracy.

Conclusion:

Scientific Temper is a mental and cultural tradition that helps to understand Whys and Hows of life. Definitely, besides parents, teachers have a greater responsibility in moulding students with scientific mindset. So, in order to promote Scientific Temper and develop Essential Skills among students, specific and clear goal-oriented curriculum is essential. Moreover teachers and academicians need to be patient as it's not an overnight activity. Nevertheless, in a world of full of uncertainty, misinformation, a student needs to undoubtedly be self-reliant on his/her own skill set.

राष्ट्रीय विज्ञान परिषद/ ८९

References :

1. Al-rabaani, A. (2014). The acquisition of science process skills by Omani s pre-service social studies teachers. *European Journal of Educational Studies*, 6 (1), 13-19.
2. Bang, E., & Baker, D. (2013). Gender differences in Korean high school students' science achievements and attitudes towards science in three different school settings. *Mevlana International Journal of Education*, 3 (2), 27-42. <http://dx.doi.org/10.13054/mije.13.11.3.2>
3. Shah et al. (2013). Attitude Towards Social Science Learning: An Exploration of Pakistani Students. *Journal of Turkish Social Science Education*, 10 (2), 35-47.
4. Khan & Ali. (2012). Higher Secondary School Students' Attitude Towards Chemistry. *Asian Social Science*, 8(6), 165-169.
5. Kour, S. (2015). Scientific Temper among Academically High and Low Achieving Adolescent Girls. *Journal of Education and Practice*, 6(34), 96-101.
6. Panchapakesan, N. (2017). Scientific temper and education : a framework for discussion. *Current Science*, 113(9), 1655.
7. Mahanti S (2013) A perspective on Scientific Temper in India, *Journal of Scientific Temper*, 1 (1&2). PP : 44-62

□□□

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. सालुंखे - उद्घाटन भाषण	१५
२	डॉ. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ थोरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२

7

Dr. S.G. Thorat

अनुक्रमणिका

भाग १ : मान्यवरांची भाषणे

१	डॉ. आ. ह. सालुंखे - उद्घाटन भाषण	१५
२	डॉ. कोळसे-पाटील - उद्घाटन सत्राचे अध्यक्षीय भाषण	२३
३	डॉ. अनिमिष चव्हाण - अंधश्रद्धेचे मानसशास्त्र : उपचार आणि उपाय	३३
४	डॉ. मंगला नारळीकर - वैज्ञानिक दृष्टिकोणावर आधारित अभ्यासक्रमाची आवश्यकता	४०
५	डॉ. भारत पाटणकर - भारतीय संस्कृती आणि अंधश्रद्धांची उत्पत्ती	४९
६	प्रा. श्याम मानव - अंधश्रद्धा निर्मूलन चळवळ आणि वैज्ञानिक दृष्टिकोण	६१

भाग २ : शोधनिबंध

इंग्रजी

1.	Dr. Sunil Sawant - Fostering Scientific Temper to Sustain the Clear Stream of Reason	७७
2.	Dr. Shivaji Pandurang Kamble - "Role of Education in Developing Scientific Temper in Students"	८१
3.	Dr. Shivaji Tate - Impact of Superstition on Indian Society	९१
4.	Rahul Hanmant Waliv - A Case of Gender Violence Under the Mask of Vigilantism in India: Witch Hunting	९९

हिंदी

१.	डॉ. सोनकांबले अरुण अशोक - संत कबीरकी वाणीमें वैज्ञानिक दृष्टी	१०९
१.	डॉ. गणेश विष्णू लोखंडे - मनोविकृतीच्या निदान आणि उपचारातील अंधश्रद्धांचा व्यत्यय	११५
२.	डॉ. मंजूषा इंगवले - महाविद्यालयीन विद्यार्थ्यांमध्ये असणाऱ्या अंधश्रद्धांचा चिकित्सक अभ्यास	१२३
३.	डॉ. संग्राम गोपीनाथ थोरात - अंधश्रद्धा निर्मूलन चळवळीतील शाहीर विजय जगताप यांचे योगदान	१३२



PROCEEDINGS
of
NAAC SPONSORED ONE-DAY NATIONAL SEMINAR
on
"Transforming HEIs Through NEP 2020"
5th November, 2022

Organised and Published by
Internal Quality Assurance Cell (IQAC)

Janata Shikshan Sanstha's
Kisan Veer Mahavidyalaya, Wai
Dist-Satara (M. S.)



75
आज़ादी का
अमृत महोत्सव

Proceeding of the NAAC-Sponsored One-Day National Seminar on Transforming HEIs Through NEP 2020

CONTENTS

1.	Chief Guest Address: Hon'ble Prof.(Dr.) P. S. Patil	1
2.	Chairperson Address Hon'ble Prof.(Dr.) Nitin Karmalkar	3
3.	Keynote Address Dr. Devender Kawaday	4
4.	Challenges In The Implementation Of NEP 2020 Dr. R. S. Salunkhe	5
5.	National Education Policy (NEP) 2020 and Gross Enrollment Ratio (GER) in Higher Education Dr. Amardeep D. Jadhav	14
6.	Critical Appraisal Of NEP 2020 Dr. Kamble C.N.	22
7.	NEP 2020 and Role of Alumni in Higher Education Dr. P.R. Jadhav	28
8.	Transformation of New Education Policy 2020 in Higher Education Dr. Sanjay patil	32
9.	NEP 2020 and Higher Education System Dr. Sonali Pawar	37
10.	A Study On Nep 2020: Issues, Approaches, Challenges and Opportunities Dr. Vishalakshi Honnakatti	41
11.	National Education Policy-2020: Milestone in Education Reforms Mr. Ganesh Babar	48
12.	Transforming HEIs Through Outcome Based Education Dr. Sunil Sawant	59
13.	Role Of Lifelong Learning In National Education Policy 2020(NEP) Prof.(Dr.) Ramchandra Govind Pawar	68
14.	National Education Policy-2020 and Privatization of Education Dr. Anil Kate	73
15.	Role of NEP-2020 in Higher Education Dr.Avinash Mahadev	80
16.	Transforming Indian Higher Education: A Historical Perspective Dr. Bhimashankar M. Birajdar,	84
17.	Women Education and NEP 2020 Manjusha Ingawale	92

Janata Shikshan Sanstha's Kisan Veer Mahavidyalaya, Wai, Dist-Satara (M. S.)



Transforming Indian Higher Education: A Historical Perspective

Dr. Bhimashankar M. Birajdar,
Assistant Professor and Head,
Department of History,
Kisan Veer Mahavidyalaya, Wai
Dist: Satara (Maharashtra) – 412 803
E-mail: bmbirajdar83@gmail.com

ABSTRACT:

Education plays a significant role in the development of the nation and societies. Hence the ancient scholars, thinkers had given due emphasis on education. The prime intention of education during ancient times was to enrich peoples for better living experiences. Modern perspectives of education are bound to continuing expansion of capitalism in a global economy. The internationalization of higher education is one of the fastest growing phenomena for transformation in the tertiary education sector. The different commissions and committees that have examined the higher education system after independence have pointed out the opportunities, challenges and recommended suggestions for implementations. Higher education not only determines the economic condition of a country but also its intellectual and social conscience and shows the present and future path of development. This article attempts to explore the historical developments and transitions in Indian higher education briefly since ancient to modern and contemporary times. Simultaneously, this article would facilitate a better understanding of the changing educational eco-systems, scenarios and policies in the context of contemporary National Education Policy (NEP), 2020.

KEY-WORDS:

Capitalism, Global Economy, Internationalization of Higher Education, Tertiary Education Sector, Intellectual and Social Conscience, National Education Policy (NEP), 2020.

Introduction:

The Indian advanced educational framework is transforming with a phenomenal change in the coming decade. On 29th July 2020 National Education Policy (NEP), 2020 was declared by the Government of India. The nine member's committee under the Chairmanship of Dr. Kasturirangan was constituted in 2019 for drafting the NEP-2020. Subsequently, based on the recommendations of the committee NEP-2020 was prepared and started its implementation in the academic year 2022-23. This new NEP-2020 recommends significant changes in the educational framework after 34 years in the history of post-independent India. NEP-2020 recommends a new framework of 5+3+3+4 by replacing the previous framework national education policy (Mule, 2020:79). The historical approach in understanding

educational developments in India is needed for familiarizing with NEP-2020 and ever transforming educational scenarios in India.

OBJECTIVES:

- To elucidate the historical background and context concerned with the education system in India with special reference to higher education.
- To elaborate briefly the ancient to modern educational developments in India.
- To explore the contemporary educational scenarios and transformations in India, especially higher education.

METHODOLOGICAL FRAMEWORK:

The present study is intended at understanding the educational scenarios and transformations in India. The most appropriate tool for collecting the data was original documents, reports, articles in books, journals, periodicals, newspapers etc. The researcher has done internal and external criticism of the collected sources to comply with the aforementioned objectives. In brief, the historical method has been followed while undertaking this study. The historical methodology has been strictly followed while writing this research article.

Ancient and Medieval Period:

During the Ancient times education was not only aimed for means of livelihood but focused on the creation of pure character, behavior and observation of religious, ethical and moral values. The 'Gurukul' pattern was the first phase of the educational system prevalent widely in India. Hence, the consistent interactions with teachers (Guru) and pupils (*Shishya*) was feasible as a result of living together. Vedic literature was the rich repository of knowledge. Therefore, the Vedic literature was an integral part of the syllabus from elementary to higher education. Along with the Vedas, the Puranas, Smriti, logic, philosophy, Nyaya (law), grammar etc. were also taught. Education was imparted through discussion and debates in the university. There were big libraries in the universities. Except the Sudras, everyone was allowed to receive education (Pandey et al. ,1995: 306). During the Ancient times little information was available concerned with education policies. The Aryans brought clarity in the education policies and made it mandatory to follow to the local peoples (Pethe,2022:07). Formal education was available in Brahman Ashramas, hermitages, and in Buddhist and Jaina monasteries. In the former it would have been restricted to the upper castes. Learning was a personalized experience involving teacher and pupil. The emphasis was on

educational developments in India is needed for familiarizing with NEP-2020 and ever transforming educational scenarios in India.

OBJECTIVES:

- To elucidate the historical background and context concerned with the education system in India with special reference to higher education.
- To elaborate briefly the ancient to modern educational developments in India.
- To explore the contemporary educational scenarios and transformations in India, especially higher education.

METHODOLOGICAL FRAMEWORK:

The present study is intended at understanding the educational scenarios and transformations in India. The most appropriate tool for collecting the data was original documents, reports, articles in books, journals, periodicals, newspapers etc. The researcher has done internal and external criticism of the collected sources to comply with the aforementioned objectives. In brief, the historical method has been followed while undertaking this study. The historical methodology has been strictly followed while writing this research article.

Ancient and Medieval Period:

During the Ancient times education was not only aimed for means of livelihood but focused on the creation of pure character, behavior and observation of religious, ethical and moral values. The 'Gurukul' pattern was the first phase of the educational system prevalent widely in India. Hence, the consistent interactions with teachers (Guru) and pupils (*Shishya*) was feasible as a result of living together. Vedic literature was the rich repository of knowledge. Therefore, the Vedic literature was an integral part of the syllabus from elementary to higher education. Along with the Vedas, the Puranas, Smriti, logic, philosophy, Nyaya (law), grammar etc. were also taught. Education was imparted through discussion and debates in the university. There were big libraries in the universities. Except the Sudras, everyone was allowed to receive education (Pandey et al. ,1995: 306). During the Ancient times little information was available concerned with education policies. The Aryans brought clarity in the education policies and made it mandatory to follow to the local peoples (Pethe,2022:07). Formal education was available in Brahman Ashramas, hermitages, and in Buddhist and Jaina monasteries. In the former it would have been restricted to the upper castes. Learning was a personalized experience involving teacher and pupil. The emphasis was on

memorizing texts such as parts of the Vedas, and gaining familiarity with the contents of the 'Dharmashastras' (Theology) and subjects such as grammar, rhetoric, prose and verse composition, logic and metaphysics. But much else was included in Sanskrit learning, such as astronomy, mathematics, medicine and astrology. In some subjects' Sanskrit texts reflected the theoretical view, as well as the practical application. Generally, however, the practice of a profession was maintained as a distinctive form of education, handled by the actual professionals. The writing of a manual in Sanskrit on a particular subject was an indicator of its importance. Buddhist monasteries took students for a shorter time of about ten years, but those wishing to be ordained as monks had to remain longer. Learning for novices began through an oral method but changed to literacy. Libraries in monasteries contained important manuscripts that were copied when they became frayed. Nalanda in south Bihar became the foremost Buddhist monastic and educational centre in the north, attracting students from places as distant as China and south-east Asia. This was possible because it had an income from a large number of villages granted to it for its upkeep. Excavations at Nalanda have revealed an extensive area of well-constructed monastic residences and halls of worship. Technical

knowledge remained largely with the guilds, where the sons of craftsmen were trained in hereditary trades. Arab scholars mention that mathematical knowledge from India was more advanced than what they had retrieved from Greek sources (Thapar, 2003:306-08). The *Agrahara* grant applied to a village consisting of a settlement of Brahmans, the land being given to them as a grant and exempt from tax, but the Brahmans could provide free education locally if they so wished. In about the eighth century, the *Matha*, an institution supported by Brahmanism and Puranic Hinduism, emerged as a parallel institution to the Buddhist and Jaina monasteries. This was a combination of a rest-house, a feeding-centre, and an educational centre, which indirectly brought publicity to the particular sect with which it was associated (*Ibid*:338-45).

Education was traditional and out of touch with rapid developments in the West during the Medieval Period. The knowledge which it imparted was confined to literature, law, religion, philosophy and logic. It excluded the study of physical and natural sciences, technology. In all fields, original thought was discouraged and relied on ancient learning. The centres of higher education were spread all over the country and were usually financed by *Nawabs*, Kings and rich

Zamindars. Among the Hindus higher education was based on Sanskrit learning and mostly confined to Brahmins. The Hindu Temples and *Matha's* were working as educational centres mostly through royal patronage by the rulers. The *Madarasa's* were working as educational higher educational centres among the Muslims. Persian education was based on the official language of that time, equally popular among both Hindus and Muslims. The teachers enjoyed high prestige in the community. Girls were seldom given education, though some of the higher classes were an exception (Chandra, 2020:44-45).

British Colonial Period:

Modern education evolved during the British colonial regime. The traditional pattern of learning in India suffered under the impact of colonial expansion. The Calcutta Madrasa established by Warren Hastings in 1781 for the study of the Muslim law. The Sanskrit college was established by Jonathan Duncan at Banaras in 1791 for the study of Hindu law and philosophy. The British Parliament for the first time made a clause in the 1813 Charter Act that the British East India Company should be spent compulsorily on education. However, the company used this fund for promoting Indian language and literature. Raja Ram Mohan Roy, who insisted for the establishment of Calcutta college in 1817 to

the British government favoured imparting western education. The Orientalist and Anglicist controversy was one of the most debatable issues in the field of education during the colonial regime. The Members of the General Committee of Public Instruction split into two groups. The orientalists advocated the policy of giving encouragement to oriental literature whereas the Anglicist favoured the adoption of English as a medium of instruction. As a member of the Executive Council Lord Macaulay favoured the viewpoint of the Anglicist group. Macaulay aimed to create a class of persons who should be Indian in blood and colour but English in tests, opinions, morals and intellect. In 1835, Lord Macaulay was appointed as law member of the Governor-general Council. Soon, under the Macaulay approved system was an attempt to emphasize on educating the upper strata of the society through English and leaving it up to those people to promote vernacular languages and literature. Macaulay put forth a theory in education popularly known as '**Filtration Theory**' in which education could be percolated from elite, higher classes to the lower and downtrodden communities. In 1854, Charles Wood prepared a dispatch on the education system for India which is known as '**Magna Carta of Education in India**'. According to Wood's scheme, the government

needed to spread Western education through English medium for higher education, establishment of universities at Calcutta, Bombay and Madras, teachers training institutions and promotion of education for the women. To evaluate the progress achieved under the Dispatch of 1854, a commission under William Hunter was set up in 1882. Many institutions were set up to promote oriental and Indian learning as well (Sahni, 2020:122-23). Rural and women's education unfortunately lagged behind throughout the 19th century (Stein, 2010:268). For improving the working and prospects of Indian universities, a commission was appointed in 1902 by Lord Curzon. His style was clear in his appointment of a commission to study the problems of university education; not a single Indian was included. The Universities Act, 1904 which appeared to enhance government control over higher education, was resented and criticized by Gokhale and others of the educated elite (Metcalf and Metcalf, 2006:155). The Sadler Commission (1917-19) was appointed to study the problems of the Calcutta university through its recommendations applicable to other universities as well. The commission suggested centralized unitary residential teaching bodies with autonomy to replace traditional Indian universities. Hartog

Committee (1929) recommended a selective system of admission to universities and diversified courses leading to industrial and commercial careers. Mahatma Gandhi proposed his Wardha Scheme although for 'Basic Education' intended learning through activity but focused on vocational education. The Sargent Plan (1944) worked out by the Central Advisory Board of Education called for elementary and higher secondary schools (Sahni, 2020:123-24).

Post-Independent India:

After Independence, the Radhakrishnan Commission (1948) was set up to review university education. The commission recommended that higher education be set up to impart general, liberal and professional education, increased focus on the subjects such as agriculture, law and medicine and improvement of engineering and technical institutions, establishment of UGC (University Grants Commission), University education should not be made compulsory for administrative services. Dr. Moodliyar Commission (1952) focuses on the diversification of courses, technology enabled multipurpose schools. However, this commission did not recommend suggestions for women's education. The Indian Government adopted a resolution in 1968

which was mostly based on the recommendations of the Kothari Commission (1964-66) (Sahni, 2020:124). This commission suggested the pattern of education viz. 10+2++3 exists in India. National Education Policy (NEP) in 1968 was drafted in the context of the commission's recommendations (Pethe,2022:07). The union government also has exclusive responsibility for institutions for scientific and technical education financed by the Government of India wholly or partially. These institutions are declared by the law of Parliament. Under this provision the Government of India took responsibility in the establishment of five Indian Institution of Technology (IIT) institutions at Kharagpur, Kanpur, Madras, Delhi and Bombay in 1956 (Rudolph and Rudolph, 1972: 69). The National Education Policy Draft (1979) was stressed on skill enhancement along with knowledge. Prime Minister Rajeev Gandhi's government introduced a new National Education Policy in 1986 by replacing previous educational policies. It recommended equity in educational opportunities concerned with admission and employment primarily to the women and reserved category students, teachers. The committee was constituted by the then Prime Minister P. V. Narsinh Rao led by Janardhan Reddy in 1992 for reviewing

educational policies. National Education Policy (NEP) (1992) published in 1996 by this committee recommended enhancing the autonomy of the educational bodies. In 2005 Prime Minister Dr. Manmohan Singh formulated a new educational policy based on minimum activity oriented programmes in the realm of education wherein a common entrance test was introduced for admission to the professional and technical educations (Pethe,2022:07).

National Education Policy (NEP)-2020:

The UGC Draft Guidelines for transforming Higher Education Institutions (HEIs) Multidisciplinary Institutions (March, 2022), emphasizing holistic and multidisciplinary education. All HEIs are expected to be transformed into multidisciplinary institutions (Jose and Winny, 2022: 19). The ancient Indian universities Takshashila, Nalanda, Vallabhi, and Vikramshila, which had thousands of students from India and the world studying in vibrant multidisciplinary environments, amply demonstrated the type of great success that large multidisciplinary research and teaching in the universities (NEP, 2020:34). The objective of enhancing up to 50 % Gross Enrollment Ratio (GER) in education has been set in NEP- 2020 by 2050 (Gedam and Kandi 2022:16). As colleges and universities all

move towards becoming multidisciplinary, they will also aim to house outstanding education departments that offer B.Ed., M.Ed., and Ph.D. degrees in education (MHRD, NEP, GOI, 2020:23).

Conclusion:

Indian education framework and policies have a very long history of its developments. The different phases of its developments have taken place since ancient to the contemporary NEP-2020. Although several phenomenal changes were recommended by different committees and commissions in the sphere of education, most of the times failed to implement suggestions by governmental agencies, stakeholders of HEIs in India. India urgently needs to bring back this great Indian tradition to create well-rounded and innovative individuals, and which is already transforming other countries educationally and economically. Although great Indian tradition, values mentioned but secular principles of the Indian constitution have been either neglected or ignored in NEP-2020. Modern education evolved during the British colonial regime but was adversely impacted on the Indian peoples, especially the attitudes of Eurocentric ideologies. The imitation of the European and American educational policies seems to be irrelevant to the contemporary Indian educational system.

The corporatization of higher education would lead to the marginalization of the downtrodden communities. It could further assign educational privileged rights in the hands of higher and elite classes. The balance of blending of knowledge, education, skills, and moral values seems to be one of the major challenges in the context of vibrant global educational circumstances before implementation of NEP-2020.

References:

- Chandra Bipin (2020):** *History of Modern India*, Hyderabad, Orient Blackswan Pvt. Ltd.
- Jose Chacko and Winny Sheena (2022):** 'National Education Policy-2020 Rubric of Assessment and Accreditation of Higher Education Institutions in India' in *University News*, Vol. 60, No. 42, Oct. 17-23, 2022, pp.16-21
- Kamalakar Gedam and Kamala Kandi (2022):** 'Vision 2030 in Indian Higher Education' in *University News*, Vol. 60, No. 38, Sept. 19-25, 2022, pp. 14-18
- Metcalf Barbara and Metcalf Thomas (2006):** *A Concise History of Modern India* (Second Edition), Cambridge University Press, United Kingdom (UK).
- MHRD, NEP, GOI (2020):** (Ministry of Human Resource Development, Government of India)- '*National Education Policy*' (NEP) *Final Draft* (2020), accessed on 16.12.2020 at URL:
https://www.education.gov.in/sites/upload_file_s/mhrd/files/NEP_Final_English_0.pdf
- Mule Devidas (2020):** '*Rashtriya Shaikshanik Dhoran*' (National Education Policy-2020) in

'Samaj Prabodhan Patrika', Vol. 231, Jul.-Sept. 2020, pp. 79-84

Pandey V. C., Khattri U.S. and Mukherjee L. N. (1995): 'Ancient India', Lucknow, Prakashan Kendra

Pethe Sukrutha (2022): 'Bhartatil Shaikshanik Dhornacha Itihas' (History of Indian Educational Policies) in the 'Daily Loksatta' (Marathi daily), 21st Aug., 2022, p.07

Rudolph Susanne and Rudolph Lloyd (Eds.) (1972): 'National Education Policy in

a Federal Context: A Proximate Goal' in 'Education and Politics in India', OUP, Delhi, pp. 68-80

Sahni Janmenjay (2020): 'Indian History', N. Delhi, Arihant Publications Pvt. Ltd.

Stein Burton (2010): 'A History of India', N. Delhi, OUP, pp.264-69

Thapar Romila (2003): 'History of Early India from the Origins to 1300 AD', The Penguin Books, N. Delhi



Paper Presentation Session

Proceeding of the NAAC-Sponsored One-Day National Seminar on Transforming HEIs Through NEP 2020

CONTENTS

1.	Chief Guest Address: Hon'ble Prof.(Dr.) P. S. Patil	1
2.	Chairperson Address Hon'ble Prof.(Dr.) Nitin Karmalkar	3
3.	Keynote Address Dr. Devender Kawaday	4
4.	Challenges In The Implementation Of NEP 2020 Dr. R. S. Salunkhe	5
5.	National Education Policy (NEP) 2020 and Gross Enrollment Ratio (GER) in Higher Education Dr. Amardeep D. Jadhav	14
6.	Critical Appraisal Of NEP 2020 Dr. Kamble C.N.	22
7.	NEP 2020 and Role of Alumni in Higher Education Dr. P.R. Jadhav	28
8.	Transformation of New Education Policy 2020 in Higher Education Dr. Sanjay patil	32
9.	NEP 2020 and Higher Education System Dr. Sonali Pawar	37
10.	A Study On Nep 2020: Issues, Approaches, Challenges and Opportunities Dr. Vishalakshi Honnakatti	41
11.	National Education Policy-2020: Milestone in Education Reforms Mr. Ganesh Babar	48
12.	Transforming HEIs Through Outcome Based Education Dr. Sunil Sawant	59
13.	Role Of Lifelong Learning In National Education Policy 2020(NEP) Prof.(Dr.) Ramchandra Govind Pawar	68
14.	National Education Policy-2020 and Privatization of Education Dr. Anil Kate	73
15.	Role of NEP-2020 in Higher Education Dr.Avinash Mahadev	80
16.	Transforming Indian Higher Education: A Historical Perspective Dr. Bhimashankar M. Birajdar,	84
17.	Women Education and NEP 2020 Manjusha Ingawale	92

Janata Shikshan Sanstha's Kisan Veer Mahavidyalaya, Wai, Dist-Satara (M. S.)

Transforming HEIs through Outcome Based Education

Dr. Sunil Sawant
Professor & Head
Department of English
Kisan Veer Mahavidyalaya, Wai

Abstract:

This research paper is an attempt to examine the educational methodology adopted by NEP 2020 based on Outcome Based Education. The paper throws light on the difference between the traditional "teacher-centred" educational methodology and the current "student-centred" outcome-based educational methodology. In OBE, the student learning outcomes constitute the criteria by which curriculum is developed or redesigned, instructional materials are selected, teaching methods are adopted, and evaluation is conducted. The paper also draws attention to the key features, the various benefits, along with a few shortcomings of the new methodology. It has been further made clear by the researcher that the National Assessment and Accreditation Council (NAAC), Bangalore, has started giving importance to the incorporation of 'learning outcomes' (POs, PSOs and COs) in its methodology adopted for the assessment and accreditation of different HEIs. The present researcher has also analyzed the introduction of OBE in the curricula designed and developed by Shivaji University, Kolhapur in the present paper.

Keywords: OBE, Learning Outcomes, HEIs, POs, PSOs and Cos

Traditional classroom setups have been found highly "teacher-centered". Most teachers teach fixed curricula in such classrooms and most students spend a lot of time trying to learn the fixed curricula of

every subject. In the traditional education system, teachers mainly focus on teaching the curricula; they just want their students to learn & mug up things being taught. The entire course and curricula is designed to help the students score good marks in the examination. The traditional education system just focuses on memorizing skills of students rather than skill development. Many students in the traditional education system are not skilled enough to match the requirements of candidates in the companies. The gap between industry requirements and curricula has given rise to the unemployable students.

It was Benjamin Bloom who, along with other educationists, in their 1956 book, introduced a new taxonomy of educational objectives which was later revised and adopted worldwide in the teaching-learning process. The revised taxonomy includes:

1. **Remembering** : Recalling from memory of previously learned material
2. **Understanding** : Explaining ideas or concepts
3. **Applying** : Using information in another familiar situation

4. **Analyzing** : Breaking information into part to explore understandings and relationships
5. **Evaluating** : Justifying a decision or course of action
6. **Creating** : Generating new ideas, products or new ways of viewing things

Bloom's Taxonomy is hierarchical, meaning that learning at the higher level requires that skills at lower level are attained.

Outcome Based Education (OBE) is a shift towards "Students-Centred" classrooms with focus on learning outcomes. Here, the students take up courses with a certain goal of developing skills or gaining knowledge and they have to achieve the goal by end of the course. There is no specific style, method or time limit of learning. The student can learn as per his/her choice. The administrators, educators, moderators and instructors guide the students to achieve the target outcomes. This new trend requires the educators to be equipped with new knowledge and skills for teaching based on the required learning outcomes. Hence the need for the teachers to undergo new training to prepare themselves for world-class quality of education.

The curricula are designed in such a way that the output to be achieved by the end of the session is decided in the first place. The curricula include various innovative activities

that would succor students to reach the desired target. Teachers need to decide what skills are required to master a particular subject, and then, they design the curricula keeping the same in mind.

The traditional grading system often provides grades to students ranking from 'best' to 'worst' and calling some 'toppers'. These grades don't give exact numbers and even if numbers are given, then there's no emphasis on whether the students have learned new skills. Grading is solely based on their bookish knowledge. However, the OBE system focuses on what the students have learned. The traditional model of grading on a curve (top student gets the best grade, worst student always fails (even if they know all the material), everyone else is evenly distributed in the middle) is never accepted in OBE. Instead, a student's performance is related in absolute terms: "Sita knows how to write the letters of the alphabet" or "Sita answered 80% of questions correctly" instead of "Sita answered more questions correctly than Geeta."

The OBE system of education generally tracks and reports not just a single overall grade for a subject, but also gives information about several specific outcomes within that subject. This approach is valuable to institutions and parents by specifically

identifying a student's strengths and weaknesses. A student has to learn enough of the current material to be able to succeed in the class. A student technically cannot flunk in this system: a student who needs to review the current material will have to do so until he/she achieves the predetermined outcome. This acknowledges differential growth at different stages, and focuses the teacher on the individual needs of the students. The OBE emphasizes on recognizing positive achievements, and compares the student to his own prior performance; it recognizes achievement at different levels. Even those who would not achieve a passing grade in a traditional age-based approach can be recognized for their concrete, positive, individual improvements.

The student learning outcomes constitute the criteria by which curriculum is developed or redesigned, instructional materials are selected, teaching methods are adopted, and evaluation is conducted. In the OBE, desired outcomes form the basis for the entire learning system. A curriculum is designed with the outcomes in mind right at its conception. The course content and assessments are developed based on the outcome itself. The various OBE programmes share an emphasis on changes to the entire educational system, observable and

measurable student performance or student outcomes, and the assumption that all students can learn. Some programmes, such as William Spady's OBE model, involve expanded opportunity and support for students who need more time to master material. Students in these programmes may be given grades of Incomplete until they succeed.

Outcome Based Education requires the redesigning of the courses away from the conventional curriculum in order to promote the acquisition of higher-order thinking skills among the students. The colleges have to revamp the admission process by seeking a detailed information about the skills and abilities of the students.

Way back in 1949, Ralph W. Tyler argued that teaching and learning are inextricably linked, to the degree that it makes no sense to say that teaching takes place if there is no learning. He viewed student learning as the criterion of teaching effectiveness. The outcome-based education insists that educational practice should be focused on ensuring that students master the skills (that is, master "the outcomes") the educators decide are necessary for them to be effective adults. It has been observed that those educational institutions are high-achieving which adopt a goal-oriented instruction programme. It has also been found

that such institutions direct resources toward achieving specific instructional goals, and their staff works together to achieve learning objectives. The OBE aims at raising the education standard and aid the institutions to acquire accreditation from esteemed accreditation bodies such as NAAC by improving continuously in the long run. NEP 2020, too, intends to help the Indian educational institutions define outcomes and give them the flexibility to meet those goals on their own terms.

In India, many institutions of higher learning have started embracing outcome-based education.

The National Assessment and Accreditation Council (NAAC), Bangalore, an autonomous institution of the University Grants Commission (UGC), incorporated OBE requirements in its Manual for Self-Study Report of Affiliated Colleges published on 9 August 2018. The Manual defines the concept 'Learning Outcomes' as follows: 'Specific intentions of a Programme or module, written in clear terms. They describe what a student should know, understand, or be able to do at the end of that Programme or module' (NAAC, 126).

The said Manual defines three 'Levels of Outcomes' as follows:

1. **Programme Outcomes:** POs are statements that describe what the students graduating from any of the educational Programmes should be able to do.
2. **Programme Specific Outcomes:** PSOs are statements that describe what the graduates of a specific educational Programme should be able to do.
3. **Course Outcomes:** COs are statements that describe what students should be able to do at the end of a course (NAAC, 127).

The terms 'Programme Outcomes' and 'Course Outcomes' are further defined in the following manner in the Manual:

Programme Outcomes: POs are what knowledge, skills and attitudes a graduate should have at the time of graduation. While no agency has formally defined the POs of General Higher Education 3-year degree Programmes in India, POs of all professional Programmes in engineering and other areas are identified at national level by the concerned accrediting agency. POs are not specific to a discipline. (128)

Course Outcomes: COs are statements that describe what students should be able to do at the end of a course. They can be 6±2 for courses with 2 to 4 credits, and 8±2 for courses with 5 to 6 credits. (123)

The Manual has provided Sample POs of General Higher Education Programmes as follows:

Students of all undergraduate general degree Programmes at the time of graduation will be able to

PO1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO2. Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

PO3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO4. Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

PO5. Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO6. Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

PO7. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes (131-132)

Shivaji University, Kolhapur started following the OBE model of education. The Bachelor of Arts (BA) Programme, for example, was revised around 2018 by including the following POs:

Sr. No	Programme	Programme Outcomes
1	BA	To understand knowledge in the field of Arts and Social Sciences. To be honest, cultured and good citizens with social consciousness. To get earning opportunities through employment and self-employment. To understand fundamental human values. To improve communication and soft skills. To make all round personality development.

The University, at first, introduced only 'Course Objectives' for each course for the first two years of the degree course and then made a sudden change in its curricula and included 'Course Outcomes' along with

'Course Objectives' at the third year degree level. When the revised syllabi for the MA English degree course was introduced in the year 2018, the "Objectives" of the Programme were introduced following the traditional model of curriculum design. Recently, around 2020, without making any change as such in the syllabi, following the OBE model, the university produced a document incorporating the POs, PSOs, and COs of the Master of Arts Programme along with the Vision and Mission of the Department of English. A careful look at the above document reveals that Shivaji University, Kolhapur used to include 'Objectives' in its syllabi for the help of the students earlier, but, with the introduction of the OBE methodology, it has started introducing POs, PSOs and COs from the year 2020.

NEP 2020 has asserted that one of the major problems currently faced by the higher education system in India is: 'less emphasis on the development of cognitive skills and learning outcomes' (NEP, 33). India, it states, as envisioned in its Constitution is expected to be 'a democratic, just, socially-conscious, cultured, and humane nation upholding liberty, equality, fraternity, and justice for all'. Accordingly, higher education represents 'the key to more vibrant, socially engaged, cooperative communities and a happier,

cohesive, cultured, productive, innovative, progressive, and prosperous nation' (33).

If we succeed in integrating the humanities and arts with Science, Technology, Engineering and Mathematics (STEM), NEP 2020 asserts, we will be able to achieve positive learning outcomes such as:

- a) increased creativity and innovation
- b) critical thinking and higher-order thinking capacities
- c) problem-solving abilities
- d) teamwork
- e) communication skills
- f) in-depth learning and mastery of curricula across fields
- g) development of social and moral awareness
- h) general engagement and enjoyment of learning (NEP, 36).

NEP 2020 has set these outcomes which the students should be able to demonstrate at the national level. These outcomes are to be adopted by individual teachers, administrators, and colleges. The standards set by NEP can be adopted as mandates or as guidelines. This policy has recommended that the student performance standards be developed cooperatively at the state level by a broad-based group of educators, parents, business leaders, and other citizens. It also recommends

that the universities set additional standards to supplement the state standards.

NEP 2020 also makes it clear that effective learning requires a comprehensive approach that involves appropriate curriculum, engaging pedagogy, continuous formative assessment, and adequate student support. The curriculum must be interesting and relevant, and updated regularly to align with the latest knowledge requirements and to meet specified learning outcomes. High-quality pedagogy is then necessary to successfully impart the curricular material to students; pedagogical practices determine the learning experiences that are provided to students, thus directly influencing learning outcomes. The assessment methods must be scientific, designed to continuously improve learning and test the application of knowledge. Last but not least, the development of capacities that promote student wellness such as fitness, good health, psycho-social well-being, and sound ethical grounding are also critical for high-quality learning (NEP, 38).

In order to promote creativity, institutions and faculty will have the autonomy to innovate on matters of curriculum, pedagogy, and assessment within a broad framework of higher education qualifications that ensures consistency across institutions and programmes and across the

ODL, online, and traditional 'in-class' modes. Accordingly, curriculum and pedagogy will be designed by institutions and motivated faculty to ensure a stimulating and engaging learning experience for all students, and continuous formative assessment will be used to further the goals of each programme. All assessment systems shall also be decided by the HEI, including those that lead to final certification. The Choice Based Credit System (CBCS) will be revised for instilling innovation and flexibility. HEIs shall move to a criterion-based grading system that assesses student achievement based on the learning goals for each programme, making the system fairer and outcomes more comparable. HEIs shall also move away from high-stakes examinations towards more continuous and comprehensive evaluation (NEP, 38).

One of the steps to be taken by the Government is: Develop and support technology tools for better participation and learning outcomes (41). The National Higher Education Regulatory Council (NHERC) will be set up to regulate educational outcomes, along with finances, audits, procedures, infrastructure, faculty/staff, and courses (47). The National Accreditation Council (NAC) will be entitled to take into consideration outcomes along with such other criteria as basic norms, public self-disclosure, good

Proceeding of the NAAC-Sponsored One-Day National Seminar on Transforming HEIs Through NEP 2020

- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill W. H., Krathwohl D. R. *Taxonomy of Educational Objectives: The Classification of Educational Goals. Vol. Handbook I: Cognitive Domain.* New York: David McKay Company, 1956. Print.
- NAAC. *Affiliated-College-Manual-9aug18-based-on-19jul18-*. Web. 14/09/2022.
- National Education Policy 2020*, Ministry of Human Resource Development, Government of India, Web. 14/09/2022.
- Regulations Governing Choice Based Credit System with Multiple Entry and Multiple Exit Options*, Shivaji University, Kolhapur. <http://www.unishivaji.ac.in>. Web. 29/09/2022.
- <https://ega.ct.gov> > ... Web. 14/09/2022.
- <https://www.iitms.co.in> > ... Web. 14/09/2022.
- <https://www.k12academics.com> > ... Web. 14/09/2022.
- <https://harappa.education> > ... Web. 14/09/2022.



Dignitaries and Participants



PROCEEDINGS
of
NAAC SPONSORED ONE-DAY NATIONAL SEMINAR
on
“Transforming HEIs Through NEP 2020”
5th November, 2022

Organised and Published by
Internal Quality Assurance Cell (IQAC)

Janata Shikshan Sanstha's
Kisan Veer Mahavidyalaya, Wai
Dist-Satara (M. S.)



Scanned with OKEN Scanner

Proceeding of the NAAC-Sponsored One-Day National Seminar on Transforming HEIs Through NEP 2020

CONTENTS

1.	Chief Guest Address: Hon'ble Prof.(Dr.) P. S. Patil	1
2.	Chairperson Address Hon'ble Prof.(Dr.) Nitin Karmalkar	3
3.	Keynote Address Dr. Devender Kawaday	4
4.	Challenges In The Implementation Of NEP 2020 Dr. R. S. Salunkhe	5
5.	National Education Policy (NEP) 2020 and Gross Enrollment Ratio (GER) in Higher Education Dr. Amardeep D. Jadhav	14
6.	Critical Appraisal Of NEP 2020 Dr. Kamble C.N.	22
7.	NEP 2020 and Role of Alumni in Higher Education Dr. P.R. Jadhav	28
8.	Transformation of New Education Policy 2020 in Higher Education Dr. Sanjay patil	32
9.	NEP 2020 and Higher Education System Dr. Sonali Pawar	37
10.	A Study On Nep 2020: Issues, Approaches, Challenges and Opportunities Dr. Vishalakshi Honnakatti	41
11.	National Education Policy-2020: Milestone in Education Reforms Mr. Ganesh Babar	48
12.	Transforming HEIs Through Outcome Based Education Dr. Sunil Sawant	59
13.	Role Of Lifelong Learning In National Education Policy 2020(NEP) Prof.(Dr.) Ramchandra Govind Pawar	68
14.	National Education Policy-2020 and Privatization of Education Dr. Anil Kate	73
15.	Role of NEP-2020 in Higher Education Dr.Avinash Mahadev	80
16.	Transforming Indian Higher Education: A Historical Perspective Dr. Bhimashankar M. Birajdar,	84
17.	Women Education and NEP 2020 Manjusha Ingawale	92

Janata Shikshan Sanstha's Kisan Veer Mahavidyalaya, Wai, Dist-Satara (M. S.)

Women Education and NEP 2020

Manjusha Ingawale
Department of Botany,
Kisan Veer Mahavidyalaya, Wai

Abstract:-

Women education can play an important role in the development of country. Education is a milestone of women empowerment as it enables them to respond to challenges, to confront their traditional role and change their life. It is the most powerful tool to change the position in society and empowerment of women. Literacy alone cannot help women in self-dependence but higher education helps them to become more capable, makes them aware of their rights and duties and use their rights as per need.

The National Policy on Education 1986 recognizes education as the major tools that can help liberate the country from backwardness and lead it onwards to progressive nation. Free and compulsory education for all was initiated. After that there is a change in the education policy in India with the introduction of the New Education Policy 2020. This new policy aims at universalization of education in India with 100% gross enrolment ratio by 2030 for school education and 50% by 2035 at higher education. The first such move is the formation of a Gender Inclusion Fund toward equitable education for girls who are needy, poor and creating special education zones is included in the provision. It also aims to improve women leadership capacity through positive civil dialogues with women leaders involved in the education system. In this study

an attempt has been made to study the New Education policy 2020 along with Women Education.

Key words:-Education, Empowerment, Women, NEP, Universalization

Introduction:-

Education is a powerful tool that builds confident and ambitious women through which they become aware of their rights and raise their voice against exploitation, is discrimination or any form of injustice meted out to them. Education is a foundation stone or milestone for the empowerment of women. Literacy alone cannot help women in self-dependence but higher education helps women to become more capable. Higher education means the education beyond the level of secondary education at the degree level and above. The UNESCO's World Conference on Higher education (1998) and the World Education Forum (2000) made a commitment to the attainment of many goals for women's education i. e. higher the level of education greater the empowerment of women. (Nand Kumar, 2014). A nation loses its goal of

integral and sustainable developments when women remain uneducated and unempowered. Education is the tool that can eliminate many social crimes and evils prevailing in the society. Social customs such as Sati, Dowry, Female infanticide, Flesh Trade and other harmful customary practices can be eradicated through female education. Women must be exposed to platforms with equal opportunities in order that the nation progress and achieve its goals.

Objectives of the study:-

Following are the objectives taken under study.

- To study the importance of women education
- To compare the provisions in NEP for women education
- To study the challenges of NEP for women education
- To put forth the suggestions towards women education as contained in NEP

Methodology:-

This research paper is basically descriptive and I have taken the help of secondary data like books, magazines, government reports etc.

Discussions:-

Women Education

Women's education will help to eradicate the discrimination and stigma that

women face today through realization of their rights. It will help to eliminate social evils as female infanticide, dowry, child marriage, harassment, etc. This will not just help the women of today but of the future generations who can live in a world where gender equality exists. Educated women can contribute to family's economy, social advancement of society and raise the standard of living.

Empowering women helps in the development of the nation. The government, over the years has introduced many schemes to promote women's education in India such as Beti Bachao Beti Padhao Yojana, Sarva Shiksha Abhiyan, Rashtriya Mahila Kosh, Mahila Shakti Kendra, etc.

Comparison in Provisions in NEP for women education

The National Policy of Education (NPE) 1986 - recognizes 'Education' as the major tools that can help liberate the country from backwardness and lead it onwards to progressive developed nation. Education will be used as an agent of basic change in the status of women. Also, National Education System will play a positive dominant role in the empowerment of women. It called for special emphasis on the removal of disparities and to equalize educational opportunities for women. "Free and Compulsory Education for All" was initiated.

The Ninth, Tenth and Eleventh Five Year Plans (1997-2002) focused on free education for girls in elementary to the higher level and to provide free vocational and professional training for girls, free school dress, books, scholarships to reinforce girl's education. After 34 years, there is a change in the education policy in India with the introduction of the New Education Policy (NEP) 2020 designed by a committee chaired by Scientist K. Kasturirangan known as Kasturirangan Committee.

This new policy aims at universalization of education in India with 100% gross enrolment ratio of girls by 2030 for school education and 50% by 2035 for higher education. The NEP 2020 aims at making 'India a global knowledge superpower'. It also proposes various steps to increase access of women into schools, which includes creating special education zones, gender inclusion fund toward equitable education for girls who are underprivileged, the targeted scholarships, and formula based and discretion funding of gender inclusionary projects in school levels.

Within the goal, it also intends to improve women leadership capacity through positive civil dialogues with women leading institutions, including principals, teachers, wardens, physical instructors and other staffs.

Challenges of NEP for women education

1. Funding becomes a big challenge specially in the COVID era. The policy gave a provision for public-private partnership in education where many schools will become privatized and can become expensive that will not be affordable for low income families, which may impact girl education.
2. Reflecting on the RTE Act, 2009, the policy does not lay any provisions for the extension to cover 15-18 years for free and compulsory education which is one major challenge for transition of girls from primary to secondary level.
3. The issue of sex education as well as health and nutritional concerns for the girl child has been neglected from being mentioned in the new policy which is a major concern.
4. Teachers need to be digitally trained to blend into the digital learning process.
5. Language is one factor that proves challenging for implementation as India has 22 active languages. Introducing of mother language and to bring out study material in academic institutions for each subject and finding a competent teacher is a big challenge.
6. The big challenge is establishing a digital infrastructure. A large number of students do not have access to such technology and gadgets. To access digital infrastructure such

About the Book

The present book on "Innovative Trends in Biological Science" has been apprehend in order to discuss various aspects of biological science. This book is helpful in academic as well as research and widely read and reach to its target audience.

Editors



Mr. Balwant Singh



Mr. Mukul M. Barwant



Ms. Shivangi Tripathi



Dr. Vanita C. Karande



Dr. Vinay Kumar Singh



Dr. Ruchita Srivastava



MRP: 1000/- INR 28/-USD

ISBN: 978-93-5704-927-6

Author's From

AUTHORS NAME	AFFILIATION
Abhishek Tripathi	Department of Biotechnology, Institute of Engineering and Technology, Lucknow, Uttar Pradesh, India
Akshatra Pracy Fernandes	Assistant Professor of Department of Botany, Ganpat Parsekar College of Education Harmal, Pernem Goa
Ansari H. E	K. V. N. Naik Arts, Commerce & Science College, Nashik, Maharashtra, India
Ashok Kumar Srivastava	Participatory Rural Development Foundation (PRDF), 59 Canal Road, Shivpur – Shahbazganj, Gorakhpur 273014, India
Boomika M	PG Student, Department of Zoology, Avinahilingam Institute for home Science and Higher Education for Women, Coimbatore-641043, Tamilnadu, India
Chitra P	Assistant Professor, Department of Zoology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore-641043, Tamilnadu
Christopher S	Department of Biotechnology and Research, Shri Nehru Maha Vidyalaya College of Arts and Science, Shri Gambhirmal Bafna Nagar, Malumichampatti, Coimbatore
Debosmita Sikdar	Department of Biotechnology, Government College of Engineering and Leather Technology, Kolkata, India

K. Ajintha	Research Scholar, Department of Zoology, Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli-627011, Tamilnadu, India
K. Kavitha	PG and Research Department of Biochemistry, Vivekanandha College of Arts and Sciences for Women (Autonomous), Elayampalayam, Tiruchengode - 637 205, Tamilnadu, India
Kamini Dubey	Assistant Professor, Govt.P.G. College Narsinghgarh (M.P.)
M. Balasubramanian	PG and Research Department of Biotechnology, Vivekanandha College of Arts and Sciences for Women, Veerachipalayam, Sankari - 637 303, Tamilnadu, India
M. Bhaskar	Department of Computer Science, Vivekanandha College for Women, Tiruchengode - 637 205, Tamilnadu, India.
Manabendra Mandal	School of Sciences, Department of Molecular Biology and Biotechnology, Applied Microbiology and Biotechnology Lab, Tezpur University (Central), Napaam-784028, Tezpur, Assam, India
Manjusha Ingawale	Department of Botany, Kisan Veer Mahavidyalaya, Wai.
Monim Ul-Islam	Department of Biotechnology, Government College of Engineering and Leather Technology, Kolkata, India
Ms. Ashwini Sanap	Executive Microbiologist, Quality Control, Varun Beverages Pvt. Ltd. PepsiCo.
Ms. Jayashri Pawar	Assistant Professor, Department of Microbiology, Sanjivani Arts, Commerce and Science College, Kopergaon.

CHAPTER

23

**BIODIVERSITY OF
BACILLARIOPHYCEAE FROM
THOSEGHAR, SATARA DISTRICT
(MAHARASHTRA)****Manjusha Ingawale***Abstract*

Present paper deals with study of some members of Bacillariophyceae collected from water bodies of Thoseghar, Satara district. Thoseghar is a small village 20 Km from Satara city at the edge of the Kokan region in Western Maharashtra. It is famous for waterfall. There are a series of waterfalls. Some of them 15 to 20 meters and one of 500 meters in height. This study has shown presence of sixty diatoms belonging to two orders Centrales and Pennales. These species belong to nineteen genera namely Cyclotella, Achnanthes, Fragilaria, Synedra, Pinnularia, Navicula, Gomphonema, Eunotia, Hantzschia, Nitzschia, Cymbella, Bacillaria, Frustulia, Craticula, Diatoma, Ulnaria, Caloneis, Luticola and Surirella. Among these diatoms Gomphonema and Eunotia showed their dominance. These diatoms are being reported for the first time from the study area.

Keywords: *Diatoms, Bacillariophyceae, Thoseghar, Satara.*