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## JIGYASA

As the name reflects itself Jigyasa is a Research Journal focused on gathering knowledge on the different issues of Arts, Linguistics and Social Sciences. It is a journal which generates appetite for knowledge amongst the social scientists, educationists, linguists, policy makers and the politicians and at the same time it also evolves the solutions. Our international and national experts of the subjects will be regularly guiding the society with their thought provoking papers and articles.

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## **Gandhi and Tagore: Classifying the Educational Thoughts in Modern Indian Perspective.**

*Dr. Srabani Chatterjee\**

### **Abstract**

Education is the most essential component of human society. Spread of education can led to communal development and promise for a better world. For this reason many leaders and thinkers put much emphasis on uplifting the value in education and crafted many theories and concepts for that purpose. In our present world instability, mental unrest, violence is prevailing all around. This kind of instability can only be solved indulging true education. That kind of education has been propagated by two great thinkers of our country, Mahatma Gandhi and Rabindranath Tagore. The objective of this paper is to define the educational concepts of these two great thinkers and analyzing their modern day implication in building peace.

**Keyword:** Educational concept, Non-violence, Buniyadi scheme, Ashrama

Education is the most important key role in the life of an individual as well as the society. Many problems can be solved by using the basics of educational principals. In our present world we can sense instability, violence, lack of peace in mind everywhere. This instability can be addressed by proper use of education. In reality the scenario is something different. In this paper we will try to address those problems and also try to find solutions by walking in the path shown by two great men.

The objective of this paper is to discuss the policies of Mahatma Gandhi the father of Indian nation and Rabindranath Tagore the world poet. Gandhi's philosophy of education is a bit comprehensive. For him education is an instrument for socio economic development, material progress, as well as moral evolution for a person in society. Tagore's system of education is based on the intellectual, physical, social,moral, economic and spiritual characteristics of human beings. The right use of all these can build one's true personality. Education concepts of Tagore have some similarities as well as similarities with that of Gandhi. We will

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\* Assistant professor, Subhas Chandra Bose centenary college

discuss both and also try to apply these wise policies in our educational system.

Mahatma Gandhi's role in India's struggle for independence is nothing new to be discussed but his educational concepts are the matters of discussion here. Education, according to Gandhi, is the mean off all around personality development of a person. His view of basic education was developed on his philosophy of truth, on violence, theism and dignity of labor. For him educational philosophy should be sympathetic, friendly and deep feelings of love.

The peculiarity of Gandhi educational concept was keeping aloof from Modern machinery. He was strictly against modern technology. He mentioned that, "if the machinery craze grows in our country it will become an unhappy land". This concept is impossible because people I cannot leave without modern machinery in this present world. Gandhi was so much again accepting modern technology that he declared that , "real freedom will come only when we free ourselves of the domination of Western education western culture and western way of living which happen ingrained in us emancipation from this culture would mean real freedom for us."

The motto of Gandhiji's educational policy was stupid mother tongue familiar .He feel disgusted to spoke of home rule our independence in foreign tongue. In his time all official documents where in English even the best newspapers also. It was kind of his political idea that when a person speaks in English language it will affect his sense of nationality and this will grow adherence to Western culture. Surely this idea was useful during the eve of freedom struggle but in modern context this will sure to fail. In this era of globalization a person is a Global Citizen so he has to be compatible with Global means of communication. This is an undeniable fact that mother tongue is the best way to instruct total students but they should also have knowledge on English language.

Another scheme of Gandhi's educational policy was to include handcraft as the syllabus. Giving importance to manual work Gandhi's said, "useful manual labor indignity performed is the means per excellence for developing intellect.... balanced intellect presupposes a harmonious knowledge that is developed through the medium of socially." For a long time manual work has been considered substandard to mental work. People engaged in specific crafts look down upon menial and the lower caste in the society. Gandhi wants to change this idea. He also wanted the schools to be self financing as far as possible. The idea behind that was firstly in a

poor society it is not always possible to arrange funds for education to every child until and unless the schools generate resources from within. Second point was that the more economically independent the schools were the more politically independent they could be. Gandhi proposed to use handicraft as a syllabus part, that all education like history geography mathematics will be related to craft. This idea is quite challenging but interesting for students as well. Gandhi always advocated for vocationalization of education. For him, education was the means to get a healthy political environment and social progress. By getting education one can uplift the whole society where the individual is attached and also he can give advice to enhance political literacy.

Mahatma Gandhi said, "India's destiny lies not along the bloody way of the west, of which she shows science of tiredness, but along the bloodless way of peace that comes from a simple and godly life. India is in danger of losing her soul. She cannot cause it and leave." Mahatma Gandhi philosophy of truth non violence and Satyagraha help India get emancipation from British rule. All these concepts of Gandhi Where are reflected in his educational policies.

On the other hand Rabindranath Tagore's educational system is based on the intellectual, physical, social , moral and spiritual aspects of human life. His educational policies were reflected in the prevailing education system of Shantiniketan. Tagore opted for intellectual development of students. He was the chief propagator of self-learning of a child which will enhance not only new knowledge but also develop skills of imagination and intellectual property.

A child should be encouraged to seek self- ealisation. He or she must recognize their own interest weakness and solidarity. This will help in future to build a good personality. a child should be empowered to expand internal resources and thinking ability. According to Rabindranath Tagore Educational Philosophy is all about growing International brotherhood and love for mankind. 'YatraVishvaBhavatiEkNiram', where the world becomes a nest this is the motto of Shantiniketan. Not only human beings, a true educated man should be compassionate to each and every creature of this earth and should have love towards nature.

Not only a healthy mental condition and intellect, an individual's personality also depends upon physique. Rabindranath Tagore in his Shantiniketan ashram prescribed that all sorts of physical activities like yoga, sports and different kinds of exercise should be an integral part of the educational system. In fact in

common words that sound body is necessary for a sound mind. The concept of freedom is another important aspect of Tagore Educational policy. His concept was that education has real meaning only when it is imported to the true path of freedom. In fact modern thinkers like Paulo Freire also advocated the concept of freedom in pedagogy. a sound teaching learning process can only be possible when it becomes a Boat way approach. Curtailing freedom in the sphere of education can have a negative impact on child Psychology.

Rabindranath Tagore put much emphasis on mother tongue as the medium of instruction just like Gandhi poster. But his proposition was that language is a true vehicle of self-expression and the man Express in his mother tongue. In my opinion basic knowledge in any Global Language, say for example English is also necessary.

A great aspect of Educational policy is the emphasis on moral and spiritual development. His educational implications are not only limited to studies but also reflects on moral and spiritual development. An educated man is expected to gain knowledge not only from books but the person should have got the value of education.

Establishment of relations between man and God by possessing qualities and potentialities to its height was another part of Tagore Educational policy. So, praying is a part of everyday curriculum in Rabindranath Tagore Ashram faith to the great cosmic power and virtue in everyday life, the most important part of education. According to Tagore all knowledge is coming from God. This type of value added education is one of the most desired as to be included in the present day educational system. An educated person not only uplift himself but also uplift his whole society, this kind of modality and social development of senses makes an important part of the Gods Educational policy. Rabindranath Tagore Road in our country e in every village let the Cooperative principle prevails including and distributing wealth-this is my desire. In present day all over the world many educated persons for highest salaried companies trying to destroy low class people keeping the human right taken aback. This practice can only change by important humanity sympathy and universal brotherhood in the present curriculum.

Before discussing the impact of Gandhi and Tagore Educational policy on present day curriculum, we shall look through the similarities and differences between these two educational concepts. Social progress, peace and tolerance are the nodal point of



both educational policies. *Mahatma Gandhi* emphasizes on religious tolerance and practice of truthfulness and nonviolence. An ideal learning centre according to Rabindranath Tagore is a place where contradictory interests are diminished and people work together. Universal brotherhood and love for nature which combines the philosophy of love and nonviolence to all living creatures is the essence of Tagore's Educational Philosophy.

Secondly love is concerned to be an important aspect of education according to you both of them. Tagore said, "at first, children must gather knowledge through their life, and it is their first love. All its colour and movement attract their eager attention, and then they will renounce their life to gain knowledge." Relationship between educator and student according to Gandhi should be based on trusting partnership between individuals. The most striking similarity between these two educational theories was their concept of human educational system. Tagore was one of the first Indian who argued to spread education among masses. His desire was that more than 90% of the population of India should have basic education. As Indian society is mostly rural so spreading education in villages seems to be an important duty for Tagore. Also supported this view and took elaborate plans to fulfill his scheme of education.

As for the differences are concerned, the major difference between the theories is spiritualism. For Gandhi, education is the means of moral development but for Tagore it is the means to achieve God. The Educational Philosophy of Tagore focuses not only on moral development but also life after death. The two main points of his philosophy are universal brotherhood and love for God. Strong faith in God which grows day by day true prayers helps to grow self-confidence and mental stability. Also physical development according to Tagore is as essential as this realization. The need of a sound body and the means to achieve it become an integral part of educational concepts. This particular concept is missing in Gandhi's plan.

Gandhi framed his scheme of vocational education in 1921 which was popularly known as 'Buniyadi' education. This theme of the 'Buniyadi' education later paved the way for the 'Wardha plan' of education. The chief problem of Gandhi's Educational policy is its adaptability to the present world. It's unnecessary inclination to mother tongue avoiding modern machinery and the scheme of using craft as a syllabus is almost impossible in practice. Government of India in later years right to materialize the scheme of 'Buniyadi' education by establishing National Institute of basic education. Though, the effort is not very fruitful. There are some provisions of adding vocational training in syllabus in primary education which

can be repeated as a compromise between primary and union 'Buniyadi' scheme of education.

Materialization of Rabindranath Tagore Educational Philosophy can be seen in the educational institutions of 'VishvaBharati' and 'Shriniketan' established by him. In fact both these institutions are one integral part. For experimenting His own educational theories RavindraNath Tagore established a School named 'Brahmacharyashram' in 1901 at Shantiniketan. The main team of this institution was to propagate life century education about students. Communal development and educating rural population take over Tagore started Sriniketan Gram Udyog in 6th February 1922 nearby village called cruel. Gram Udyog was established with the motto to provide basic education and Encouraging handicraft and cottage industries in rural areas.

These maestros had a different kind of approach of life. Education is not bookish or self-illuminating concept for them, it is the manifestation of perfection of mankind. Education is like sunlight which illuminates the whole world around. This kind of approach is strongly needed in present day world where educated are using their education only to achieve their own good and doesn't bother to care for others. The whole world is busy in utter non-violence and peace is being destroyed everywhere. If, the scenario changes then only the concepts of Gandhiji and Tagore can be truly utilized.

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## Role of Female Psyche in the Feminine Quest for Liberty in Anita Desai's *Cry the Peacock*

DE. Tanu R. Bali\*

**Abstract :** *Desai is concerned with the psychic life of her characters. For her it is "depth which is interesting delving deeper and deeper in a character or a scene rather than going round about it". (Jain 61-69) She has tried to understand minutely the predicament of her female characters. She represents the welcome creative release of the feminine sensibility.*

**Key Words:** Psyche, Quest, Sensibility, Exploration, Feminine

Women have always been the subject of literary work but literature has mostly been created by men. Because of this, an authentic question arises, as how much men know about the feminine psyche, and even if they know how much is it true. Of late there has emerged a group of women novelists who try to give a genuine rendering of the female sensibility from their own point of view. Women writers of all ages have a natural preference for writing about women characters. Anita Desai is no exception, for she has also written by and large about women characters.

Anita Desai has added a new dimension to Indo-Anglian fiction by concentrating on the exploration of the troubled psyche of her characters, especially, the women in particular. It is, infant, gratifying on the one hand and quite interesting on the other hand that the women writers in Indo-Anglian fiction have shown greater understanding and verve to delve deep into the psyche of the Indian characters. N.R. Gopal has gone into the details thus:

Fortunately this movement from the outward gross realities to inward complexities found as it's mouth-piece in a number of women novelists, who by the peculiar situation of their existence have been able to see the Indian complexities from close quarters, when constraints of vivid hues and shades work upon the sensitive individuals. Of these women novelists, Anita Desai happens to be the leading voice. We may miss in her fiction the customary strains of rural poverty, caste and class conflicts, but she has fascinating stories to tell about individuals who have to traverse a ground too tricky and treacherous to handle smoothly. (Gopal 4)

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Concerned mainly with the atmosphere of the psyche Desai creates opulent gallery of those characters, who are different from those of other Indo-Anglian writers. What matters for Desai is the psychic tension of these characters. She has no doubt championed the cause of woman in her works. But what distinguishes her from the rest of Indo-Anglian writers is her pre-occupation with the psyche of the individuals. She has depicted through her characters, feminine personality and feminine psyche better than other Indo-Anglian novelists According to N.R. Gopal, "In different novels, Anita Desai has portrayed different facets of human feminine psyche". (Gopal 31) Thus, she has succeeded in presenting the feminine

**psyche with all its variety and shades.**

Anita Desai speaks to us not only the tumult of the human soul but also of its depth. It is through "the quality of mind and soul alone" (Iyengar 343) that Anita Desai's novels would be a major contribution to literature. She "probes deep into the inner recesses of the psyche of the character and delves deeper and deeper in a character rather than going round about it." (Jain 68) By shifting the realm of her novels from outer to inner reality and fathoming the nocturnal recesses of the human psyche, she brought the Indo-Anglian novel into the mainstream of European and American fiction. Unlike the other Indo-Anglian novelists, Anita Desai's predominant concern is not with society and social forces but the individual psyche and its interaction with social values.

Desai's forte is the exploration of the interior world, plunging into the limitless depth of the mind, and bringing into relief the hidden cantours of the human psyche. This main thrust on the inner life of the individual on myriads of inner impressions, passing fancies and fleeting thoughts, together with her razor-like sharp awareness of the futility of existence is perceptible in each of her novels. Turning inward, her fiction plunges into the innermost depth of the human psyche to fathom its mysteries, the chaos inside the mind.

Primarily interested in exploring the psychic depth of her female characters, Desai may be said to be doing something unique among the contemporary Indian-English novelists. She considers the outside world and action only tip of the iceberg, the bulk of which remains submerged. Through her novels, she tries to bring about the submerged portion of it. Asnani says in this connection, "Whatever action there is in her novels is part of the integral whole composed of the human psyche, the human situation". (Asnani 5)

Anita Desai is predominantly concerned with female characters. She is not only concerned with normal women but also with women of disturbed mental status. N.R. Gopal has correctly pointed out in this connection, "Anita Desai not only explores and portrays the feminine psyche of a common woman but also of the subnormal bordering on abnormal women". (Gopal 22)

In nearly all novels of Desai, female psyche plays dominating role in bringing on the surface females' quest for liberty from marital bondages, traditional bondages and discontented life of womanhood.

Anita Desai's first novel **Cry, the Peacock** is the story of a sensitive, introvert woman Maya married to a rational husband. The novel has been rightly described as a psychological novel. R.S. Sharma writes:

Cry, the Peacock, Anita Desai's first novel is also perhaps the first step in the direction of psychological fiction in Indian writing in English. Initially the novel shocks us with its neurotic and near morbid obsession with death, but a closer study we admire the writer's skill in capturing the psychic states of a woman. (Sharma 24)

Darshan Singh Maini considers Cry the Peacock as "a typically 'feminine' novel not because it is a story of a woman told by a woman but because ...fruit of feminine sensibility".

Maya, the protagonist is in quest for liberty from marital bondages. Though Gautama is a faithful husband who takes care of Maya and loves her in his own way yet Maya is never satisfied and happy. She feels that Gautama never cares for her and does not have any feeling for her. The death of Maya's pet dog Toto makes matter worse. This incident troubles Maya a lot. But Gautama a practical man takes this event easy and consoles Maya in his own way and says he would bring another dog for her. His indifference hurts Maya. In order to console her he offers a cup of tea without realizing her state of mind. This mechanical gesture only makes her brood over Gautama's insensitivity:

Showing how little he knows of my misery, or how to comfort me. Giving me an opal ring to wear on my finger, he did not notice the translucent skin beneath, the blue flashing veins that ran under and out of the bridge of Gold ... telling me to go to sleep while he worked at his papers, he did not give another thought to me ... it is his hardness – no, no not hardness but the distance he coldly keeps from me. (9)

This example clearly reveals Maya's psyche and her uneasiness with her husband Gautama, who doesn't understand her. Her psychic self brings on surface her desire for liberty from marital bondage.

Although Maya and Gautama are living as husband and wife yet they are strangers to each other, following their own way. They talk and converse while strolling together but it is only a meaningless conversation that does not bring them closer or inspire Maya:

And so we strolled up and down the lawn, talking desultorily, not really listening to each other, being intent on our own paths, which howsoever run parallel and closely enough for us to briefly brush against each other now and then reminding us. (18)

This example of Maya's psyche brings on surface the marital disharmony, which makes her long for liberty. Maya has stifling sense of loss of liberty, which is denied to her due to her marriage to a man, fatherly in age.

Spouses as life-partners are supposed to share the joys and sorrows of each other. However, Maya feels miserable because "he had not the faintest knowledge of her" (114) Gautama's over busy life does not provide an opportunity for physical intimacy. Maya's psychic self in such moment is expressed in the following words:

But when I went to rouse him from the couch, with a touch I saw that he had closed his eyes not with mere tiredness but in profound ... sleep and was very far from any world of mine ... I hesitated wishing to summon him to me, yet knowing, he could never join me. It was of no use. (93)

Due to the temperamental incompatibility marriage becomes bondage for Maya. She yearns liberty from marital bondage. She sees possibility of liberty from marital bondage in the death of Gautama :

The man who had no contact with the world or with me. What would it matter to him if he died and lost even the possibility of contact 'what would it matter to him? It was I, I who screamed with the peacocks, screamed at the sight of the rain clouds ... (175)

Thus with the help of female psyche is the case of Maya Desai reveals her longing for liberty from marital bondage.

For Desai action is less important for she portrays emotions and thoughts of her characters to reveal their psychic odyssey. She portrays the psychic upheavals in the minds of her anguished protagonists. With the help of female psyche she brings on surface females' quest for liberty.



Predominantly interested in exploring the psychic depth of her female characters, Desai may be said to be doing something unique among the contemporary Indian-English novelists.

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## **Quadrilateral "QUAD" Partnership and India's Strategic Concerns: Challenges and Opportunities**

*Deepak Setia\**

The beginning of the Quadrilateral “Quad” partnership between United States, Japan, India, and Australia began when “Tsunami Core Group” was formed as an ad-hoc grouping in order to respond to the devastating Boxing Day tsunami of 2004. The Core Group, led to a “new type of diplomacy” that created a new network in the face of an emerging challenge, brought together the four nations best equipped to swiftly mobilise tsunami aid. The successful partnership between four major democracies in the region for Humanitarian and Disaster relief (HADR) Operation, led to idea of Institutionalising this partnership for broader Security issues concerning the region.

Initially, Japan was the main advocate of the Indo-Pacific concept during this period, and Prime Minister Shinzo Abe plays a particularly prominent role in this regard. Japanese Prime Minister Shinzo Abe’s speech at the Indian Parliament on August 22, 2007, entitled “Confluence of the Two Seas,” called for a “broader Asia” with the cooperation of Japan and India along with the United States and Australia in the entirety of the Pacific Ocean. This led to a limited partnership between Quad nations in 2007, which was discontinued in 2009 due to Chinese pressure and Australian Prime Minister Kevin Rudd deciding not to antagonise the Chinese.

Shinzo Abe again pushed the Idea of Quad Partnership in Indo-Pacific, In a published article for the Project Syndicate in 2012 named “Asia’s Democratic Security Diamond” Abe said that “I envisage a strategy whereby Australia, India, Japan and the US state of Hawaii form a diamond to safeguard the maritime commons stretching from the Indian Ocean Region to the western Pacific.” In the same article Abe also says “the peace, stability and navigation freedom in the Pacific Ocean are inseparable from those of the Indian Ocean. As the oldest marine democracy in Asia, Japan needs to play a bigger role in defending the shared interests in the above two regions.”

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This idea remained dormant till 2016, when Donald Trump got elected as President of USA, after coming to power Donald Trump adopted an “Indo-Pacific Strategy” in place of Previous US Presidents “Pivot to Asia Policy”. Indo-Pacific Strategy adopted by Donald Trump aimed at partnering with like-minded nations in order to balance China’s aggressive rise, this policy also find its supporters in Japan and Australia, which were vary of Increasing Chinese aggression in the region. India however was reluctant in Initial days, However, ingression of Chinese forces in Bhutan’s Territory of Doklam which is near to India’s Strategic chicken neck’s corridor. This was followed by a long stand-off in Doklam, which pushed India reluctantly towards re-institutionalising Quad as an Informal grouping in 2017. Since 2017, to present times, Quad have now become an Important part of India’s Indo-Pacific Policy which is further expressed through various speeches of Indian Prime Minister and Foreign Minister.

With the knowledge of hindsight, it will not be wrong to say that the end of Quad 1.0 was, however, only a minor distraction in the larger picture of realignment among the four maritime democracies. Bit by bit, they identified convergent interests across the two-ocean region, with misgivings about China a significant driver. The revised “Quad”—the 2017 update of the informal quadrilateral security dialogue originally formed by the US, Japan, India, and Australia in 2007—represents a renewed attempt to shore up a “rules-based order in the Indo-Pacific.”

The informal grouping of Quad does not operate in Vacuum and it is a “means” of pursuing Indian interests in the Indo-Pacific region. From the point of view of Indian Policymakers, The Indo-Pacific region is area from Eastern coast of Africa to Entire coast of Western Pacific Ocean. Indian Navy’s Strategic Security doctrine also laid emphasis on Indo-Pacific Ocean.

### **Challenges**

A national geo-strategy cannot be formulated without factoring in ‘geographical’ realities, and a nation’s geography is never perfect. One cannot alter geography but can modify its geo-strategic orientation.” The whole idea of “Indo-Pacific region” (IPR) in study of Geopolitics is a new one and is gradually making its place as an “Geopolitical map”. This can also be gauged from the fact that among the four Quad nations, there is no unanimous view about the boundaries of this IPR. On the Other hand, for Australian and USA the western End of Indo-pacific is Arabian sea and on the eastern Side according to Australia Indo-Pacific region covers Entire

Western Pacific Ocean but for USA the eastern side of IPR goes only till Gaum islands and does not include entire western Pacific Ocean.

This divergences in Geographical boundaries deters India's strategic interests the most as India is highly dependent on Persian Gulf and West Asian region for its Energy Security. Also, Arabian Sea is also critical to India's overall Maritime Security and hosts various important trading Cities, Ports, and other critical installations.

The Quad nations have Strategic convergence in the Indo-Pacific region, Science and Technology cooperation, however in order to make this partnership broad based, the Economic partnership within Quad nations need to be strengthened. Among the four Quad nations, it is India which is lagging in this domain. India has trade and commerce related issues with USA, Japan and Australia respectively.

In all four Quad nations, there are many scholars who are of the opinion that the "Indo-Pacific" concept has no serious economic component among Quad nations, more so with India and other three members of Quad, a major reason behind which is "complexity" India presents other member while conducting economic partnerships. While on the other hand Economic dependence of Japan, USA and Australia on China presents totally different picture. Thus, it will not be wrong to conclude that If Quad nations are not able to project "Indo-Pacific" as a good economic agenda and continue to put focus on Quad as a "Geo-Security Construct", the Quad can't achieve its goal.

China's opposition to the "Indo-Pacific" construct as well as "Quad" Grouping is not new. China have not officially accepted the combination of Indian and Pacific oceans as a single entity while dealing with various nations of the region and considers the "Indo-Pacific policy" adopted by Quad nations aimed against China. China since very beginning is vehemently opposing the Quadrilateral partnership between India, Japan, Australia and USA being aimed against China. China's view on Quad have changed from calling Quad as "Asian NATO" to a "Attention grabbing Idea" which will "dissipate like Ocean Foam". However, there were instance of some moderating statements from China too on Quad, when it said "China expects to see that relevant countries develop friendly relations and cooperation, which, nevertheless, will not target at any third party".

Russia is one of major arms providers to India with which India have Strategic Partnership but strained USA-Russia relations and proximity of Russia with China have resulted in Dilemma for Indian State. Russian Foreign minister Sergei Lavrov during his address at Raisina Dialogue in Jan 2020 raised Questions about the whole Idea of

Indo-Pacific and Indo-Pacific was a construct aimed at containing China by the USA, the idea of “Rule based world order” which is championed by USA is solely aimed against China and is “Less and Less” about International Law.

In Inaugural Quadrilateral Security Dialogue (QUAD) held online in March 2021, the Joint statement which was issued called for “Denuclearization of North Korea” did not mention “Denuclearization of entire Korean Peninsula” which is a stark difference from past stands of Quad nations especially India. The Joint declaration also conveniently ignore the Singapore Summit Declaration. The rapprochement which was made towards North Korea during Donald Trump is yet to be seen under President Biden Administration, thus raising fears about De-Stabilization of region again to Nuclear Proliferation. If Such De-Stabilization it will be a threat for whole of Indo-Pacific Region.

On the broader Issue of Indo-Pacific in general and Quad in particular, the ASEAN group is divided. This ambivalence can be gauged from a Survey by ASEAN Studies Centre of ISEAS – Yusof Ishak Institute, in its 2019 and 2020 editions of the State of Southeast Asia (SSEA) survey it was found that the majority of respondents – 61.3% (2019) and 54% (2020) – thought that “the concept is unclear and requires further elaboration.”; Meanwhile, few of them – 17.2% (2019) and 28.4% (2020) – pinned their hope on the concept to present “a viable option for a new regional order.”

The recent events of clashes at Galwan and incursion by Chinese in Fingers area of PangongPso lake, Demchok, Depsang Plains, Gogra and hot springs, in Union Territory of Ladakh in summer of 2020 have shown that China can't be trusted. Under this Backdrop the Threat of Two-Front War with Pakistan and China becomes even more real. Since 2015, the China Pakistan Economic Corridor (CPEC) has brought China and Pakistan even closer. It was the first leg of Chinese President Xi Jinping's flagship Belt and Road Initiative (BRI) to get operationalised, knitting their economic development and fusing their military capabilities. Also, with development of Gwadar port under CPEC and emerging maritime partnership between China and Pakistan, there are Chances of Chinese PLAN intrusions in Arabian Sea along with Pakistan Navy.

Due to Boundary disputes with Pakistan and China, the overall security outlook in Indian Defense forces remained “Land based”, which can be gauged by the fact that most amount of Defense budget went for Indian Army, thus giving little space for focusing on Maritime domain and on Upgrading Indian Naval forces. Thus, the issue of

funds mobilizations especially for Indian Navy is presenting India with various limitations.

In Indian Navy's Maritime Security Strategy Doctrine, Areas like Arabian Sea, Persian Gulf (Including Strait of Hormuz) is considered as "Primary Security concern" for India as it the source of majority of our oil supplies and gas imports, and is home to more than seven million expatriate Indians. India is also developing Chabahar Port in Iran in order to establish a trade route with Central Asia, and this Chabahar port is just few Km away from Gwadar port of Pakistan developed under CPEC. In this backdrop, maintaining good relations with Iran is thus critical to India's Security needs as well as India Indo-Pacific policy.

However, due to Emerging Security partnership between India and USA and in order to not to antagonize USA, India have been forced to abide by sanctions put on Iran by USA under it Countering American adversaries through Sanctions act, popularly known as CAATSA. India however but able to get waiver for Chabahar port project under CAATSA, but were forced to reduce its oil imports.

#### **Opportunities**

Apart from various challenges faced by Quad grouping mentioned above, it also presents various opportunities like Balancing China, Providing alternative to Chinese BRI in the region for Infrastructure building in the Indo-Pacific region, Enhancing Joint Maritime Capabilities and Promoting Maritime Domain Awareness, Along with providing solution Global Non-Traditional Security threats like tackling Climate Change, Undertaking Global Vaccine Diplomacy and Promoting Digital Security.

It seems likely that the downturn in Chinese-Indian relations between 2014 and 2017 contributed to India's decision to support the Quad's revival. It will not be wrong to say that, China is today a significant factor in every one of India's major relationships and most aspects of Indian policy. Taking advantage of its geographical centrality in the Indian Ocean Region (IOR), India's approach to the Quad has been an evolutionary experience in the emerging Indo-Pacific construct where India's interdependent but complex relationship with China is a strong factor.

Since 2013, Chinese State under Xi Jinping is actively pursuing BRI as a tool to enhance its Global footprint. The objectives of the BRI fall under two key themes: (i) internal economic rebalancing and (ii) expansion of strategic presence across resource-rich and geographically important nations.



“Internal Economic Rebalancing” aims at Facilitating China’s long-term plans of developing landlocked hinterlands and underdeveloped regions; Outsourcing internal productive glut and infrastructure overcapacity amid slowdown in global demand for its exports; Assisting and promoting troubled State-Owned Enterprises (SOEs), which employ tens of millions of workers, through provision of lucrative projects overseas; and developing infrastructure in Developing partners will help China to reverse anemic growth in global trade by enhancing the absorption capacity of export markets in the emerging world. On the other hand Chinese wants to attain the “Expansion of Strategic presence” by gaining foothold across strategically located nations especially in Indo-Pacific Region; Lock in rare commodities key to Chinese long-term development; Globalize Chinese technological and industrial standards across emerging markets. Various projects which China is undertaking under BRI, present Security threats to Indian National Security and Violating India’s Territorial Integrity under its China-Pakistan Economic Corridor.

India’s Chief of Naval Staff, Sunil Lamba, have publicly criticized China’s maritime activities in the Indian Ocean, and the construction of maritime infrastructure by China in the countries along the Indian Ocean as military projects of the Chinese navy, the Chinese navy “has a base in Djibouti and a port in Hambantota, Sri Lanka”, India’s comments were widely echoed by the participants from the United States, Japan and Australia.

As India moves forward in the 21st century, its development and prosperity will remain closely linked to the maritime domain. Maritime Domain Awareness (MDA) can be defined as an all-encompassing term which involves being cognizant of the position and intentions of all actors, whether own, hostile or neutral, in the constantly evolving maritime environment in the areas of interest; In this the gaps in the knowledge available at various levels is sought to be filled by surveillance, intelligence and sharing of information, thus MDA is a vital ingredient to a nation’s maritime security and economic well-being. It is in this MDA where defense partnership with Quad nation will help in India’s holistic security needs.

India have Signed three foundational agreements of Logistics Exchange Memorandum of Agreement (LEMOA), the Communications Compatibility and Security Agreement (COMCASA) and Basic Exchange and Cooperation Agreement (BECA) with USA. With Japan, India is Implementing arrangement for deeper cooperation

between Japan Maritime Self-Defense Force and Indian Navy which will result in greater cooperation and exchange of information in Maritime domain awareness between the Indian Navy and Japan Maritime Self Defense Force. With Australia a “Joint Guidance for the Australia-India Navy to Navy Relationship” document have been signed which will result in serving as a guideline document to showcase the intent of both the Navies to work together bi/ multi-laterally and will provide broad scope of guidance in developing mutual understanding, cooperate for regional security, collaborate in mutually beneficial activities and to develop interoperability.

In order to provide an alternative to China’s BRI, Quad nations are actively engaging with one another at various levels. Quad nations can provide solution to various issues associated with BRI like Lack of Transparency and Openness; Respecting sovereignty and territorial integrity of Nations; Principles of Financial responsibility; and Equality among nations while developing infrastructure.

Blue dot Network: It was jointly launched by the US, Japan (Japanese Bank for International Cooperation) and Australia (Department of Foreign Affairs and Trade) in November 2019 on the sidelines of the 35th ASEAN Summit in Thailand that aims to bring governments, the private sector and civil society together to promote “high quality, trusted standards for global infrastructure development”.

The Blue Dot Network vision uses as its foundation established global infrastructure principles set out in the G20 Principles for Quality Infrastructure Investment, the G7 Charlevoix Commitment on Innovative Financing for Development, and the Equator Principles. It aims to promote quality infrastructure investment that is open and inclusive, transparent, economically viable, financially, environmentally and socially sustainable, and compliant with international standards, laws, and regulations.

While issuing the India-USA joint statement after the visit of Donald Trump to India, both nations “showed interest” in this initiative. The Joint Statement read:

“Prime Minister Modi and President Trump expressed interest in the concept of the Blue Dot Network, a multi-stakeholder initiative that will bring governments, the private sector, and civil society together to promote high-quality trusted standards for global infrastructure development.”

All Quad nations other than India are already part of blue dot Network also all the reservations which India have vis-à-vis BRI are addressed under Blue dot Network thus India joining this initiative is the

next logical step in order to provide boost to Infrastructure building in the region.

With the advent of Sixth Generation welfare, Technological advancements in General and Critical Technologies in particular can act as “Gamechangers”. These Technologies are also key to Economic and Social Transformation Locally as well as Globally. In order to develop such “Gamechanger” Critical Technologies like Machine learning, Artificial Intelligence, Quantum Computing, 5G Technology, Biotechnology, Blockchain Technology and Robotics; Quad nations are actively collaborating and cooperating in the field of Science and Technology.

It was also observed that China controls and dominate the supply chains many crucial raw materials which are critical for development of such Technologies like Rare earth metals which are crucial for development of Semiconductors, Active Pharmaceutical Ingredient (API) are crucial for development of Pharma and Biotechnology Sector.

In order to Diversify that and with the spirit of partnering in the field of development of Critical Technologies on April 2021, Trade ministers of India, Japan and Australia formally launched Supply Chain Resilience Initiative (SCRI) whose main task is to avoid supply chain disruptions and affirming commitment to strengthen resilient supply chains by supporting the enhanced utilization of digital technology; and supporting trade and investment diversification.

Climate change is an “Existentialist Threat” for whole of Humanity and the brunt is not only being faced by present generation but will be faced by future generations as well. In order to tackle the problems presented due to Climate Change, During the inaugural Quad Summit in March 2021, Quad leaders also established a Working Group on Climate change.

### **Way Forward**

India’s overall Indo-Pacific Strategy is based on Bilateral, Trilateral, Quadrilateral and Multilateralism partnerships in the region; among all these Quadrilateral partnership with USA, Japan, and Australia is of key strategic importance. The Quad nations, three of which are amongst the world’s five largest economies and Australia the 14th ranked can offer a comprehensive economic revival plan through an inclusive aid and development program on easy terms which could have long term benefits in countering the ambitious Chinese Belt and Road Initiative which is reeling under the effects of its debt-trap diplomacy.

While, all of the Quad nations especially India have maintained that Quad is neither a “military grouping” nor it is aimed against any particular Nation. According to Jagannath P. Panda “India–China relations act as a balancer to ensure that the Quad does not emerge as an anti-China proposition, even though it does intend to negate China’s growing unilateralism in the IOR.”

India’s approach towards Quad can be gauged thought how from Indian PM Speech at First Quadrilateral Leaders’ Summit held on 12 March 2021, in which PM said:

“Our agenda today - covering areas like vaccines, climate change and emerging technologies - makes the Quad a force for global good. I see this positive vision as an extension of India's ancient philosophy of VasudhaivaKutumbakam, which regards the world as one family. We will work together, closer than ever before, for advancing our shared values and promoting a secure, stable and prosperous Indo-Pacific. Today’s summit meeting shows that Quad has come of age. It will now remain an important pillar of stability in the region”.

On similar lines Indian External Affairs Minister Dr S. Jaishankar, while interacting with a group of reporters during his USA visit on 30 May, 2021 said “Quad today fills a very important gap that has emerged in contemporary times, where there are global or regional requirements, which cannot be filled by a single country. It cannot even be filled by one bilateral relationship, and which is not being addressed at the multilateral level”.

Thus, From the statements by Indian Prime Minister as well as Indian Foreign Minister, it is visible how India sees Quad as a “means” for pursuing India’s National Interest forward.

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## Finding the Ecological Concerns in Arundhati Roy's "God of Small Things"

Aishwarya chauhan\*

*"We do not see nature with our eyes, but with our understandings and our hearts."*

William Hazlitt

### **Abstract :**

*First of all, it is important to understand what nature is. In simplest of words, the phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations is nature. Indus Valley was one of the oldest civilizations of this world. Since then people have been worshiping mother nature. When there was no education, people still had knowledge of nature. They worshiped soil. They knew that the sole reason for their survival was food, which land was offering them. Hence they too offered worship to nature. In this 21st century, we have come a long way ahead. We are becoming more educated with diminishing knowledge of the soul and life. Everyone wants to be successful, but nobody cares for nature.*

This paper seeks to outline the ecological concerns of Arundhati Roy. Since people are more advanced with enjoying the best equipments at home, they have forgotten what mother nature has done for mankind. Both women and nature have sacrificed and yet sacrificing themselves for the improvement of mankind. But, when we harm the environment, we harm ourselves. It is important to realise so. Writers write according to the contemporary era. They write what they see. Through her novel, she has wisely put her point regarding human nature with the ecosystem. Animals also communicate with the nature. It is us who have lost the connection.

**Keywords :** Nature, Ecology, Mankind, Environment

**Introduction :** Suzanna Arundhati Roy was born in Kerala. She is best known for the novel "God of small things" which brought her the Man Booker Prize for Fiction in 1997. Roy was an architect in her early life. She wrote two screenplays: *In Which Annie gives it those ones* (1989) and *Electric Moon* (1992). Roy is a brilliant author

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with profound knowledge of business, books, politics, media and everything.

### ***The God Of Small Things***

Following in the footsteps of Salman Rushdie's *Midnight's Children* (1981) and Vikram Seth's *A Suitable Boy* (1993), Arundhati Roy's *The God of Small Things* (1997) has been hailed as the latest literary 'discovery' from India. Its epigraph is a quotation from contemporary writer John Berger: "Never again will a single story be told as though it's the only one."

It is a story of twins - Rahel and Estha. Rahel is an energetic and imaginative girl while Estha (EsthappenYakolpe) is more grave and well behaved than his twin Rahel. Perhaps, the harshness suffered at an early stage made him so. Ammu is the mother of the twins. The story is written in a fragmented narrative with time shifts. There are several themes in the novel like Indian history and politics, caste discrimination, forbidden love, social and gender discrimination and the constant element of betrayal. But in this paper we will focus on nature and its relationship with the people.

The story is set in the village of Ayemenem, which is now in Kottayam district in Kerala. The events of *The God of Small Things* are revealed in a fragmentary manner, mostly jumping back and forth between scenes in 1969 and 1993, with backstory scattered throughout. Roy has described the book as "an inextricable mix of experience and imagination".

**Ecology** Nature has been existing since the beginning. Humans evolved much later. Ecology started to gain popularity in the 1960s when environmental issues started rising.

With the modern era, we started losing contact with nature. Trees were cut down rapidly. Pollution from the chimneys started affecting the whole ecosystem. Human activity plays an important role in the health of ecosystems all around the world. Pollution emitted from fossil fuels or factories can contaminate the food supply for a species, potentially changing an entire food web. Introducing a new species from another part of the world into an unfamiliar environment can have unintended and negative impacts on local lifeforms. These kinds of organisms are called invasive species. Invasive species can be any form of living organism that is brought by humans to a new part of the world where they have no natural predators.

Ecology is the study of organisms and how they interact with the environment around them. An ecologist studies the relationship between living things and their habitats. The distribution and

abundance of organisms on Earth is shaped by both biotic, living-organism-related, and abiotic, nonliving or physical, factors.

**Relationship between ecology and Roy's "God of Small Things"**

The novel opens with the description of nature. Roy gives a vivid description of the weather of Ayemenem:

*May in Ayemenem is a hot, brooding month. The days are king and humid. The river shrinks and black crows gorge on bright mangoes in still, dustgreen trees. Red bananas ripen. Jackfruits burst. Dissolute bluebottles hum vacuously in the fruity air. Then they stun themselves against clear windowpanes and die, fatly baffled the sun. The nights are clear, but suffused with sloth and sullen expectation. But by early June the southwest monsoon breaks and then there are three months of wind and water with short spells of sharp, glittering sunshine that thrilled children snatch to play with. The countryside turns an immodest green. Boundaries blur as tapioca fences take root and bloom Brick walls turn moss green. Pepper vines snake up electric poles. Wild creepers burst through laterite banks and spill across flooded roads. Boats ply in the bazaars. And small fish appear in the puddles that fill the PWD potholes on the highways.*

It is certain that Roy has added semi autobiographical elements in her work because she has added a lot of her childhood memories throughout the novel. For example, Ammu represents her mother. She got married and later on divorced. Her mother even owns a pickle factory which was eventually taken over by her son, Roy's older brother. The pollution of Meenanchalriver is directly related to the Narmada river valley dam system that India was convincing its people was good for them. Arundhati Roy has great affinity with nature. She openly criticizes industrialisation in her works and interviews. Also, she had been on strikes too for the sake of the environment. She was even arrested for her efforts. Roy relates her novel with both ecocriticism as well as ecofeminism. Both are interrelated. Environmental criticism, also known as ecocriticism and "green" criticism (especially in England), is a rapidly emerging field of literary study that considers the relationship that human beings have to the environment.

Simply put, ecofeminism is a feminist movement that focuses on the parallels between the oppression of nature and animals and the oppression of women.

It is the belief that capitalism and industrial development are a reflection of patriarchal values, that the same power structures that restrict the autonomy of women and other marginalized people are



also responsible for issues like factory farming and, ultimately, climate change. Renowned ecofeminist, Vandana Shiva, once said that "ecofeminism is a good term for distinguishing a feminism that is ecological from the kind of feminisms that have become extremely technocratic." Roy is the perfect example of ecofeminist. She supports both nature and women. Mother Nature and women are not different. Unfortunately, instead of worshiping and giving respect to these entities, men are exploiting them for their own physical and material gains. In "*god of small things*", Roy uses ecofeminism to support women's rights and protests against industrialization which polluted the river which ran near her home in real life. The effects of these dams is shown in her novel when she writes, "Some days he walked along the banks of the river that smelled of shit and pesticides bought with World Bank Loans" Even just building the Sardar Sarovar Dam would displace 45,000 families due to the water level rising 17 meters. The amount of families that could have been displaced if their proposal for all 3,000 dams to be built went through is exponential. Here is more information about the dam and its harmful effects from the perspective of the villagers. Ecocriticism functions as a tool that draws the attention of the world to crucial environmental issues through analysis of literature.

**Baby Kochamma** is an important character in the novel. She was fond of gardening. Not only fond, but she had taken her diploma in ornamental gardening twenty three years ago. Gardening is therapy. Spending time with nature brings mental peace and harmony, but Baby Kochamma left gardening when she was made familiar with television. She was very much involved in loving and caring for the plants. Plants that had the least scope to survive were turned green and galore with her efforts. People used to visit her garden but the technology made her indolent. The same garden filled with greenery was now full of weed called Patcha.

"Like a lion- tamer she tamed twisted vines and nurtured bristling cacti, she limited bonsai plants and pampered rare orchids. She waged war on the weather. She tried to grow edelweiss and Chinese guava. Now her garden is abandoned and it is full of a weed called Patcha. It has grown knotted and wild, like a circus whose animals had forgotten their tricks."

The most significant role has been played by none other than **Velutha**. He is the actual *God of small things*. In the novel, Velutha is a Paravan (untouchable) who grew up with Ammu. Though he is

skilled and the best carpenter Ayemenem had, he still gets poor treatment. Velutha fixes all the machines in the pickle factory. He grew young and handsome, and was loved by both the twins. His affair with Ammu, betrayal, and brutal death make up much of the novel's tragedy. Delving deep in the novel, we realize that Velutha is the symbol of sustainable development in the novel. The author describes him as making '*tiny wind mills, rattle, minute jewels boxes out of dried palm reeds, he could carve perfect boats out of tapioca stems and figurines on cashew nuts.*'

Arundhati Roy has directly applied the ideology of William Wordsworth. He once said to his sister Dorothy that everyone would betray her but not nature. Similarly, when Velutha was driven out by her own mother from his house, he takes refuge in the lap of mother nature near the bank of the river. The Meenachalriver became his shelter. He caught fish and cooked in an open fire. He used to swim and enjoy his days. His thirteen night physical relationship with Ammu starts and progresses near the bank of the river. Nature is the witness of their relationship. It can be said that the river Meenachal is the lifeline for Velutha.

**Conclusion :** Since the beginning of the novel, Arundhati Roy has been mentioning nature through the weather, the trees, plants, forests, animals and river. Not only Roy, but several writers have talked about ecocriticism through their works.

In "Book of Nature" by Ruskin Bond, he emphasizes that there is a relationship between man and nature and both are interdependent and interrelated. He feels pity for the cruel and unsympathetic nature of humans towards nature. His empathy for nature and animals is depicted in his stories and poems. Many of his stories are set in the landour cantonment in the upper reaches of Mussoorie. His works preserve the tranquility, beauty and serenity of the Garhwal Himalayas. He has written over three hundred stories in which he brings the vivid picture of Himalayas and deals with different aspects of the region from beauty of nature to recent environmental degradation.

Amitav Ghosh has written *The Hungry Tide* in which Sunderban is the setting. Beside the Ganges, the Brahmaputra and the Irrawaddy are the rivers, which empty into Bay of Bengal. The borders of the rivers and the sea are invisible. The poor islanders lead a tough life full of hardships and existential threat in this desolate and mysterious region covered with mangroves and mudflats. The writer has portrayed the life of islanders who struggle hard to survive.

In a nutshell, literature and nature are interconnected. Both are interwoven into aestheticism. Arundhati Roy has tried to bring out awareness among people through her novel *God of Small Things*. If we are destroying nature for our own purposes, we should also learn the art of preserving. Because, if nature vanishes, life will vanish. Humana are part of this ecosystem. We need this environment, food, water, fire etc. to sustain. Nature is not dependent on us but we are and we shall be, forever. It is important to understand our real purpose in life i.e., to serve our mother, Nature.

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# Folk Culture of Uttarakhand

*Dr. Ajay Kumar Singh\**

## **Abstract**

*Folk culture refers to the unifying expressive components of everyday life as enacted by local tradition bound people in groups. Primarily folk culture tradition focuses on traditions practiced by small foot, homogeneous, rural groups living in isolation from other groups. Today, however, folk culture is recognized as a dynamic representation of both modern and rural constituents. The folk tradition carries through oral means from generation to generation not written sources. It revolves around the likes and practices of the people. The area of study of the present paper is Uttarakhand i.e. Garhwal and Kumayun region. There are a good number of articles and books on the topic. Geographical factors have played a vital role in shaping the history and culture of this region from very early times. Particularly in the medieval period the waves of migration from the Gangetic plains, Punjab and Rajasthan to these regions have contributed a lot. The impact of these migrations is clearly visible in the religious and folk culture practices of the people of Uttarakhand. Analyzing these local cults and practices the paper ultimately depicts the process through which the folk culture is going to become a source of entertainment and learning to the tourists of plains. Folk culture handed down through oral tradition now increasing through dynamic computer-mediated communication, it relates to the cultivation of community and group identity. There are several fairs, religious traditions, festivals, musical folk dances, unique costumes and cuisine of Uttarakhand clearly separating them from the rest of the world. This paper aims to focus on the main folk cultures of Garhwal and Kumayun regions that are being practiced and how this could be a source of attracting the tourists and become means of economic development.*

## **Introduction**

Hilly state, Uttarakhand, was formed in 2000. This 27<sup>th</sup> state of India is very rich in folk culture. There are more challenging economic conditions in the hills. The holy rivers like Ganga and Yamuna originate from the glaciers of Uttarakhand. The topography

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of this state is characterized by hilly region-rugged and rocky mountains, sharp streams and rivulets, frequent landslides, high peaks, rapid soil erosion, glaciers and widespread habitants. Uttarakhand has traditionally been divided into two regions, the eastern region known as Kumayun and the Western region known as Garhwal. Both the regions are very rich in their traditional values.

The Garhwalis and Kumayunis living in Uttarakhand are- the Bhotias, the Jaunsaries, the Tharus, the Bokhas and the Rajis are the notable ethnic group of people living in Uttarakhand. The people of this state mainly speak Hindi, which is the official language of the state. Other important languages are – Garhwali, Kumayuni, Punjabi and Nepali. The ethnicity of the people of this state involves a number of tribal communities. Jaunsari are a group of small tribal people who are classified into two original tribal groups namely the Kotlas and Khasas. The people have their own way of dressing and cultural practices. This is one of the communities in the world which follow the polyandrous system where the wives can have more than one husband at a time. The Bhotiyas live in the mountains of Himalyas as they have more or less the same physical appearance like that of the Tibetans.

### **Local Gods**

The people of Uttarakhand believe in worshipping the spirit of their ancestors. People believe that by doing this kind of worship they wake up the gods and local deities to solve their problems. It is a traditional belief that by doing this they get divine justice. Music plays a vital role on such occasions and acts as a medium to invoke gods. The singer or Jagariya sings a ballad of the gods with allusions to the great epics like *Mahabharata* and *Ramayana* and which describe the adventures and the exploits of the god being invoked. The people are deeply rooted in religious faiths and superstitions for any good thing they do, they depend on any astrological forecast of the Brahmins for its auspiciousness. They follow age-old customs and traditions for all social functions like new birth, marriage, death etc. Shiva and Durga are the most important gods of the people of Uttarakhand and many fairs and festivals are held in regard with the above mentioned Gods. People believe in ghosts, witches etc. and tantra – mantras are used to cure diseases and prevent calamities.

### **Folk Dance and Music**

Folk dance and music play a vital role in the lives of the people of Uttarakhand. The lives of people are filled with a lot of music and dance. Dancing is a major part of the tradition of this state

whether Kumayun or Garhwal. Dancing is not only a medium of entertainment but people also believe that through dancing one can please gods. It is believed that the ritual of dancing can be dedicated to the young maidens called 'Akchharis' dancing on the high peaks. Any form of dance is incomplete without costumes. Therefore, people dress up in some special designs and get collected to dance and worship. Some of the folk dances include Baroda Nati which is the popular dance of Jaunsar Bhawar area in Dehradun district, Langvir Nritya, an acrobatic dance and Dhurang & Dhuring which are popular folk dances of the Bhotiya tribe. Folk songs include Basanti which are composed to welcome the spring season, Mangal which are sung during marriage ceremonies, Jagars which are used during the worship of ghosts. Bajuband which talks about the love and sacrifice of the shepherds, Khuded, talks about the suffering of a woman who gets separated from her husband and Chhura which discusses the experience of the shepherds and the advice passed on by them to the younger generation. The tourists can be entertained by songs and dances of the state.

### **Cuisine**

The people of Uttarakhand living in higher villages and eat yummy recipes from generations. Most of the people are non-vegetarian. Some of the most delicious mouth-watering specialists of Uttarakhand include- Urad Dal Ke Pakode which are spicy pakoras prepared from different pulses. Phanu too is made from dals, Chainsoo which is made from black gram dal. Bhang ki chutney is sour tasty chutney prepared from roasted Bhang and Cumin seeds mixed with lemon juice. The people of Uttarkhand generally eat grain such as mandua and barley. People also eat thick gravy with potatoes, tomatoes and other vegetables, a spinach dish and local breads such as chapates, *mandua ki roti* and *gahat ke paranthe*. Chutney made from sesame seeds, hemp seeds and other local ingredients help perk up meals. Popular sweet dishes include *Jhangore ki Kheer*, the famous *bal mithai* of Almora and *Singhodi* made from desiccated coconut and Khoya. I wish the dishes to be served to the tourist and they will find different tastes on the one hand and would like to visit again and again and on the other hand the products of the state will get a market for the farmers and those who are in this job will get good wages. And the cuisine of Uttarakhand can attract the tourists from the different parts of the country.

**Social Communication**

The Paharis of Uttarakhand have had a more frequent and intensive contact with one another than with that of the plain due to topographical barriers, and have been subjected to different contacts and environments at different points of time. As a result pahari culture shows certain distinctiveness and this is reflected in its caste structure, polyandry system, religious beliefs and practices. Kumayun has larger tracts of fertile valleys; Garhwal is characterized by rugged mountain tracks. The impact of these variations are also reflected in some of their socio-cultural practices-belief in deities, customs and traditions, festivals, folk songs and legends etc. Despite variations, Kumayun and Garhwal are not distinct social units; one can also see the underlying unity between them in terms of their belief and practices, folk legends and relationship with nature.

**Costumes**

The dresses worn by people living in a region shows the culture and tradition followed by them and a fair idea about the kind of community residing there. Uttarakhand is home of variety of communities including Punjabis, Bangalis, Tibetan and Nepalis. Residents of Garhwal hills have their own pattern of wearing clothes due to the cold weather of the places; wool obtained from sheep is used to prepare woollen clothes. Almost all the men follow a similar style of wearing Kurta-Pyjama is very famous among the men of Uttarakhand. A head gear or a turban is a must add-on to complete the traditional costume. In the winter season men as well as women wear woollen jackets. Traditional costumes of women are ghagri is a long shirt which is worn by mostly all the women of Uttarakhand. It is associated with a beautiful coloured choli which is an Indian blouse and a cloth covering the head i.e. orni. This orni is generally fixed firmly to the waist. This is the traditional costume of both Kumayunis and Garhwalis. *Ghagra-Pichora* is the traditional bridal costume of Kumayunis women is similar to the *Ghagra Lehenga-choli* of Garhwal. Pichora is a Kumayuni covering of head which is decorated with gold and silver embroidery. Ladies put on Sindoor on the forehead along with a huge gold ring (known as- Nath) on the nose. Hasuli is another ornament which is worn in gold by the economically rich ladies while in silver by economically poor ladies. Some ethnic groups also wrap mantle-like clothing known as Sarong around them. Sarong is kept with the help of waist bond and the dress is completed by wearing a top blouse along with it.

**Folklore**

The medieval period in Uttarakhand witnessed important developments which are seen in the socio-cultural experiences of the people, particularly in its folklore. The vast collection of folk literature which can be termed as oral tradition has been documented by scholars such as Govind Chatak, D. D. Paliwal, E.S. Okley, P.D. Gairola, Trilochan Pande and G.D. Upreti. The efforts of the scholars like these have enabled us to understand the experiences of the pahari folk in various aspects of life through their folk songs, ballads, proverbs and legends. The word of mouth was a very strong medium in the medieval period and it was empowered to transmit many of the folk traditions from generation to generation. Some of the folklore reflects from the plains, others are chiefly from the local origin referring to the peculiar features of mountain life, social environment and embodying local beliefs and customs. The paharis shared a more spontaneous relationship with local deities who emerged from the local environment mostly as spirits of mortals who were later deified. Their beliefs and sentiments are particularly reflected in the Jagar gathas which form an important aspect of the folklore of Kumayun and Garhwal regions. While studying the culture of Uttarakhand one often tends to draw a comparison with that of the plains because the culture of both the regions, that is of the hills and the plains should not become parameters by which the folk culture of Uttarakhand can be measured. No doubt there has been considerable influence from the plains but this does not mean that the culture of Uttarakhand is an assimilation of other cultures. One can be fascinated by the distinctive traits of pahari culture which ranges from topography, agricultural techniques, customs and tradition, folklore and religious beliefs and practices. For a long; these regions have attracted people from different parts of the country both as an ideal place for pilgrims as well as tourists in search of peace of mind and a change for climate.

**Jagar Gathas**

Jagar is another important folk culture of Uttarakhand. Jagar is a spirit possession ceremony in which a designated deity or a group of deities is induced by ritual drumming and singing of traditional devta legends to possess a pre-arranged oracle. A Jagar is generally arranged to cure illness, particularly when the illness is believed to have been caused by ghostly possession. In this ceremony the most important role is played by the jagariya who is regarded as the priest of the ceremony. He is the one who narrates the legends and leads the



ceremony. The success of jagariya depends on the quality of his skills and the number of gathas that he can narrate. The underlying theme in these gatha is the description of the accounts and deeds of the deity to be invoked. There are no specific cast roles in the Jagar ceremony. Sometimes a Brahmin priest is included to recite hymns in Sanskrit. The welfare is related to such religious performances. It is a cause and effect of relationship, if there are good rains in the village, then the villagers associate it with such performances.

### **Worshipping Gods and Goddess**

The folk culture of Uttarakhand has another important culture in which the worship of gods and goddesses are very common. Raja-Rajeshwary temple is one in Dewalgarh in Garhwal hills where goddesses might have been worshiped by the kings since the early medieval period. The diety was worshiped by the Garhwal Rajas; it would have probably gained the name of Raja-Rajeshwari. In the present time her worship is undertaken in the form of Durga during the Navratri. The diety is depicted in a very unusual style where she is seated on the thrones and has three feet which rests on Brahma, Vishnu and Shiva. Nautiyal suggests that this representation would have been under the influence of tantrism in this part of Uttarakhand (K.P. Nautiyal, 1969).

The snake worship in the folk culture of Uttarakhand has achieved a special place in the religious sphere. The worship of snakes is very common throughout Garhwal and some parts of Kumayun where snakes are worshiped as the village deity. There are various names by which Nagdevta are known. Some such names are Beni-naga, Karakota, Sesnaga and Vasukinaga (K.P. Nautiyal, 1969). D. D. Sharma assumes that the worship of the Naga culture in the region might be an effect of the snakes which are associated with the water (D. D. Sharma, 2009).

The oral traditions offer a different view of the female form the views found in the written text. In the Sanskrit myth, the male god creates the goddess and gives her powers. The folk context the primordial goddess wishes to create by union with her son and gives them her powers.

Similar is the case with goddess Nanda of the central Himalyan region. William Sax suggests that the mountain goddess creates and gives powers to the gods. She is benevolent of nature, but also gets angry and destroys her own people. The story of the local goddess Nanda does not have much of chants and charms but songs sung by people. Every year there is a yatra of her going back to her

in-laws from her natural home which is a celebration occasion. Nanda is mostly appropriated in the main pantheon as Parvati and is worshiped with the same enthusiasm in both the region Garhwal and Kumayun. The links of the local traditions are derived from the Devi Mahatmaya. Nanda Devi is also called the Goddess of the king. Chand rulers of Kumayun believed Nanda Devi as the daughter of their family (Badri Dutt Pandey, 2011). She is portrayed as the disobedient wife who longs for her natal home that she curses her own kingdom when she is not called for the festivities.

### Conclusion

To sum up Uttarakhand is a hub of different folk cultures, traditions, ethnic groups and languages brought together. According to Gandhiji “After having been three weeks in the hills I am amazed why people need to go Europe in search of health”. This is what brings the beauty of the state. There is no industry in the hills of Uttarakhand, agriculture was main occupation of the people of hills but now days it is not sufficient for livelihood. Tourism has been the main source of economy of the people of hills. I do strongly believe that the economy of the state may be sounder through the folk culture. If the tourists are provided lodging in Indian houses, they are served yummy Pahari cuisine, typical Pahari dresses are provided to the tourist for photography, custom and tradition of the hilly people in attracting the tourists. Chardham and other pilgrimages must be brought into limelight for the pilgrim tourists.

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# Application of GIS in Spatial Data Mining

Anita Shukla\*  
Soumya Shukla\*\*

## ABSTRACT

*In the present work, we attempt to explain the application of GIS software in spatial data mining by considering a geographical case study. GIS is leveraged as a problem-solving tool to analyze spatial data for watershed prioritization for a region in Maharashtra, India.*

*This paper is organized in the following manner. First, we introduce the concepts of Data Mining and GIS, followed by a discussion on data sets, data storage, and GIS terminologies. Finally, a case study is presented that uses the fundamental operations of GIS for visualizing and analyzing geographic data to derive new information.*

## General Terms

Data Mining, Spatial Data, GIS, Geocoding, RDBMS, Geoprocessing

**Keywords :** Spatial Data Mining, GIS, Vector, Raster

## Introduction

The advancements in computerization and scientific data collection have led to exponential growth in data volume. This makes it challenging to interpret all this data manually or with limited technologies to gain valuable insights. Therefore, the development of new tools and techniques that support humans in transforming data into useful knowledge has been the focus of the relatively new and interdisciplinary research area called knowledge discovery in databases. Also, dealing with geographical data poses a multitude of challenges due to the unstructured nature of spatial data format.

The present study uses a relatively new tool called Geographic Information System (GIS) to analyze both spatial and non-spatial data effectively.

## Data Mining

Data mining or knowledge discovery is the computer-assisted process of digging through and analyzing enormous sets of data, to extract useful insights [1].

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### Geographic Information System (Gis)

A GIS system is an information system for importing, storing, analyzing, managing, exporting, and presenting spatial data(location-based) [2].

GIS enables users to envision the geographic aspects of data, by querying and analyzing results via map depictions. GIS has the unique advantage of integrating spatial data which describes the position of a feature on the earth's surface using geocoordinates such as latitude & longitude. GIS can also be used to create new features by integrating complex features. Some uses cases of GIS analysis include weather forecasting, sales analysis, population forecasting, and land use planning.

### Data Representation

GIS tool is designed to capture, store, manipulate, analyze, manage, and present various types of datasets.

Two fundamental components of geographic data include *space*(expressed as spatial data) and *quality* (expressed as attributes). These are stored in relational databases as thematic layers that can be linked together by the software as shown in Figure 1.

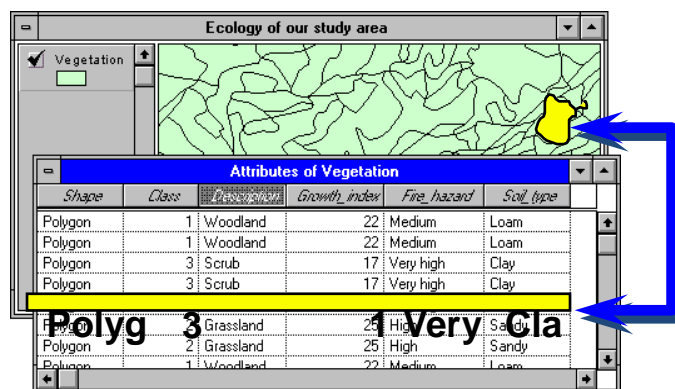


Fig. 1. Depiction of spatial data attributes stored in tabular format

### Data Format

Two fundamental types of data format in GIS are Vector and Raster.

The *vector* model is a composite data format consisting of a series of (x,y) coordinates that are allocated for discrete data represented as points, lines, or polygons [3]. *vector* format is good for representing well delineated features.

The *raster* format expresses data as a continuous changing set of grid cells, which are used for data such as elevation, slope, and surfaces

[3]. The regular grid of cells comprises of a cell representing a unit area on the ground and spatial resolution, while a value assigned to cell represents attribute such as reflectance, Land cover, Elevation, Satellite images, DED's.

#### Database

A database manager, usually a relational database management system (RDBMS) is a collection of data items organized as a set of formally described tables from which data can be accessed easily [5]. A relational database is created using the relational model. A relational database is a predominant choice in storing data over other models like the hierarchical database model or the network model. It consists of n number tables and each table has its own primary key identifies a unique record.

The central data integrator for GIS is the database which a list or table of data arranged as rows and columns with rows as the records, or each observation entered the database and columns are called fields, which present the attributes or descriptions of each record (See Figure 2).

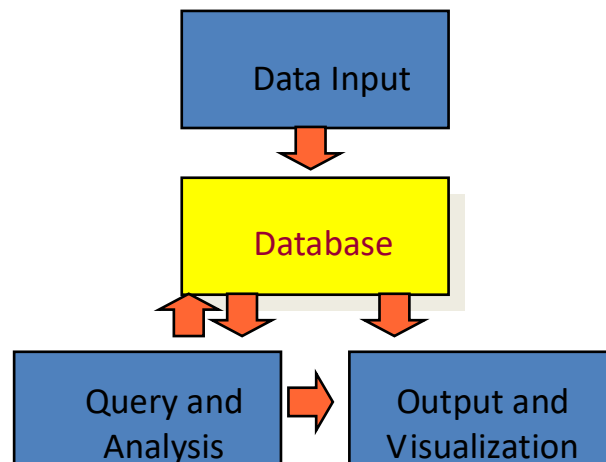


Fig. 2. GIS Data flow

## GEOCODING

The process of converting implicit geographic data into explicit or map form images is called “geocoding” [4]

## GIS ANALYSIS

GIS analysis for data mining broadly entails specific operations such as *Multiple-layer Operations*, *Spatial Modelling*, *Surface Modelling*, or *Network Analysis*[4].

Multiple-layer operations comprises of overlaying two layers to observe the changing pattern in land use. An indices map is generated as a product of this overlay.

Spatial Modelling includes modelling of various spatial features such as soil erosion, rainfall-runoff, and air pollution.

Surface Modelling is a 3-dimensional visualisation of surface to represent a variety of phenomena such as population, crime, market potential and topology.

Network Analysis includes transportation problems, location/route analysis, or point pattern analysis.

After all these analyses, the most favourable environment condition is usually determined using grid analysis, flow analysis, slope/aspect analysis to generate a probability model (See Figure-3).

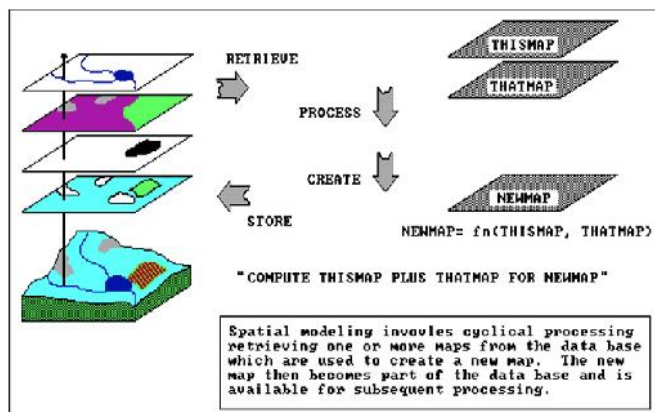


Fig. 3. Integration and modelling of spatial data[1]

## Point-in-Polygon and Line-In-Polygon

Point-in-Polygon is a topological overlay procedure which determines the spatial coincidence of points and polygons. For example, this function can be used to analyze an address and find out if it (point) is located within a certain zip code area (polygon).

Line-in-Polygon is a spatial operation in which lines in one coverage are overlaid with polygons of another coverage to determine which

lines, or portions of lines, are contained within the polygons. For example, this function can be used to find out who will be affected when putting in a new powerline in an area.

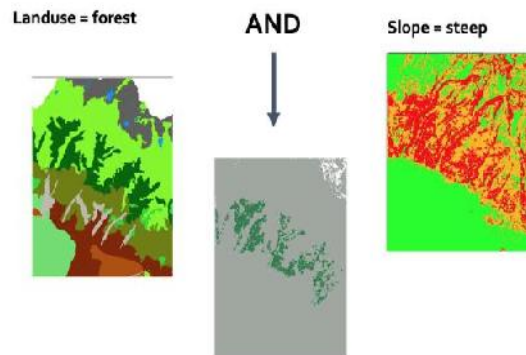


Fig. 4. Overlaying using AND statement

### Applications of Gis In Water Shedprioritization

This section described the detailed case study of using GIS tool for data storage, transformations, and analysis.

#### Introduction

In watershed development programmes, prioritization of watersheds, i.e., ranking of watersheds as per the urgency of human intervention, becomes very important to manage the watersheds efficiently and use the available funds judiciously.

In our approach, remote sensing data provides valuable and up-to-date spatial information on natural resources and physical terrain parameters. The information thus generated can be ported into GIS, which has the capability to integrate and analyse the multi-layered spatial and non-spatial information obtained in a wide variety of formats both from remote sensing and conventional sources. A judicial combination of these two technologies can provide a cost-effective solution for the prioritization of watersheds.

#### Problem Statement & Objective

Finding out the potential of GIS as data integrator, analysis of spatial data and finding out solution according to user defined criterion that is in this case, prioritization of water shed based on various factors.

#### Input Data

**Satellite data:** In order to prepare a land use map of the study area, satellite data of IRS ID LISS III of 18<sup>th</sup> October 2020 and 31<sup>st</sup> January 2021 covering path row 96/58 and 96/59 were used and analysed [6].



**Spatial data:** The spatial data used for analysis was obtained from Table 1 shown below.

Name of Layer	Information Content	Geographic Projection	Remarks
Base map	Settlements, roads, and other location features	LCC, Everest modified	State-wise information available
Wasteland map	Status wasteland (categories and extend)	LCC, Everest modified	State-wise information available
Micro watershed	Spatial location of micro-watershed with codes	LCC, Everest modified	State-wise information available
Village map	Village location and names	LCC, Everest modified	District wise information
Drainage lines	Description	LCC, Everest modified	State-wise information available
Drainage polygon	Description	LCC, Everest modified	State-wise information available

Table 1: Map transformations on GIS

### Data Transformations

The greatest advantage of GIS is the capability of integrating data from various sources which can be in different projection systems. They can be re-projected and transformed to same projection for analysis. The next section shows the process of applying various transformations to data.

### Information Extraction using GIS

Spatial analysis can be of following types:

*Feature combination* – Spatial features of the 2 input layers are overlaid to union/intersect.

*Feature extraction* – 2 layers are overlaid, and the extent of analysis layer decidesthe region to be retained or erased from input layer using clip /erase/split operations.

Feature combination and extraction – Features are spatially combined, extracted and stored as the resultant layer in Identity/update operations.

Figure 6 explains the 3 stages of data extraction using GIS software. Here, the oval shape represents the specific GIS operation being carried out.

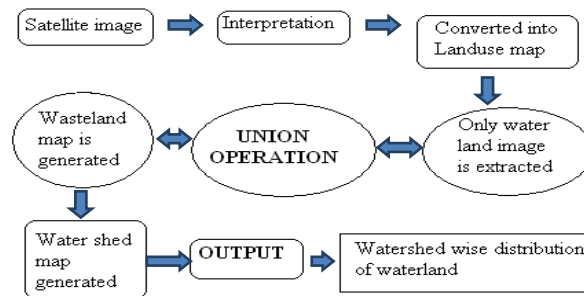


Fig 6: 3 Stages of Data Extraction

The map obtained after the analysis in stage 1 is shown in Figure 7. In stage 2, water body map is generated and required information is extracted in a tabular form (See Figure 9). The final priority map is then obtained with all the required specification of the study area in detail (See Figure 11).

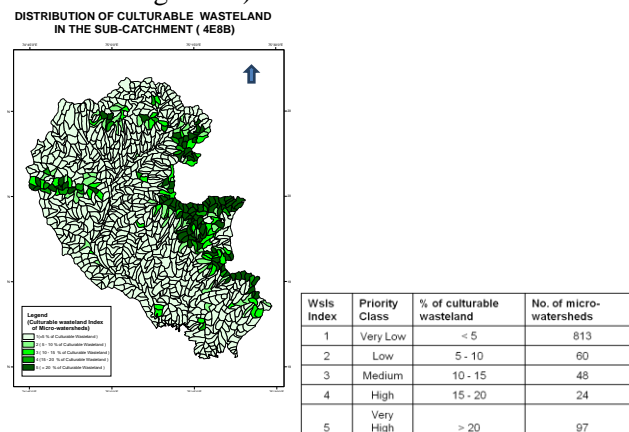


Fig 7: Stage 1 of Data Extraction

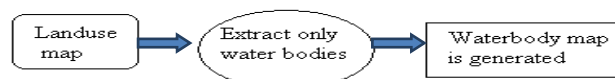


Fig 8: Transition from Stage 1 to Stage 2 of Data Extraction

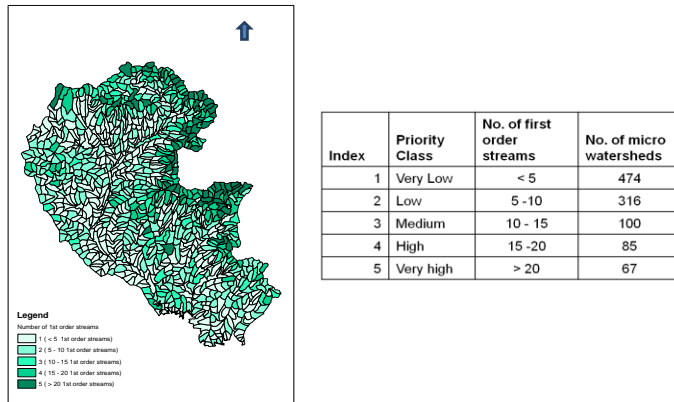
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Fig 9: Stage 2 of Data Extraction



Fig 10: Final stage of Data Extraction

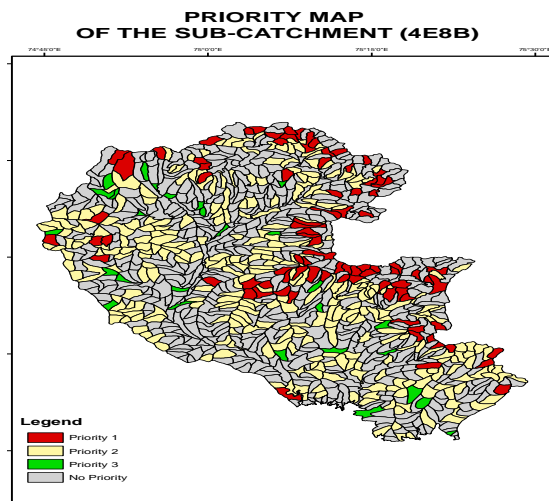


Fig 11: Final priority map generated after multiple GIS transformations

### Conclusion And Future Work

The scope and significance of the present study is the use of GIS and the remote sensing data, to identify the micro watersheds in Maharashtra, according to their characteristics and ranking them based on the prioritization criteria.

The results of data mining for this study, identifies specific priority zones considering various factors.

**Priority1**(425 micro-watersheds) class includes those composite land units (micro watersheds), which need to be treated immediately.

**Priority 2** class (318 micro-watersheds) is those, which need to be treated after Priority 1 areas, and then **Priority 3** areas (28 micro-watersheds) treated subsequently.

The future scope of this study can include next step in the field of large-scale mapping, updating the existing geographical maps, project planning, decision-making and natural resource management. GIS can also be effectively used in calculation of more vulnerable/hazard prone zones and to take up respective preventive measures.

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# **Role of Micro Finance In Women Empowerment Through Self Help Group**

*Dr. Sarita Kumari\**

## **Abstract**

This paper reveals that the rural development is a very dynamic process which includes in improving the socio-economic, political, environmental, and well-being of the poor people living in rural areas. In India more than 70 percent people living in rural areas, the concept of rural development assume great significance. The Saharsa is one of the most backward district these areas have been facing so many problems like unemployment, poverty, lack of skills, illiteracy, and basic infrastructure health care common trend here. The present study is focused on the Socio-Economic status of Self-Help Group on rural development, and to study impact of Self Group on rural development in Saharsa district. The present paper it is based on primary and secondary sources of information.

**Keywords :** Rural Development, Socio Unemployment, Poverty

## **Introduction:**

Development of a state is very much dependent on the growth of rural people. Poverty is physical problem faced by every developing country like India. The fiscal condition is one of the basic needs of the poor rural people of the society for their socio upliftment. Microfinance to Self-Help Group may be measured as a dynamic tool for meeting the fiscal condition of those inferior sections of the society living in rural areas. Since 1999, over 2.25 million SHGs have been recognized with an investment of Rs. 14,403 crores, making over 6.697 million people.

The objective to bring the poor families above the poverty line by ensuring significant increase in income over a period of time, is to be achieved over a process of social mobilization, skill development training programme based on local requirement and capacity building along with the provision of income generating assets over a mix of bank credit and government subsidy. A Self voluntary association of poor people preferably from the same socio-economic back drop. The micro credit given to them makes them

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enterprising it can be all women group, all-men group or even a mixed group.

However, it has been the experience that women's groups perform better in all the important activities of SHGs. The Self-Help Group promotes small savings among its members. The savings are kept with a bank. This common fund is in the name of the SHG.

Usually, the number of members in one SHG does not exceed twenty. SHG is now well now almost two-decade old. It is reported that the SHGs have a role in hastening country's economic development. Mainly, members of the SHGs are women. Therefore, participation of women in the country's economic development is increasing. As majority of the women lack of resources that help contribute to their empowerment and well economic independence through self and entrepreneurial development must be paid attention to. So, the Government of In provided for Self-Help Groups (SHGs).

#### **Definition of SHGs.**

According to the NABARD twenty or less people from a homogenous class who are willing to come together for talking their common problem. They make regular savings and use the joint savings to give interest borrowing loans to their members.

#### **Definition of SHGs.**

#### **Impact of Self-Help Group on Rural Development**

The Self-Help Group contribute for the rural development in the following manner. The saving interference under the groups in the Self-Help Group helps to show punishment on group members in emerging saving practice, the increase self confidence level of the female, and cyclone or any abnormal activities in requirement of funds, income increase and standard of living, in order to change the expression of socio-economic scenario, and Self-Help Group are playing significant role in the self employment by income increase and better standard of living of the rural people. Alleviate poverty and promote economic individuality microfinance is playing a significant role in easing poverty, and rural development. Microfinance to the rural Self-Help Group is a way income increases and better standards living of the rural women. The Self Help Groups have exposed that economic independence of rural women.

The members look to transfer the finance from moneylenders, and friends to Self-Help Group loans to meet these expenditures. Rise self-confidence and self-respect SHGs movement is theoretical to build economic self-reliance of rural poor, create confidence and overcome waste SHGs members have savings in their

name and it gives them increased self confidence and self-respect role with Self-Help Group has reduced family strength due to decreases in financial problems. Make self-employment opportunities the implementation of SHGs programme has made Self-employment opportunities for the poor rural people.

### **Analysis and Interpretation**

Here using secondary data, published by the RDPR report in the year 2014-15 district wise SHG groups entries in Bihar are briefly discussed. Now in this part of the paper briefly discuss and interpretation of primary data gathered through the field survey. In the survey, a total of 70 respondents were personally interview. Their views and opinions are being analyzed.

From the data presented, it can be observed that of the 70 respondents interviewed, about 35.71 percent belong to 18-24 years, 25.72 percent is 21-24 years, 24.29 percent 25-30 years and 14.28 percent belongs to above 30 years. Of the total 70 respondents 21.42 percent is found in illiterate, 48.57 percent in Primary and Secondary, 17.14 percent is in Graduate and a small of 12.86 percent is Above Graduation.

From the data presented, it can be observed that of the 70 respondents interviewed, about 45.71 percent Occupation belong to Agriculture Labour, 32.85 percent Occupation belong to Agriculture, 17.14 percent Occupation belongs to Small Business Activities, 04.82 percent Occupation belongs to Service. Of the total 70 respondents 47.14 percent is found monthly income 2,000-3000, 25.72 percent is found monthly income below 5,000, 15.71 percent is found monthly income 7000-10000, and a small of 11.42 percent is found monthly income above 10,000.

From the data presented, it show that of the 70 respondents interviewed, about 21.42 percent belong to agriculture, 11.42 percent belongs to education, 20.00 percent belongs to the housing purpose, 17.14 percent belongs to the small business activities. Of out of the 70 respondents before joining of SHGs 17.14 per cent belongs to monthly savings 200 rupees before joining, 27.14 percent belongs to monthly savings 200-350 rupees, 35.71 percent belongs to monthly savings 350-500 rupees, 20.00 percent belongs to monthly savings above 500 rupees; of the out of 70 respondents monthly savings after joining SHGs 12.85 percent belongs to monthly savings 200 rupees, 24.28 percent belongs to monthly savings 200-350 rupees, 47.14 percent belongs to monthly savings 350-500 rupees, 15.71 percent belongs to monthly savings above 500 rupees per month.



Data shows that all these mentioned training programmes play a dynamic role in employment generation, all SHGs have imparted training skill on 7.14 percent belongs to agarbathimaking, 02.28 percent belongs to candle making, 47.14 percent belongs to tailoring, 18.57 percent belongs to Minor irrigation, 17.14 percent belongs to animal husbandry, 05.71 percent belongs to appalam, jam and pickle.

#### **Problems Faced by SHGs on Rural Development**

The following are the problems faced by the self-help group's members in the study areas, Male members always dominate the group meetings, micro credit is also small to make a hollow in poverty alleviation and growth, monopolistic power in the hands of NGOs and banking agencies, incapability to catch the market for farm based product rather than industrial product, problem of maintaining the records and books of accounts, irregularity in attending meetings, as majority of the respondents have poor knowledge.

#### **Suggestions**

The following suggestions and conclusion have been made for the improvement of SHG on rural development.

- ☐ The program is helpful in giving education to the children of the family.
- ☐ Regarding savings, since number of members have come down extremely in the urban counterpart, savings has come down extremely as compared to rural counterpart.
- ☐ The activities of the SHGs should focused on those activities which make good return.
- ☐ Internal recovery is better than external recovery. It shows self-help group leaders are severe in recollecting debt fund.
- ☐ The Anganwadi teachers, workers and the president should take care and convince every member and bring co-operation among the members in the rural area.

#### **Conclusion**

The financial support provided the self-help groups for the development of social-economic status are found to have reached the socially backward, and economically marginalized in the study area. Have well done in the nation to alleviate poverty and authorize rural people. The influx of small enterprises and its activities have made a considerable contribution in the socio-economic development of rural poor in the society. The understanding of the significance of self-help

groups in the economic development of rural India by the government of India recognized over 2.25 million SHGs in the country.

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# The 22 Śruti's In Indian Classical Music

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## Abstract

*In this study, it will be shown the origins of the srutis in 2 two perspectives, one which has been deducted by a practical point of view and the second based on the mathematical perspective.*

*The scale which is divided into 22 Srutis in Indian Music is very unique as it has his origins from ancient time. While the world is subject to permanent changes, the theory of the Srutis remained intact until today. This research papaer will be based on the findings in the NatyaShastra written by Bharata Muni.*

**Keywords:** Sruti, indian classical music, swar, mathematic

## Introduction

In the studies on traditional Indian music, two main axes have been melodic and rhythmic structures. One of the key concepts that enables the expression of melodic structures is śruti (Sharma, 2006, p. 4).

The origin of śruti, a concept introduced by the Indian musical tradition, is the word śru, meaning "to hear". Accordingly, śruti, which gain the meaning of "hearable" or "distinguishable", are intervals that allow different kinds of distances between pitches to be expressed in traditional Indian music (Sharma, 2006, p.5).

Although a theoretical term that can be traced back thousands of years, it is certainly notable that śruti "what they really are" still remains a current and controversial position in Indian music theory.

## Determination of the Srutis

When the existing approaches to reveal the Śrutis are examined, it is seen that two main ways of thinking dominate. The first of these is the approach that is based on ancient Indian texts and is referred to as the classical system in the literature. The other is an alternative, modern view that examines the traditional Indian sound system through identification with Western Musical concepts.

## Srutis according to the classical system

The earliest document on the nature of the Śrutis is the Nāṭyaśāstra, written by Bharata Muni, which is thought to date from

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the second or third century AD. The manuscript in question is the oldest text on Indian music theory (Thakur, 2015, 515; Jairazbhoy, 1975,38).

In the aforementioned manuscript, the nature and number of śruti is revealed through a theoretical experiment on two vīnā<sup>2</sup>. The results of this experiment show that the octave is a sum of 22 śruti and there are three different types of intervals between frets.

It is understood that Bharata, the author of Nāṭyaśāstra, set out from the music practice of his day in the information he gave. Because, on the axis of the vīnā experiment, there are two ancient music series that seem to be well known at that time. The first of the aforementioned sequences is sadja-grāma (short for sagraṃa), which is accepted as the basic or standard sequence, and the other is called the second “generative” sequence madhyama-grāma (short for magrāma) (Jairazbhoy, 1975, 38; Bake, 1957, 64).

The pitch<sup>3</sup> names used by both series are common. However, in sagraṃa the axis is sound sadja (sa), while in magrama the axis is madhyama (ma). Accordingly, in sagrama the curtains are sa, ri, ga, ma, pa, dha, ni; In magrama, it is listed as ma, pa, dha, ni, sa, ri, ga (Jairazbhoy, 1975,39).

An extremely important difference between the strings is that the spacing between the sounds of the same name actually has different values in the two strings. As it was already known at the time the text was written, the ma-pa interval in magrama is narrower than that in sagrama. It is on this point that Bharata's study of the number of śrutis is built.

Bharata began his famous experiment by first tuning both the vinas according to the sagrama. According to this, the strings of both vina are tuned in full quintet intervals; The pest string is fixed as sa and the treble string as pa<sup>4</sup>. Therefore, the pest string will sound sa openly, and then, by pressing the appropriate points, the ri, ga and ma frets will be heard, respectively. The next fret and the quintet pa emerges from the open form of the treble string. The remaining curtains of the series can also be produced by this wire (Bake, 1957,65).

While one of the vinas maintains this tuning shape, a change is made in the other vina, this time the treble pa string is tuned to the pa sound, which is at a point closer to the ma, constituting the second step of the magrama. So Bharata introduces us to pramana-śruti (measurer/standard śruti) through the difference between the two distinct pa sounds in the vīnas. In the later part of the experiment,

After introducing a difference of śruti through two different amounts that the ma-pa interval receives in *sagrāma* and *magrāma*, the experiment continues, the pa wire of the second *vīna* is once again tainted by the same amount, 1 śruti. Accordingly, the curtains, which are already 1 śruti infested on the pa wire, slide one more śruti. As a result of this 2 śruti degeneration, the ga and ni sounds in the second *vīna* have reached the point where ri and dha are according to the first *vīna*, which preserves the original pitches. This overlap proves that there are 2 śruti between ri-ga and dha-ni.

It is possible to visualize this scrolling process as follows, considering each point a śruti:

●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	(●)
Pa			Dha		Ni			Sa		Ri		Ga			Ma				(Pa)

	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	(●)
I	Pa			Dba	Ni			Sa		Ri		Ga			Mn			(Pa)	
II			Dba <sub>1</sub>	Ni <sub>1</sub>			Sa <sub>1</sub>		Ri <sub>1</sub>		Ga <sub>1</sub>			Mn <sub>1</sub>			(Pa <sub>1</sub> )		

	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	(•)
I	Pa		Df <sub>a</sub>	Ni		Sa	Ri	Ga		Md		Pg							
II	Df <sub>a2</sub>	Ni <sub>2</sub>		Sa <sub>2</sub>	Ri <sub>2</sub>	Ga <sub>2</sub>		Md <sub>2</sub>		Pg <sub>2</sub>									

	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	(•)
I	P <sub>n</sub>			D <sub>n</sub> a	Ni			S <sub>a</sub>		R <sub>i</sub>	G <sub>a</sub>			M <sub>a</sub>					(P <sub>a</sub> )	
II	D <sub>n</sub> a <sub>1</sub>	N <sub>i</sub>			S <sub>a</sub> <sub>1</sub>	R <sub>i</sub> <sub>1</sub>		G <sub>a</sub> <sub>1</sub>			M <sub>a</sub> <sub>1</sub>			(P <sub>a</sub> ) <sub>1</sub>						

**Figure 5. Pa strings of Vīnas: 4śrutis**

	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
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As it can be seen, Bharata called the difference between the ma-pa intervals in the two basic sequences known in his time, *prāmaṇa-śruti*, and researched how many steps to reach his neighbor on the lower end by shifting the curtains by this amount step by step, and in this way he revealed that there are three types of intervals of 4, 3 and 2 *śruti*.

In the light of this information, the distribution of śruti in the two series given by Bharata can be shown as follows (Bake, 1957, 64):

## Sagrāma

Sa	Ri	Ga	Ma	Pa	Dha	Ni	(Sa <sup>·6</sup> )
3	2	4	4	3	2	4	

## Magrāma

Ma	Pa	Dha	Ni	Sa	Ri	Ga	(Ma')
3	4	2	4	3	2		4

An interesting point here is that Bharata directly related the concept of śruti, which is used to measure the distance between curtains, to the curtains themselves. For example, according to him, sa, the first voice of saṅgrāma, has 4 śruti. Afterwards, ri 3, ga 2, ma 4, pa 4, dha 3 and ni are expressed as 2 śruti sounds. Therefore, the śruti order of the standard sequence saṅgrāma is indicated as 4, 3, 2, 4, 4, 3, 2. Similarly, maṅgrāma shows a distribution as 4, 3, 4, 2, 4, 3, 2. This seemingly fuzzy approach becomes clear when considering the vina's experiment, and it is understood that Bharata's values for curtains are not unique to the curtain, but express the distance between it and its neighbor on the lower side (Bake, 1957, 62-64).

The answer to the question of why there are three intervals of different sizes is hidden in vedic melodies. It has been determined that three intervals are used in the melody of these religious texts, which have been transmitted with relative preservation for thousands of years, depending on the principle of not tiring the sound, and that these intervals are almost half, full and an intermediate sound with a value between two. This coincides with the interval distribution of Bharata (Jairazbhoy, 1975, 47, 51, 52).

The way Bharata's experiment was carried out is quite remarkable because some approaches found in Greek theory of the same period are not present here. For example, while the Greek theory expressed its ranges by dividing the octave and using the ratio principle, Bharata went to a calculation based only on practice and ear, far from mathematical precision. Practical music is in such a central position that even the quality of the *prāmana-śruti*, which is the unit by which it will detect other intervals, is based on the knowledge of the sequences it mentions already, and the shifting experiment is entirely done by ear only (Bake, 1957, 67).

Accordingly, the experiment, which seems to work flawlessly in theory, has led to many inconsistencies in practice, allowing the *śruti* to be appraised with many different values, thus allowing many dissimilar frequency tables to be prepared. and the *śruti* phenomenon as an unclear theoretical issue that is studied even today.

#### **ŚRUTI ACCOUNT TODAY**

Since the beginning of the twentieth century, it is seen that mostly the Indian sound system and especially the *śruti* phenomenon take place in the axis of the studies on Indian music theory. The aim of these studies is; It is to express these small intervals, which find a place in the performance but whose quality is perceived only by ear, as objectively measurable frequency ratios (Rahaim, 2011, 664).

The three types of intervals of 4,3 and 2 *śruti* pointed out by the ancient text of Bharata directly bring to mind the system of incarnations that has been introduced in Western music theory. Because, the presence of a large whole tone expressed with a frequency ratio of 9/8, a small whole tone with a fraction of 10/9, and a semitone with a ratio of 16/15 suggest a possible bond with the ratios of 4-3-2 (Kaur, 2014, p. 18).

A marriage between these two sound systems within a highly contemporary approach purports to provide an objective explanation for the nature of the *śrutis*.

The architect of the current approach in question, originally a medical doctor, Dr. Vidhyadhar Oke. Oke not only explained the 22 *śruti* based on the nativity system, but also modified the harmonium, the well-known instrument of Indian music, in such a way that it could hear these microtones, and patented the instrument he developed by giving it the name Melodium (Kaur, 2014, 22).

Being a harmonium artist himself, he ended his medical career in 2004 and turned to music entirely and gained a central position in

śruti theory with his work in a wide variety of environments after that date.

At the heart of Oke's attempt to express the 22 śruti with mathematical precision is the three frequency ratios—the ratio of the octave, quintet, and major triad to the fundamental sound—in the chant he refers to as the natural scale. It is known that in the Doğuşkanlar scale, the frequency value of the octave is 2 times the basic sound, the ratio of the quintet to the basic sound is  $3/2$ , and the major triad is  $5/4$  (Barbour, 1951, x).

Oke also gives the aforementioned frequency ratios as octave=2, quintet=1.5 and major triad=1.25, respectively, so he expresses the sa-ga-pa triad<sup>9</sup> as 100-125-150 to facilitate his further calculations.

By applying the same relation to the quintet (pa) and quartet (ma) this time, other pitches of the diatonic scale can be determined, since ma-dha-sa and pa-ni-ri also reflect the same grand triad-quintet pattern. When the basic sound, sa, is accepted as 100, the values of the other sounds are calculated as follows:

**Figure 7. Three Triads by Birth Ratio**

Sa	Ga	Pa
<b>100</b>	$100 * 5/4 = \mathbf{125}$	$100 * 3/2 = \mathbf{150}$

Ma	Dha	Sa'
$100 * 4/3 = \mathbf{133,33}$	$133,33 * 5/4 = \mathbf{166,66}$	$133,33 * 3/2 = \mathbf{200}$

Pa	Ni	Ri'
<b>150</b>	$150 * 5/4 = \mathbf{187,5}$	$150 * 3/2 = \mathbf{225}$

In the above figure, when the sounds with frequency values are arranged consecutively, the sequence sa-ri-ga-ma-pa-dha-ni-(sa) is obtained. It is seen that this sequence is actually obtained by repeating the sa-ma tetrachord in sa and pa.

**Figure 8. Sa-Ma Tetrachord**

Sa	Ri	Ga	Ma
<b>100</b>	$\mathbf{112,5}$ <sup>11</sup>	<b>125</b>	<b>133,33</b>

Pa	Dha	Ni	Sa'
<b>150</b>	<b>166,66</b>	<b>187,5</b>	<b>200</b>



There is a second, well-known way to arrive at the diatonic sequence given above. Again, in accordance with the principle of "the quintet has the ratio of 3/2" given by nature, the same seven sounds can be calculated by establishing a quintet chain. In the table below, each column reflects the frets, the quintet of the previous one:

**Figure 9.**

Sa	Pa	Ri	Dha	Ga	Ni
<b>100</b>	<b>150</b>	$\frac{150 \times 3/2}{2}$ <b>=112,5</b>	$\frac{112,5 \times 3/2}{2}$ <b>=168,75</b>	$\frac{168,75 \times 3/2}{2}$ <b>=126,56</b>	$\frac{126,56 \times 3/2}{2}$ <b>=189,84</b>

Considering that the above values are taken as a basis and the place of the octave and quadruple interval is not changed, the tetrachords take the following form this time:

**Figure 10. Sa-Ma Tetrachord**

Sa	Ri	Ga	Ma
<b>100</b>	<b>112,5</b>	<b>126,56</b>	<b>133,33</b>

Pa	Dha	Ni	Sa'
<b>150</b>	<b>168,75</b>	<b>189,84</b>	<b>200</b>

It will immediately draw attention that the frequency values of some pitches change in these tetrachords formed according to the chain of quintets, and that different values are reached with the natural scale. Here's the difference between natural intervals and the values given by math.

**Figure 11. Comparison of quintet**

	Sa	Ri	Ga	Ma	Pa	Dha	Ni	Sa'
<b>Doğuşkanlar Sistemi</b>	100	112,5	125	133,33	150	166,66	187,5	200
<b>Beşliler Zinciri</b>	100	112,5	126,56	133,33	150	168,75	189,84	200

As can be seen from the tables, while the ri-ga interval has a frequency difference of 11.11% in the natural sequence, it reflects a difference of 12.5% compared to the Pythagorean quintets. These two full-range types are already known as the 9/8 large full tone and the 10/9 small full tone in the natural scale (Daniélou, 2014, 29). The two "versions" of full tone, major and minor, also apply to the intervals of sar-ri, ri-ga, pa-dha, and dha-ni. Only the full pitch of the ma-pa remains constant as pa is an achal (non-moving) pitch<sup>13</sup>.

Again, it is obvious that the gamma interval takes different values according to the two systems: While the frequency increase in the natural string is 6.66%, the increase amount is 5.35% compared to the quintet chain. There are two versions, narrow and wide.

In light of this information, Dr. Oke identifies four types of binary spacings derived from the ternary sequence and quintet: 5.35%, 6.66%, 11.11%, and 12.5% increments.

Accordingly, the application of these frequency increase rates to suddha15 sounds reveals 22 śruti:

**Figure 12. 22 Śruti: Frequency increase percentages**

Suddha Svara	% Freq inc percentages	swar	Frequency	Śruti Nr.
Sa			100,00	1
	5,35	ri1	105,35	2
	6,66	ri2	106,66	3
	11,11	Ri1	111,11	4
	12,5	Ri2	112,50	5
Ri			112,50	
	5,35	ga1	118,51	6
	6,66	ga2	120,00	7
	11,11	Ga1	125,00	8
	12,5	Ga2	126,56	9
Ga			126,56	
	5,35	Ma1	133,33	10
	6,66	Ma2	135,00	11
	11,11	ma1	140,62	12
	12,5	ma2	142,38	13
Pa			150,00	14
	5,35	dha1	158,02	15
	6,66	dha2	160,00	16
	11,11	Dha1	166,66	17
	12,5	Dha2	168,75	18
Dha			168,75	
	5,35	ni1	177,77	19
	6,66	ni2	180,00	20
	11,11	Ni1	187,50	21
	12,5	Ni2	189,84	22
(Sa')			(200,00)	(1)

As can be seen from the table, suddha sounds are shown in capital letters, and komall6 or tīvra pitches are in lowercase.

The same findings can also be expressed in terms of ratios. The fractional equivalent of the frequency increase rates given above, from smallest to largest, is as follows (Daniélou, 2014, 30):

**Figure 13. Frequency Increase Amount-Ratio Conversion**

5,35	256/243	Sa'/Ni <sup>17</sup> 2 : 243/128	limma
6,66	16/15	Ma/Ga 4/3 : 5/4	Small half ote
11,11	10/9	Ga/Ri 5/4 : 9/8	Big half note
12,50	9/8	Sa-Pa-Ri'-Ri (3/2*3/2) : 2	Big full note

As a result of the application of the given ratios, the śruti values can be expressed in terms of ratios as follows:

**Figure 14: 22 Śruti: proportions**

Śruti Nr.	Swara	Ratio	Ratio calculation
1	Sa	1/1	
2	ri1	256/243	1/1 (Sa)*256/243
3	ri2	16/15	1/1 (Sa)*16/15
4	Ri1	10/9	1/1 (Sa)*10/9
5	Ri2	9/8	1/1 (Sa)*9/8
6	ga1	32/27	9/8 (Ri2)*256/243
7	ga2	6/5	9/8 (Ri2)*16/15
8	Ga1	5/4	9/8 (Ri2)*10/9
9	Ga2	81/64	9/8 (Ri2)*9/8
10	Ma1	4/3	81/64 (Ga2)*256/243
11	Ma2	27/20	81/64 (Ga2)*16/15
12	ma1	45/32	81/64 (Ga2)*10/9
13	ma2	729/512	81/64 (Ga2)*9/8
14	Pa	3/2	1/1 (Sa)*3/2
15	dha1	128/81	3/2 (Pa)*256/243
16	dha2	8/5	3/2 (Pa)*16/15
17	Dha1	5/3	3/2 (Pa)*10/9

18	Dha2	27/16	3/2 (Pa)*9/8
19	ni1	16/9	27/16 (Dha2)*256/243
20	ni2	9/5	27/16 (Dha2)*16/15
21	Ni1	15/8	27/16 (Dha2)*10/9
22	Ni2	243/128	27/16 (Dha2)*9/8
(1)	(Sa')	(2/1)	(1/1 (Sa)*2/1)

According to this, there are four frets with the same name within the binary interval: The frets in the small semitone (limma) interval compared to the pest neighbor have the title of aticomāl, and the ones in the large semitone have the title of komāl. Small full-tone suddha are considered, while large full-tone pitches with the widest range are prefixed with tīvra. For example, if we start from Sa, the closest pitch 256/243 ratio aticomāl rishabha (ri1), then 16/15 ratio komāl rishabha (ri2), then 10/9 ratio suddha rishabha (Ri1) and finally 9/8 fold frequency tīvra rishabha (Ri2). Then, it continues with aticomāl gandhar (ga1) and 16/15 ratio komāl gandhar (ga2), which is again 256/243 away from Ri2, other frets can be determined in the same way 18.

If the ratios of the mentioned curtains to each other are examined, an invariable pattern will be determined:

**Figure 15. Inter-Act Ratios**

Sa	Atikomāl ri (ri1)	Komāl ri (ri2)	Suddha Ri (Ri1)	Tīvra Ri (Ri2)	Atikomāl ga (ga1)	Komāl ga (ga2)	Suddha Ga (Ga1)	Tīvra Ga (Ga2)
1/1	256/243 3	16/15 5	10/9 9	9/8	32/27 7	6/5	5/4	81/64 4
	256/243	16/15	10/9	9/8	32/27	6/5	5/4	81/64
1/1	256/243	16/15	10/9	9/8	32/27	6/5	5/4	
	=256/243	=81/80	=25/24	=81/80	=256/243	=81/80	=25/24	=81/80

In the figure; While the top line includes the pitch names and the frequency fraction according to the right pitch, the bottom line separated by a line includes the calculation for the ratio of the frequency fractions of the two adjacent pitches to each other.

As can be followed from the last line, the order of 256/243, 81/80, 25/24, 81/80 continues by repeating itself. Dr. Oke, the three species ranges that make up this order are respectively poorna śruti (256/243), pramāṇa śruti (81/80) and nyūna śruti (25/24). names19.

Thus, the great full tone corresponds to the sum of one poorna śruti, one pramāṇa śruti, one nyūna śruti, and again one

pramana śruti: The mathematical expression for this sum is  $256/243 \times 81/80 \times 25/24 \times 81/80 = 41990400/37324800 = 1.125$ . It is possible as  $9/8 = 1.125$ .

### Conclusion

The concept of śruti, which is seen as one of the building blocks of traditional Indian music and has found expression in both theory and performance, has certainly been tried to be explained with different approaches and different paradigms in its millennial history. From today's perspective, it seems likely that these various forms of demonstration would come together.

If the ancient text of Bharata is interpreted in the light of Oke's findings; of the two strings given here, the sounds of saṅgrāma in Oke, given the number of śruti,

According to the notation, it can be judged to be Sa, Ri1, ga1, Ma, Pa, Dha1 and ni1. If the second sequence, magrāma, is built on the same axis sound, this time Sa, Ri1, Ga1, Ma, Pa, Dha1 and ni1 sequences emerge.

Thanks to this view, Bharata's theoretical approach, which is based on hearing and reduces microtons with different ratios to "the same amount", was able to be expressed mathematically, and it was possible to reconcile ancient and modern approaches.

In this manner; In order to pave the way for studies to be carried out in our country on traditional Indian music, it is one of our greatest wishes that such publications in our mother tongue will increase in order to understand and analyze the aforementioned music culture correctly.

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# **Examining The Role of Monetary Policy In Increasing The Aggregate Rate of Savings In The Economy**

*Patel Hard Ujjval, Vrinda Yogesh Dave & Dr. Pinal Barot\**

## **Abstract**

The role of monetary policy is critical. People's ability to save and invest can be affected by changes in the country's monetary policy, which sets the country's interest rates and inflation targets. Monetary policy is also used to reduce aggregate spending when inflation is on the rise by reducing the money supply or raising the interest rate. It's important to keep in mind that monetary policy in developing countries encourages economic growth in addition to achieving equilibrium like full employment or the potential output level.

**Keywords :** *Monetary policy, savings, economic growth, equilibrium*

## **Introduction**

Economic growth and price stability are the primary objectives of monetary programs in developing countries. In order to maintain long-term stability, it really is generally accepted that money supply growth must keep pace with demand, which would be assumed to be linked to national income. It is the transmission of the central bank's policy actions to achieve the ultimate goals of economic growth and inflation through monetary policy. There are two phases policy. First, the policy shock has an effect on various financial market segments. In the second phase, it enters the real economy, thereby affecting the savings of household in economy. How adjustments in monetary policy actually impact household, firm, and bank behavior is critical to the policy transmission mechanism. Banks are on the supply side, providing credit and facilitating efficient resource allocation for households and businesses. Authors have examined how level of savings alter by monetary policy in this paper.

## **Reserve Bank of India**

On April 1, 1935, the Apex Bank (RBI) of India was officially established. First, the Central Bank was conceived as a shareholders' bank in accordance with the model used by renowned

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foreign central banks at the time of its establishment. The bank had a total equity of Rs. 5 crore, which was divided into 100 shares. The private shareholders contributed Rs. 4, 97, 80,000, while the government contributed Rs. 2, 20,000. Central bank (RBI) began operations on January 1, 1949.

"Credit gaps" are meant to be closed, as per the Reserve Bank of India's Bulletin. For example, "to regulate the issue of banking notes and the keeping of reserve with view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantages" are stated in preamble to Reserve Bank Act, 1934, which established the Reserve Bank of India.

#### **OBJECTIVES OF RBI:**

**The main objectives of RBI** are stated below:

- To maintain economic stability and credit by regulating financial policy
- Expanding banking infrastructure across the country, independent of political influence.
- As the note issuance authority, bankers' bank and the banker to government, the Reserve Bank of India (RBI) is tasked with promoting economic growth within the government's overall economic policy while maintaining price stability and many others.

**Monetary Policy-** Managing an economy's money supply and growth rate is the function of monetary policy. Macroeconomic variables, like inflation and unemployment, can be effectively regulated using this tool. It is possible for the central bank of a country to implement monetary policy in order to regulate the overall supply of money and achieve long-term economic stability. The two major tools which influence the savings of households are repo rate and reverse repo rates.

**Repo Rate:** The repo rate, also known as the key short-term lending rate, is commonly referred to as the Indian interest rate. The RBI offers the repo rate, an interest rate with a one-day maturity, to banks in need of rupees. RBI will decrease the repo rate if it wants to increase the amount of money in circulation. When banks deposit funds with the central bank, they earn interest called the reverse repo rate. The repo rate always is higher than the reverse repo rate. Interest rates on bank services such as loans, mortgages, and savings are affected by changes in the repo as well as reverse repo rates.



**REVERSE REPO RATE:** The RBI also employs a reverse repo rate to keep a check on rising prices. As a result, the Reserve Bank of India (RBI) tends to increase the reverse repo rate. This means that banks now have a place to put their money that will earn them a higher rate of interest than they were previously able to. The money they have in the hands of RBI is completely secure. It's completely risk-free.

Central banks use monetary policy as a set of tools that they could use to promote economic growth by controlling the flow of capital available to banks, customers, and businesses in a particular country. By controlling the supply of money available to the country's banks, consumers, and businesses, monetary policy could be used to enhance sustainable growth. One of the most important objectives is to keep the economy growing steadily but not too fast or too slowly. The changes in monetary tools can have a direct effect on savings of households. The sector-wise savings can be seen from Table-2, where the proportion of household savings is seen increasing in past 5 years.

Effective monetary policy can have a positive impact on all of the above-mentioned conditions for economic expansion. To increase the overall saving rate, a variety of monetary policies can be implemented. To begin, a policy of high interest rates can encourage people to save money.

Over the years, the Apex Bank has used a variety of tools to guide the country's monetary policy. The volume of available credit to the economy can be influenced indirectly through bank rate policy. Commercial banks' willingness to borrow or invest money is influenced by how much credit is available to them and how much it costs. Commercial banks' cash reserves can be directly controlled through the Cash Reserve Ratio (CRR) as well as Statutory Liquidity Ratio (SLR) methods. The purchase or sell securities by commercial banks can influence their cash reserves, which in turn influences the volume of credit. Therefore, the economic development of the securities market is critical to a successful of this policy.

The Liquidity Adjustment Facility (LAF) includes repo and reverse repo rates, which give the Reserve Bank daily control over market liquidity and the ability to send interest rate signals to the market. A rise in economic output or income is a result of an increase in the economy's industrial output or capital stock. Economic expansion can be boosted by increasing the rate at which people save is well-known.

- (a) There must be an increase in savings in the economy;
- (b) the mobilization of such savings so that they can be used for investment and production;

It is possible to increase the overall rate of saving through various monetary policies. To begin, a policy of high interest rates can encourage people to save money. Since developing countries had a limited supply of capital in the 1950s and 1960s, it was widely assumed that lending rates must be kept high to encourage saving and to speed up the accumulation of capital. In developing countries, this argument was predicated on the theory that savings were favorably elastic or responsive to the rate of interest. However, this belief was not supported by empirical evidence.

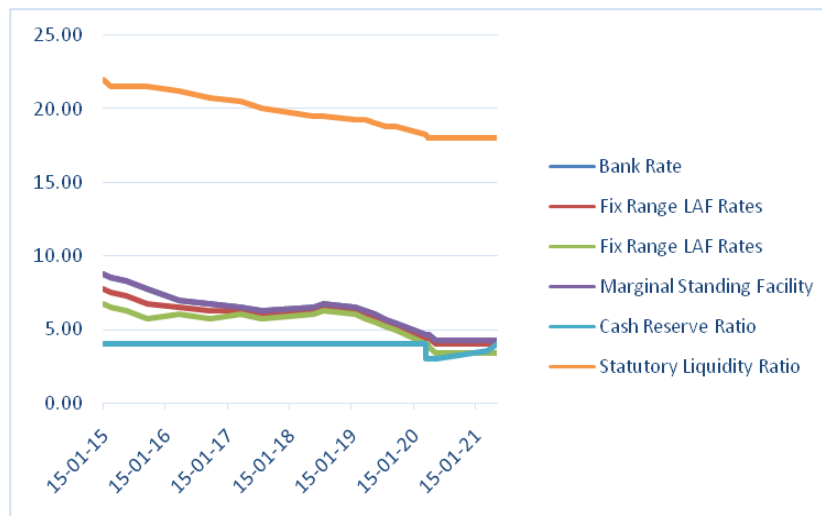
Changes in the Indian monetary policy framework have necessitated changes in operating targets and processes, which are now based on multiple indicators. The development of the financial markets has facilitated the transfer of regulation transmissions through interest rates, resulting in a shift from quantifiable intermediate objectives to interest rates. Furthermore, the availability of various instruments like the CRR and OMO, including the LAF and MSS, has provided monetary operations with the necessary flexibility.

Countercyclical monetary policy has resulted in significant cuts to key monetary policy rates like the bank rate as well as the repo rate, which have been implemented since 1998. In August 2019, the bank rate was 5.65%; by March 2020, it had dropped to 4.65%. The repo rate was also reduced from 5.15% in October 2019 to 4.00% in May 2021, a significant decrease. Due to the severe impact of the COVID-19 outbreak, IT resources were depleted, resulting in decreased liquidity in the financial markets and an increase in the volatility of financial product prices. As a result, the Reserve Bank has been able to reduce trading hours for a number of markets governed by the central bank beginning on April 7, 2020. Following the gradual lifting of restrictions on people's freedom of movement and the restoration of normal business operations in office spaces, it was decided to gradually restore trading hours starting on November 9, 2020.

### Major monetary policy rates in past five years:

Table 1: Major Monetary Policy Rates And Reserve Requirements - Bank Rate, LAF (REPO, REVERSE REPO AND MSF) RATES, CRR & SLR						
(Per cent)						
Effective Date	Bank Rate	Fix Range LAF Rates		Marginal Standing Facility	Cash Reserve Ratio	Statutory Liquidity Ratio
		Repo	Reverse			
15-01-15	8.75	7.75	6.75	8.75	4.00	22.00
04-03-15	8.50	7.50	6.50	8.50	4.00	21.50
02-06-15	8.25	7.25	6.25	8.25	4.00	21.50
29-09-15	7.75	6.75	5.75	7.75	4.00	21.50
05-04-16	7.00	6.50	6.00	7.00	4.00	21.25
04-10-16	6.75	6.25	5.75	6.75	4.00	20.75
06-04-17	6.50	6.25	6.00	6.50	4.00	20.50
02-08-17	6.25	6.00	5.75	6.25	4.00	20.00
06-06-18	6.50	6.25	6.00	6.50	4.00	19.50
01-08-18	6.75	6.50	6.25	6.75	4.00	19.50
07-02-19	6.50	6.25	6.00	6.50	4.00	19.25
04-04-19	6.25	6.00	5.75	6.25	4.00	19.25
06-06-19	6.00	5.75	5.50	6.00	4.00	19.00
07-08-19	5.65	5.40	5.15	5.65	4.00	18.75
04-10-19	5.40	5.15	4.90	5.40	4.00	18.75
27-03-20	4.65	4.40	4.00	4.65	4.00	18.25
28-03-20	4.65	4.40	4.00	4.65	3.00	18.25
11-04-20	4.65	4.40	4.00	4.65	3.00	18.00
17-04-20	4.65	4.40	3.75	4.65	3.00	18.00
22-05-20	4.25	4.00	3.35	4.25	3.00	18.00
27-03-21	4.25	4.00	3.35	4.25	3.50	18.00
22-05-21	4.25	4.00	3.35	4.25	4.00	18.00
Source: Annual Report of RBI, 2021						

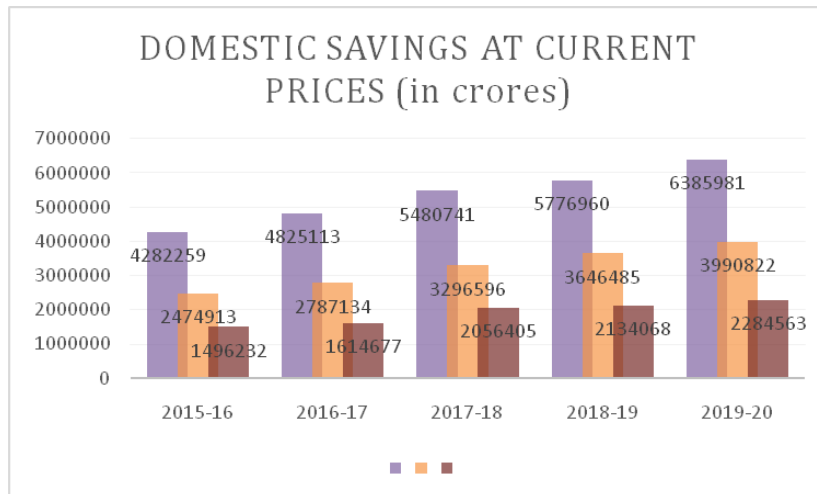
Source: Annual Report of RBI, 2021



An opposing view on interest rate policy, which has gained considerable traction in recent years, deserves to be mentioned. For Keynes, the interest rate is an indicator of the investment cost, and therefore the lower the interest rate on a loan should be to encourage more investment. Keynes, on the other hand, argued that lower interest rates had little effect on investment and that cheap or easy money creation as a part of monetary policy was ineffective in reviving the economy. Dr. K.N. Raj tried to argue that lowering interest rates is the best way to encourage investment in developing countries because it is a key factor in economic growth.

<b>TABLE 2 : Sector-Wise Domestic Saving At Current Prices</b>					
(Amount in ₹ Crore)					
Item	2015-16	2016-17	2017-18	2018-19	2019-20
Gross Savings	4282259	4825113	5480741	5776960	6385981
Household sector	2474913	2787134	3296596	3646485	3990822
Gross financial saving	1496232	1614677	2056405	2134068	2284563

**Source :** National Statistical Office (NSO).



A developing country's economic growth will be boosted if its monetary policy focuses on increasing the amount of money saved. Remember that the real interest rate is the nominal interest rate minus the inflation rate. We believe that in order to provide a fair return on savings, the real interest rate should be positive and, preferably, not expected to fall below 5% per year.

Therefore, in order to maintain savings incentives, the nominal interest rate should be increased as inflation rises. For example, deposit and lending rates given to the customers by banks in India have prompted investors to spend one's savings in investments like gold, jewellery, and real estate in recent years (2011–12 and 2012–13). Because of this, the amount of money saved for productive investment decreased. Chidambaram's budget for 2013-14 stated that inflation-indexed bonds would be issued, with the nominal interest rate rising automatically with inflation.

Even more importantly, the expansion of banks and financial intermediaries can help boost national savings in developing countries, particularly in rural areas. To encourage people who spend all of their extra money to save it in a safe place, more banks should open in areas that are currently underbanked and underdeveloped. To encourage saving, commercial banking offers a saving rates in the form of a bank deposit interest rate.

It also encourages people to save more money by allowing them to invest their savings in mutual funds that are linked to equity and other savings schemes that allow people to invest their savings in more productive and worthwhile investments, such as land, real

estate, gold, and jewellery. Banks, however, are needed in both cities and suburbs in order to tap as well as raise savings adequately and to prevent their unproductive use. According to Professor Lewis, an advancement economist, the quantity of savings depends in part on the availability of banks and financial institutions in a country's economic development experience. Individuals save more if the nearest financial institution is right in front of them than if it is a long distance away.

As a result, when a rational real rate of interest is pursued, savings growth in the form of financial deposits will be greater. It's also likely that people will save more for the purchase of financial assets as the number of financial institutions grows. Aggregate savings have risen significantly as a result of rapid widening of bank services after major commercial banks were nationalised by the Reserve Bank in 1969.

Bank deposits, that also accounted for 12.61% of total household savings in 2016-17 but accounted for 47.33 percent of all these savings in 2018-19, have increased from 12.61% of total household savings in 2016-17 to a rate of 47.33% in 2018-19, post demonetization.

It should be noted that maintaining reasonable price stability is necessary to enable the banking system to mobilize an increasing portion of savings. According to Dr. Manmohan Singh when he served as Reserve Bank of India Governor: "It will be less attractive for people to save in the type of physical forms of investment, gold, and take on more responsibility of inventories if there is reasonable price stability. A further requirement for banks to be able to mobilize sufficient savings is that rates of interest on bank deposits remain positive on a real-terms basis. In other words, interest rates must be kept higher than inflation. A negative real interest rate will deter people from saving if prices rise too rapidly.

The fixed-rate reverse repo took in more liquidity, rising from an average of 4.3 lakh crore every two weeks between January 16 and 29 of 2021 to 4.9 lakh crore every two weeks between January 30 and March 31 of 2021. It was also reaffirmed by the Reserve Bank that it would continue to provide sufficient liquidity in the financial system. Additional measures were announced by the Reserve Bank of India on February 5, 2021, which included (I) allowing banks to NBFCs under TLTRO on Tap scheme for additional bank loans to defined stressed segments; (II) steady recovery of CRR in 2 phases in such a non-disruptive way to 3.5

percent on effect from March 27, 2021, and 4.0 percent effective since May 22, 2021; (III) relaxation in the availing of funds.

### **Conclusion :**

The above requirements for economic growth can be met with proper monetary policy. To increase the overall saving rate, a variety of monetary policies can be implemented. A policy of high interest rates can encourage people to save money. There should be incentives for saving in a developing country, according to our view, by adopting a rational favorable real interest rate strategy the country's economic growth will be boosted by increased savings, which will lead to more funds available for investment. The expansion of bank services and other financial firms in developing countries, particularly in rural areas, can play an integral role in elevating national savings through monetary policy. Savings mobilization is just as critical as saving more money; without effective savings mobilization, there will be insufficient investment to spur economic growth.

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## Folk Tradition of Varanasi: Past and Present

*Dr. Sourabh Tripathi\**

**Abstract:** *Varanasi claim's to be one of the world's oldest living cities if literary evidence is considered, as testified by a few references to it in Vedic literature<sup>1</sup>. Varanasi has grown to be considerably more comprehensive than the other cities because it is thought to be the world's oldest and most diversified living city. Kashi is one of the world's oldest cities, with a three-thousand-year history of consistency, integrity, antiquity, and holiness. "If we imagine the ancient Acropolis and the Agora of Athens still alive with the intellectual, cultural, and ceremonial traditions of classical Greece, then it must be much more similar to the present Varanasi, Diana L. Eck writes in Banaras: City of Light<sup>2</sup>. Addition to this, the world's oldest cities like Peking, Athens, and Jerusalem are all influenced by a different ethos now than they were in the past, but Varanasi still gives the glimpses of ancient culture and tradition with continuity<sup>3</sup>. We could easily found the evidence of folk religion and cultures from the current life of Varanasi itself, so many places are still on the name of local deities like Lahura Veer, Bhoju Veer, Dediya Veer and Bhoga Veer. Even if anyone visit Banaras Hindu University, campus he can see that there are two small shrines dedicated of folk gods, one is near faculty of arts called as Akela Baba and the second one is near to the Triveni Girls hostel compound. In this paper we have tried to present the diverse nature of folk tradition in Varanasi, specially the religious aspects on the basis of archeological findings from the various archeological sites.*

**Introduction:** Varanasi, known as the "City of Shiva," has seen many different currents of tradition and religion since the 6th century BC. If one tries to comprehend Varanasi's actual multifaceted landscape, he may come up empty-handed or be amazed by the true nature of this lovely city. Varanasi is now widely recognized as a Shiva city in the minds of the general public. However, if we look into the legacy of this great city then we will find that whatsoever we have seen and understand till now about this city is so limited, as Lewis Mumford wrote that in this city energy has converted itself into the culture<sup>4</sup>. In the history of humanity, the folk tradition is the

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earliest religious belief system<sup>5</sup>. Folk religion, also known as popular religion or mass religion refers to a wide range of religious forms and manifestations that differ from organized religions, traditional doctrines, practices and expressions. Folk religion is more broad than classical religion since it is concerned with the beliefs and faith of the masses, which fluctuate with time and regional geography. Folk culture may not have formed in a vacuum; rather, it must have resulted from the coordination of human living patterns, eating habits, traditions, activities, and many unknown aspects of nature<sup>6</sup>. In Hindi, the word "folk tradition" is translated as "Lok Parampara," which means the beliefs held by many communities that has grown over many years and continues to evolve. The worship of nature and its diverse elements is widely accepted as evidence that the beginnings of folk deities are most likely tied to the early stages of human evolution. In the Vedic period, we can see the growth and development of folk cults, as well as their incorporation into the mainstream belief system of Vedic gods<sup>7</sup>. During the Vedic period, there is evidence of harmony between folk religion and Vedic religion. The process of reconciling Vedic gods with folk deities, according to Vasudev Sharan Agrawal, began during the Vedic period. Various folk deities are naturally mentioned with Vedic deities in an Atharvaveda<sup>8</sup>. One of the hymns Prithvi Sukta<sup>9</sup> (hymn to the earth) of Atharvaveda states that our motherland is home to varied people who speak various languages and practice numerous religions. Folk religion, according to Dr. Vasudev Sharan Agrawal, is the consequence of three important aspects of human life: land, mass, and culture. Different civilizations have adored their local deities in different ways throughout history; idolizing those in the material form established the stable foundation for folk culture, which is still practiced around the world today<sup>10</sup>.

**Folk Tradition in Varanasi:** The folk cult's development was totally dependent on ordinary people's faith and beliefs, not on royal patronage, because it was their popular culture. The earliest tradition of folk cult is related with the Mother Goddess, these goddesses are related with land and productivity. Mother Goddess is recognized as one of the goddesses linked with folk religion in practically all of the world's cultures. We can find indications of Mother Goddess worship in India from the lower Paleolithic period of the Belan valley<sup>11</sup> to the Neolithic period of Mehargarh and Chirand. The size, shape, and design of these idols have changed over time, depending on societal beliefs and customs. Naagmesh, Naag, Kuber, Beer, Yaksha, and

Yakhsini are other major gods in the folk tradition of Varanasi addressed in this paper.

**Mother Goddesses:** The Mother Goddess idols were most likely affiliated with folk religion at first, but through time, they came to be associated with a wide range of religions, resulting in a variety of names and subject matter. Academicians have referred to her as Mother Goddess in general, aside from these variations. If we look at the accounts of excavated archaeological sites in Varanasi, we can see that terracotta figurines have been discovered everywhere from Rajghat, Sarnath, Akatha, and Oriyaghat Ramnagar. It is clear that they were connected to some religious ritual based on their appearances; structure, and carving. During the Rajghat excavation, terracotta figures of Mother Goddess were discovered. Among them is a female figure with a missing genital that dates from 800-600 BC and was created using the sticking technique<sup>12</sup>. From the Rajghat<sup>13</sup>, many clay figures of Mother Goddess dating from the Gupta dynasty have been discovered. One of them is particularly noteworthy; this mother goddess's idol is large, handcrafted, and has a bird-like face. Though the the eye part and nostrils are engraved through sharp lines. All of them appear to be too similar to Kushana period terracotta; it appears that during the Gupta period, when artistic activities in Varanasi were at their pinnacle, a parallel tradition of clay art or terracotta was also in practice.



Fig. 1. Kushana Period, Head figurine of mother goddess (Rajghat)

Fig.2. Kushana Period, Archaic mother goddess (Rajghat)

**Naga Worship:** The worship of snakes appears to be older than that of Yaksha. Snake worship is still practiced throughout India. For ages, this snake-worshipping practice has affected Vedic, Buddhist, and Jain religions. Vishnu sleeps on Sheshnag's bed, named Anant<sup>14</sup>, while Shiva wears a snake garland. The snake is the natural mark of Tirthankaras Parsvanatha in Jainism; nevertheless, according to Buddhist legend, the serpents Nanda and Upananda hailed Buddha after his birth. After obtaining enlightenment, the Buddha spent a lot of time under the Bodhi tree, and Nagraj Muchkund placed a shadow on his head for his comfort<sup>15</sup>. The association between serpents and water is widely established in folklore<sup>16</sup>, and there are numerous incidents relating to this, such as Kaliya Nag, Seshasayi Vishnu, and Varaha Samudra Manthan. There has long been a practice of making serpents in either a pure serpent form or a human-serpent hybrid form. The lowest section of the image is exhibited in a circular shape in mixed form. Varanasi was known for its Naga worship. The Buddha preached the serpent Erakapatta amid a clump of seven Siris trees near Banaras, according to the Dhammapada Aatkatha<sup>17</sup>. Even now, there are vestiges of snake worship in Varanasi. The Naga well (nagakuan) is still respected as a sacred location, and Varanasi

celebrates Nagpanchami. The snake sculpture has been mentioned in Varanasi from the Rajghat's<sup>18</sup> pre-Mauryan phase. This terracotta idol depicts snake gods and goddesses and was cast from a flat mould. The walls of the Kardmeswar temple at Kandwa, which dates from the 13th century AD, are adorned with several serpent images. In addition, pictures of Naga-Nagi are carved on the walls of several Varanasi temples of Varanasi like, Chintamani temple (Pitambpura), on the stairs of Kedar ghat, Raghurajeswar temple of Bhonsala ghat<sup>19</sup>.

**Yaksha Worship:** The yaksha worship tradition has no unique literature; however, the Rig Veda is the first literary mention of yaksha worship, scholars such as A.K. Coomaraswamy<sup>20</sup>, R.N. Mishra<sup>21</sup>, and G.H. Sutherland<sup>22</sup> undertook the first thorough and serious investigation into this topic, suggesting a shift in the origins of this mystical being from a folk deity to subsequent integration in the Brahmanical and Shramanic traditions. The yakshas were recognized as demi-gods worshipped in chaityas in the later Vedic period; the figure of Kuber and a relationship between this class of creatures and other demi-gods such as Rakshasas, Gandharvas, and Asuras were also posited in the centuries that followed<sup>23</sup>. Except for one allusion in the Rig Veda, when the yaksha is described as having a lovely shape, Vedic literature makes no mention of the yaksha's physical personality. We also learn from Jain literature that Yaksha worship was widespread in the 3rd–2nd BC, and that Chaityas of Yakshas were found in every city in North India. Varanasi has a lot of evidence of Yaksha worship dating back to the 1st century BC, including three Yaksha statues discovered in Rajghat<sup>24</sup>. The practise of Yaksha worship in Varanasi dates back to the Mauryan or Sunga dynasties, if not earlier. Yaksha images from the Sunga and pre-Sunga periods can be found in the Bharata Kala Bhavana and the Sarnath museum, both in Varanasi. The Sarnath museum's gallery no.4 houses a damaged image of yaksha from the first century AD. In addition, the Jnana Pravaha, Centre for Cultural Studies & Research Varanasi, includes a terracotta plaque from the second century BC representing the top section of Yaksha gripping a tree branch in both hands<sup>25</sup>.

It is said in Varanasi that no one in this city can survive without the permission of Kala Bhairava, Kotwal(chief of police) of Varanasi, it is believed that in Varanasi, Shiva is the king, Annapurna is the queen and Kala Bhairava is the governor<sup>26</sup>. There are so many shrines scattered in Varanasi which are devoted to the worship of

Bhairavas. The tradition of worshipping Bhairava has same origin as folk gods even it is believed that, one of the manifestations of Bhairava, Dandapani is depicted as a former yaksha in Kashi mythology, who left his status of yaksha to become a devotee of lord Shiva.

**Naigamesha:** Naigamesha is known by many names, including Negamesha, Nemesha, Naigameshin, Negamesi, and Harinegameshi<sup>27</sup>. The word 'Nagmesh' comes from the word "Nigam" or Corporation, which refers to a trader or a group of merchants<sup>28</sup>. The word Nagmesh is first mentioned in the Rigveda's Appendix in the Griha Sutra as Nejmesh<sup>29</sup>. Skanda, Visakha, and Nagmesha are the three masculine planets. Nagmesh, the ninth planet, is known as Pitrugraha (paternal planet) because it protects or guards children, reflecting its unique place among the nine planets<sup>30</sup>. Four male Nagmesh terracottas from the Kushan era were discovered at the Rajghat archaeological site. Among them two Nagmesha terracotta idols are depicted with Yagyopaveet<sup>31</sup>. The Rajghat has yielded eight faceless male Nagmesha clay statues from the Gupta dynasty deposit<sup>32</sup>. In addition, nine female Negmeshi, terracotta from Gupta and post-Gupta periods have been unearthed at the Rajghat archaeological site<sup>33</sup>. The face of the first terracotta resembles that of a goat. A crescent-shaped projection with a hole for hanging the terracotta can be observed on the upper section. The chest is appealing, and the hands are spoon-shaped. The rest of the terracotta in this area appears to be comparable to the terracotta as discussed above<sup>34</sup>.



Fig.3.Naigamesh Image, Rajghat Excavation, ASI Catalogue of Terracotta figurines from Rajghat Excavation (1940)

**Taranakit (Star Shaped Figurines):** The star-shaped figures were made by hand and are an example of proto-terracotta. This can be found in different archaeological sites across North India from the pre-Mauryan to the Gupta periods. Because five knobs or projections have been produced in it through hands, two hands, two legs, and a head that form a star, they are called star-shaped or Taranakit. There are no genital marks of any kind on it. It is said to be an early type of terracotta that has been successfully displayed in human form based on its appearance. Stella Camerish has given them the term timeless because of their uniform shape and the fact that they have been found in numerous archaeological sites<sup>35</sup>. The star-shaped clay figurines found in the Kashi region are comparable to shape of star fish. The physical structure of this sculpture is unclear from the front and back. The twitch method was used to construct the face in some terracotta's, and the eyes were shown through two holes. Their size varies between one and three inches. Two terracotta figures have been discovered at the Rajghat site from the Northern Black Polished Ware ceramic culture phase<sup>36</sup>.



Fig.4. Star shaped figurine, Rajghat Excavation,ASI Catalogue of Terracotta figurines from Rajghat Excavation (1940)

**Conclusion:** Varanasi has a long history of preserving its unique cultural traditions, which has served as a strong basis for material success. On the one hand, the efficiency of arts, crafts, and cottage industry contributed to the city's economic development through commerce and trade; while on the other hand, their technical and creative abilities helped Varanasi gain international recognition. Antiquity and continuity are the two defining characteristics of Varanasi's multi-faceted panorama. As Diana L. Eck beautifully

states in his book “*Banaras City of Light*” that “Banaras has lived through the entire evolution of Indian civilization in North India. The historical currents of the periods have passed through Banaras, from early Aryan kingdoms and rivalries, to the golden Mauryan and Gupta empires, to a thousand years of Muslim and ultimately British dominance. Great sages have pounded their thoughts here, and reformers have arrived with new perspectives<sup>37</sup>”. Varanasi has been the mainstream centre of art, culture and religion since so many centuries, as Prof. Vidula Jayaswal states that the recent C14, dating of Aktha suggest that this place was flourishing even before the arrival of Lord Buddha and because of the popularity and widely acknowledgement of this place in intellectual sphere Buddha has chosen it for his very first sermon<sup>38</sup>. From ancient time to the modern age so many foreigners has visited Varanasi and wrote about the multiple aspects of this city in their accounts. The glory of this city is not only confined within the boundary of religion but also the other aspects like, music, art, craft, dance, sculptures are exemplary for the whole World. Varanasi has been recognized as one of UNESCO's 'Cities of Music,' as part of the Creative Cities Network. It was chosen for UNESCO's "field of excellence" plan in the music category.

In this present 21<sup>st</sup> century when we are witnessing communal hatred and rise of communal violence in all over the World especially in mid-west and our neighboring countries, this city stands as guiding light for the whole civilization. The concept of "Aano bhadra krtavo yantu vishwatah<sup>39</sup>" (let noble thoughts come from all directions) is the city's essence, and it is the driving force behind Varanasi's continued cultural expansion.

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# **Study on Socioeconomic parameter of Tuberculosis patient with special reference to Nutrition in Rural Women of Jharkhand**

*Dr. Priti Kumari\**

## **Abstract**

*This study was conducted to evaluate socioeconomic parameter of Tuberculosis patient with special reference to Nutrition in Rural Women of Jharkhand. A sample of 120 rural tuberculosis women was examined from Seraikela-Kharsawan district. It was found that mostly lower socio-economic status women were defaulter/ Relapses in treatment whereas mostly high socio-economic status tuberculosis women were completed their treatment.*

*Keywords: Tuberculosis, Socio-economic status, Rural women*

## **Introduction**

Tuberculosis is a major threat to the mankind. It is an infectious disease that causes illness and death worldwide. It is generally called TB, and caused by *Mycobacterium tuberculosis*, which most commonly affects the lungs, but can also damage other parts of the body. It was declared a public health emergency by WHO in 2005. Globally 8.4 million people are estimated to develop TB each year, new infections occur at about 1 per second and nearly 2 million deaths results from the disease (WHO,2010).Overall one third of the world's population is currently infected with the tuberculosis bacillus , over 90per cent of them is in developing countries only. India is one of the TB burden countries in the world and accounts for nearly 20 per cent of global burden of tuberculosis. The tubercle bacterium affects the body depending upon its immunity power in two ways- latent and active. In Latent TB the bacteria remains inactive in the body showing no symptoms at all. This type of tuberculosis infection is not contagious in nature although the risk of becoming active is very high. While in active TB the bacteria increases rapidly in the body and the body starts showing symptoms of TB infection and if the infection is in the lungs the chances of spreading of the infection becomes high. The common sign and symptoms of Tuberculosis disease are persistent cough (sometimes with blood

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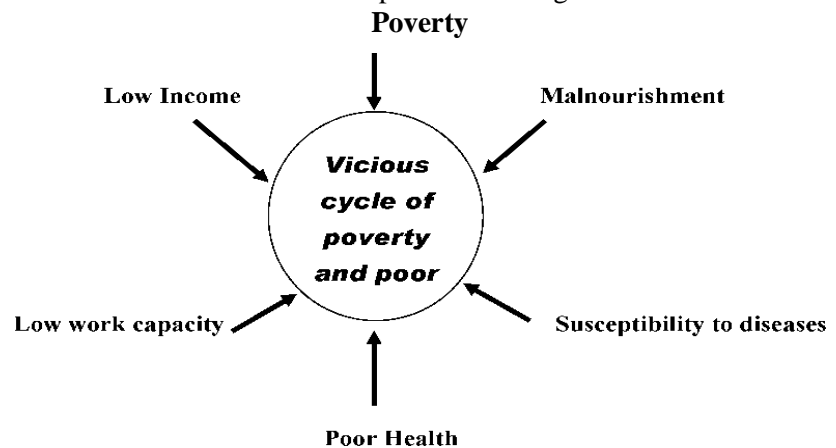
in sputum) for three weeks or more than that, fever with cold, night sweats, loss of appetite and sudden weight loss. It was found that the disease is more virulent in warm and humid climate than in the cold and the hot. The cold and hot climate both hinders the growth of the bacteria and provides a suitable environment for the treatment of this disease. There are horst of factors which affects tuberculosis occurrence and its transmission like age and sex, heredity, under-nutrition and various environmental factors like poverty, poor housing facilities, over- crowding, ill-ventilated house etc and social factors like illiteracy, unawareness, improper utilization of health facilities, large family sizes and gender discrimination etc. But one of those under- rated factor is the impact of poverty on tuberculosis incidence and transmission. It is generally found that poverty has a prominent and sharp influence on health and well being of humans. Poverty and vulnerabilities are the greatest impediment to human and socioeconomic development.

Poverty means being deprived materially, socially and emotionally. It includes lack of economic resources, lack of education, lack of access to basic life resources such as food, water and sanitation, and lack of control over one's life and reproductive partners. Poverty directly accounts for almost one third of the global burden of disease. Poverty leads to poor health, which in turn aggravates poverty and reduces human productivity. Poor adherence to tuberculosis treatment is a major problem. The basic priorities faced by poor populations are the need to earn money on a daily basis and duties towards family members. Poverty in TB control encompasses the needs of those facing not only economic impoverishment but also of all the relatively vulnerable, disadvantaged, marginalized, stigmatized and otherwise excluded sections of the population. The rapid growth of industrialization and globalization had not only adversely affected the environment but also human health and thus the heath issues like spread of Tuberculosis, HIV-AIDS, the influence of global warming on human health.

Health is more than the absence of disease. It is a major determinant of happiness. It is often said that that greater health is usually equated with lower mortality and morbidity rates. Poverty and poor health is interrelated as poverty leads to under nutrition and mal-nutrition which in turn makes body prone to various diseases. An unhealthy man couldn't work hard so his economical condition will

decline which directly affects his purchasing power and the quality of medical treatment which he can afford and thus it will in turn affects his health. The first major definition to present health as a positive entity was done by World Health Organization (WHO) in 1946 that —Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. Thus poverty and poor health

forms a vicious circle which is presented in Fig below.



### Malnutrition

Malnutrition is one of the leading factors contributing to the burden of disease, death and disability (WHO, 2013). Malnutrition has generally been visualized in terms of under-nutrition focusing on underweight or anaemia among women or micronutrient deficiencies among the vulnerable. India has not yet tackled the problems of under nutrition and poverty; it is increasingly facing additional problems resulting from industrialization, economic development and nutrition/health transition. Malnutrition is coming into focus with deficiencies of vitamins and minerals such as iodine, iron, zinc and vitamin. Micronutrient deficiencies increase morbidity and mortality, impair cognitive development, reduce learning ability and productivity, and reduce work capacity in populations as a result of higher rates of illness and disability—resulting in a tragic loss of human potential. Probability of chronic disease risk increases when women are affected by under nutrition and during their early phases of life where growth and development is very crucial. It is evident that with improvement in socio-economic status, nutrition and diet related problems of obesity and non-communicable diseases (NCDs)

may also increase in countries with persisting challenges of under nutrition (WHO, 2014). Around 1.5 million maternal and child deaths occur every year due to under nutrition, however, rapid escalation of overweight/obesity worldwide, is leading to rising emergence of non-communicable diseases like diabetes, cardiovascular disease, cancer and stroke (WHO, 2016). Nearly one-third women in the reproductive age group of 15-49 years have Body Mass Index (BMI) > 25 kg/m<sup>2</sup> with 35 percent in urban and 29.2 percent in rural areas; 7.6 percent have high blood sugar; 6 percent have high blood pressure (IIPS, 2016). However, In India, with rapid urbanization, double burden of malnutrition (DBM) is emerging as a challenge, where under nutrition and over nutrition are existing concurrently in different segments of population (Kulkarni et al, 2016).

Malnutrition and tuberculosis are both problems of considerable magnitude in India. Both are public health problems. Under-nutrition is associated with an increased frequency, severity and fatality of infections, including TB. Malnutrition may be an important factor in the high mortality and morbidity from tuberculosis in population subjected to food shortage. Tuberculosis mortality rates in different economic groups in a community tend to vary inversely with their economic levels. Poor nutrition among patients who have undergone gastrectomy may be a risk factor for the reactivation of tuberculosis. There are other studies indicating that incidence of tuberculosis is unusually high among malnourished people. Tuberculosis is probably associated with more severe malnutrition than other chronic illnesses.

### **Methodology**

The present study was a cross- sectional research conducted among women with tuberculosis residing in rural area of Seraikela-Kharsawan district. The study was conducted with a sample size of 120 rural women with tuberculosis selected from aanganwadi centre records.

### **Objectives**

1. To study demographic profile of rural tuberculosis female patients
2. To study Socio-Demographic Characteristics of the Patients
3. To study the women with tuberculosis into different forms of malnutrition
4. To study Clinical Assessment of the Rural Tuberculosis Women
5. To study Socio-economic status and treatment seeking behaviour of patients

### Tools and Techniques

The data collection was done using some tools as questionnaire cum interview schedule, 24-hour dietary recall were used. In order to determine the prevalence and forms of dual burden in the specified area, a total of 120 women with tuberculosis were interviewed.

### Body weight

Body weight is the most widely used and simplest reproducible measurement of the overall assessment. It indicates the body mass and is a composite crude estimate of all body constituents, like water, fats, minerals etc. For the present study, weight of the women was taken using an electronic weighing scale with an accuracy of 0.1 kg. The weighing scale was placed on a hard surface and checked and calibrated for zero errors.

### Body Mass Index (BMI)

The Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults. It is defined as a person's weight in kilogram divided by the square of his height in meters ( $\text{kg/m}^2$ ). BMI provides the most useful population-level measure of overweight and obesity as it is same for both sexes and for all adults.

**Body-mass Index = Weight in Kg / Height in meter**

After computing the BMI, women were classified as underweight (BMI  $< 18.5 \text{ kg/m}^2$ ) or obese (BMI  $> 30 \text{ kg/m}^2$ ) in accordance with the WHO revised BMI.

### Analysis

The present cross-sectional study was conducted among rural women with tuberculosis (N=120) residing in Seraikela-Kharsawan district in order to determine the different forms of malnutrition among these women to unravel the factors causing of Malnutrition.

**Table 1**  
**Profile of the Rural women with Tuberculosis**

Profile	Rural women with Tuberculosis
Age (in years)	30 - 50
Age at marriage (years)	14 - 28
Age at first child birth (years)	16 - 32
Weight (Kg)	32 - 87
Height (cm)	130.5 – 182.5

<b>Waist-circumference (cm)</b>	<b>53 - 126</b>
<b>Hip-circumference (cm)</b>	<b>55 - 133</b>
<b>BMI (Kg/m<sup>2</sup>)</b>	<b>14.6 – 37.6</b>
<b>Waist-hip ratio (WHR) (cm)</b>	<b>0.69 – 1.21</b>
<b>Waist-height ratio (WHtR) (cm)</b>	<b>0.37 – 0.79</b>

Table 1 reveals that

1. Minimum age of the tuberculosis women is 30 years and maximum is 5 years
2. Minimum age of marriage of the tuberculosis women is 14 years and maximum is 28 years
3. Minimum age of first child birth of the tuberculosis women is 16 years and maximum is 32 years
4. Minimum weight of the tuberculosis women is 32 kg and maximum is 87 kg
5. Minimum height of the tuberculosis women is 130.5 cm and maximum is 182.5 cm
6. Minimum waist-circumference of the tuberculosis women is 53 cm and maximum is 126 cm
7. Minimum hip-circumference of the tuberculosis women is 55 cm and maximum is 133cm
8. Minimum BMI of the tuberculosis women is 14.6 kg/m<sup>2</sup> and maximum is 37.6 kg/m<sup>2</sup>
9. Minimum waist-hip ratio of the tuberculosis women is 0.69 and maximum is 1.21
10. Minimum waist-height ratio of the tuberculosis women is 0.37 and maximum is 0.79

**Table 2**  
**Socio-Demographic Characteristics of the Patients (N=120)**

		<b>No. of Patients</b>	<b>Percentage</b>
<b>Age Range</b>	30 to 35	17	14.17
	36 to 40	65	54.17
	41 to 45	26	21.67
	46 to 50	12	10.00
<b>Marital Status</b>	Married	85	70.83
	Widow	27	22.50
	Single	8	6.67
<b>Caste</b>	OBC	17	14.17
	ST	66	55.00

	SC	12	10.00
	Others	25	20.83
<b>Religion</b>	Hindu	26	21.67
	Christian	78	65.00
	Others	16	13.33
<b>Education</b>	Illiterate	38	31.67
	Primary	56	46.67
	Secondary	14	11.67
	Graduation	12	10.00
<b>Type of TB</b>	Pulmonary	98	81.67
	Extra-pulmonary	22	18.33
<b>Socio-economic status</b>	Upper	27	22.5
	Middle	76	63.33
	Lower	17	14.17

**Table 2 reveals that**

1. Maximum percentage of patients is found 54.17% in the age range between 36 to 40 years and minimum is found 10% in the age range 46 to 50 years.
2. Maximum percentage of patients is found 70.83% who are married but minimum is found 6.67% who are single.
3. Maximum percentage of patients is found 55.00% who are belonged to Schedule tribe but minimum is found 10.00% who are schedule cast.
4. Maximum percentage of patients is found 65.00% who are Christian but minimum is found 13.33% who are other caste.
5. Maximum percentage of patients is found 46.67% who are primary educated but minimum is found 10.00% who are graduate.
6. Maximum percentage of patients is found 81.67% who are having Pulmonary Tuberculosis but minimum is found 18.33% who are having Extra-Pulmonary Tuberculosis.
7. Maximum percentage of patients is found 63.33% who are under middle socio-economic status but minimum is found 14.17% who are under lower socio-economic status.



**Table 3**  
**Categorization of women with tuberculosis into different forms of malnutrition by BMI-for**

Based on BMI-for-age criteria (BAZ) N=120														
Sever Thickness (N=6)			Moderate Thickness (N=12)			Mild Thickness (N=48)			Normal (N=47)			Overweight (N=7)		
UM	NM	OM	UM	NM	OM	UM	NM	OM	UM	NM	OM	UM	NM	OM
1	2	3	3	4	5	12	17	21	24	12	11	4	2	1

**r age (BAZ) category (N=120)**

**UM = under Malnutrition, NM = Normal malnutrition, OM = over Malnutrition**

Table 3 reveals that

1. Three women with tuberculosis are sever thin having over malnutrition so person's intake of energy and/or nutrients deficiencies, excesses or imbalances vitamin and mineral.
2. Five women with tuberculosis are moderate thin having over malnutrition person's intake of energy and/or nutrients deficiencies, excesses or imbalances vitamin and mineral.
3. Twenty one women with tuberculosis are mild thin having over malnutrition person's intake of energy and/or nutrients deficiencies, excesses or imbalances vitamin and mineral.
4. Twenty four women with tuberculosis are found normal having under malnutrition person's intake of energy and/or nutrients deficiencies, excesses or imbalances vitamin and mineral.
5. Four women with tuberculosis are found overweight having under malnutrition person's intake of energy and/or nutrients deficiencies, excesses or imbalances vitamin and mineral.

**Table 4**  
**Clinical Assessment of the Rural Tuberculosis Women**

Details	Sub group	Women (N=120)	Percentage
<b>General Appearance</b>	Normal Built	<b>67</b>	<b>55.84</b>
	Thin Built	<b>34</b>	<b>28.33</b>
	Sickly	<b>19</b>	<b>15.83</b>
<b>Hair</b>	Normal	<b>64</b>	<b>53.34</b>
	Dull & Dry	<b>37</b>	<b>30.83</b>
	Thin & sparse	<b>19</b>	<b>15.83</b>
<b>Face</b>	Normal	<b>112</b>	<b>93.33</b>
	Molar & supra orbital	<b>8</b>	<b>6.67</b>
<b>Eyes</b>	Normal	<b>87</b>	<b>72.50</b>

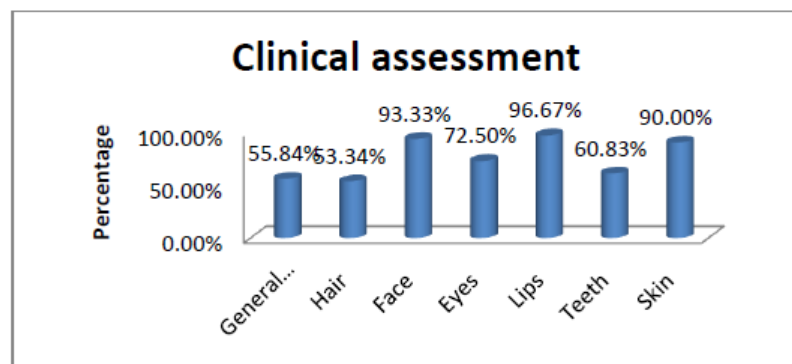
	Pale Conjunction	24	20.00
	Night blindness	9	7.50
<b>Lips</b>	Normal	116	96.67
	Angular cheilitis	4	3.33
<b>Teeth</b>	Normal	73	60.83
	Caries	36	30.00
	Mottled	11	9.17
<b>Skin</b>	Normal	108	90.00
	Xerosis	8	6.67
	Wrinkled	4	3.33
<b>Nails</b>	Normal	94	78.33
	Koilonychias	17	14.17
	Brittle Nails	9	7.50

Table 4 reveals that

1. General Appearance of tuberculosis women are found normal 55.84%
2. Hair of tuberculosis women are found normal 53.34%
3. Face of tuberculosis women are found normal 93.33%
4. Eyes of tuberculosis women are found normal 72.50%
5. Lips of tuberculosis women are found normal 96.67%
6. Teeth of tuberculosis women are found normal 60.83%
7. Skin of tuberculosis women are found normal 90%
8. Nails of tuberculosis women are found normal 78.33%

**Graph 1**

**Graphical representation of Clinical Assessment of the Rural Tuberculosis Women**



**Table 5**  
**Socio-economic status and treatment seeking behaviour of patients**

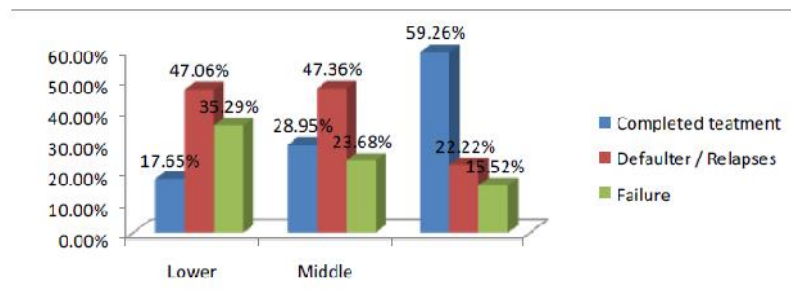
S.No.	Socio-economic status	Completed Treatment		Defaulter/Relapses		Failure		Total	
		N	%	N	%	N	%	N	%
1	Lower	3	17.65	8	47.06	6	35.29	17	14.17
2	Middle	22	28.95	36	47.36	18	23.68	76	63.33
3	Upper	16	59.26	6	22.22	5	18.52	27	22.50

Table 5 reveals that

1. Maximum patients (47.06%) under lower socio-economic status are found defaulter / Relapses in seeking treatment of tuberculosis.
2. Maximum patients (47.36%) under middle socio-economic status are found defaulter / Relapses in seeking treatment of tuberculosis
3. Maximum patients (59.26%) under upper socio-economic status are found completed in seeking treatment of tuberculosis.

**Graph 2**

**Graphical representation of Socio-economic status and treatment seeking behaviour of patients**



## Conclusion

Tuberculosis which is also called as disease of poor mostly affects the socially and economically deprived sections of the society. The poor living conditions which is accompanied with the overcrowding, dirty environment, indoor cooking, improper nutritional supplement etc fosters the rate of spread of TB infection making the poor population more vulnerable than the rich ones. Keeping this in mind the researcher had tried to assess the socio-economic condition of tuberculosis patients in order to examine the association between

socio-economic condition and tuberculosis incidence and treatment seeking behaviour of patients. we can infer from the above findings that socioeconomic status has positive association with the treatment seeking behaviour of the patients i.e. upper group patients are more aware and prompt in taking treatment and usually they complete their course of medicine in comparison to the middle and lower sections of the society. The low percent share of patients in completion of treatment is found in lower group may be attributed to the reasons like money crisis, poor nourishment which hinders the effects of medicine on body, no time to take or continue treatment because of over- burden of work. Tuberculosis disease has economic consequences especially for the lower segment of the society. Thus it is very clear that socio-economic condition of patients is strongly associated with their tuberculosis infection and their treatment seeking behaviour. Apart from this the government in collaboration with the nongovernmental organizations should make provisions for providing nutritional supplement for those patients who belonged to lower socio-economic status group along with the free medicine which will strengthen the immunity of patients to overcome their disease.

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## **Emotional Intelligence of Adolescence In Context of SES And Child Rearing Practices**

*Savita Kumari\**

The present study conducted on 100 adolescence of Begusarai district to examine the effect of some social correlates such as SES , child rearing practices on emotional intelligence of the respondents. It was hypothesized that there would be significant effect of SES ,child rearing practices on emotional intelligence of the respondents .Emotional intelligence scale of Salovey and Mayer (1990) Gupuswamy scale of SES were used to measure emotional intelligence and SES of the adolescence respectively.

The scale along with PDS were employed on the respondents and data were retained .The obtained data were analysed using t-ratio. Hypothesis was proved by the result .In the light of the result it was concluded that there is positive and significant correlation between loving and protecting parental behaviour and emotion intelligence score of adolescents.

### **Introduction**

Emotional intelligence is defined as composite set of capabilities that enable a person to manage herself or himself and others (Goldman 1995, 1998).

Mayor and Salovey(1997) defines emotional intelligence as an encompassing abilities to perceive accurately, appraise and express emotions. People who possess a high degree of emotional intelligence know themselves very well and are also able to sense the emotions of others. They are affable, resilient and optimistic. A person become more productive and successful when a person developed their emotional intelligence.

Besides this child rearing practices is a process which involves planning, formulating and implementing procedure of bringing up children in a certain way. This process involves in calculating in children certain values attitude opinion and belief through direct teaching, modelling and imitation.

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**Purpose**

The main purpose of the study is to examine the effect of SES on emotional intelligence of the adolescents.

**Hypothesis**

It was hypothesized that they would be significant effect of SES, child rearing practices on emotion intelligence of the responded.

**Method of study****Sample**

This study was conducted on 100 inter college students from R. C. S college of Begusarai district. They were equal in respect of high and low SES, urban and rural uninhibited inhabitants respectively. In other respect they were matched so far as practicable.

**Tools used**

The following tools were used:-

1-Emotional intelligence was measured using emotional intelligence scale by Gupuswamy.

2-SES(rural and urban) was measured by using Bhardwaj R.L SES scale.

**Procedure**

Emotional scale and SCS scale along with PDS were employed on 100 respondents. Thereafter respondents were grouped into high and low groups in respect of SES and child rearing practices along with Urban and rural inhabitants.

**Results and interpretation**

VARIABLES	GROUP	N	MEAN	SD	RATIO	DF	P
SES	HIGH	50	80.50	6.97	8.10	1.38	< .01
	LOW	50	65.88	7.23			
CHILD REARING PRACTICES.	HIGH	50	70.4	7.51	7.30	1.38	<.01
	LOW	50	65.72	7.14			

T value showing the effect of SES, child practices on emotional intelligence of the Respondent.

The results be played in displayed in table 1 clearly.

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## Sports as a Tool for World Peace

Sunil Kumar \*

*This article advocacy the Sports is an international language. Its ability to cross cultural Sports related programs to bridge social, economical, human development, human health, education, sustainable development, social mobilization and peace. As a result sports can be powerful tool to promote peace symbolically on the globe level and very practically within communities.*

**Introduction :** With the aims of peace in mind, the United Nations Inter-agency Task Force on Sport for Development and Peace was formed, bringing together agencies with significant experience using sport in their work, including ILO, UNESCO, WHO, UNDP, UNV, UNEP, UNHCR, UNICEF, UNODC, and UNAIDS. The Task Force was co-chaired by Mr. Adolph Ogi the Special Adviser to the Secretary-General on Sport for Development and Peace, and Ms. Carol Bellamy, Executive Director of UNICEF. Secretariat support was provided by the non-governmental organization (NGO) Right to play (formerly Olympic Aid). Members of the Task Force were designated by the Heads of the participating United Nations organizations.<sup>1</sup>

Several concrete steps have been taken in recent years in support of the use of sport for development and peace. These Include recommendations emanate from MINEPS III, the UNESCO meeting of ministers for physical education and sport in 1999; the World Health Assembly Resolution WHA55.23 in 2002 concerning Who's 'Global Strategy on sport and the environment; and a UNICEF Executive Directive in early 2003 encouraging all field offices to consider sport in their programming. Similarly, in the sports world, various sports federations and organizations have demonstrated an increasing awareness about the broader potential of sport.<sup>9</sup>

However, much more should be done. Sport is yet to be mainstreamed into the development agenda or the United Nations system. In general, sports initiatives to date have been ad hoc,

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informal, and isolated. The time is ripe to develop a coherent and systematic strategy for increasing the use of sport within the United Nations. A common framework needs to be established that draws together sport-related initiatives and actors across the different sectors.<sup>11</sup>

**Realizing the potential of sport as a tool for development and peace :**

Sport is far more than a luxury or a form of entertainment. Access to and participation in sport human right and essential for individuals of all ages to lead healthy and fulfilling lives. sport-from play and physical activity to organised competitive sport-has an important role in all societies. Sport is critical to a child's development. It teaches core values such as co-operation and respect. it improves health and reduces the likelihood of disease. It is a significant economic force providing employment and contributing to local development .And; it brings individuals and communities together, bridging cultural or ethnic divides. Sport offers a cost-effective tool to meet many development and peace challenges.

The potential of sport as a tool for development and peace is yet to be fully realized. The use of sport remains outside the mainstream of thinking among United Nations agencies .While sport and play are repeatedly acknowledged as a human right. They are not always seen as a priority and have even been called the 'forgotten right.'<sup>(2)</sup> sport is seen as a by-product of development, not as an engine.

The report shows why sport must play a stronger role in the development agenda. By demonstrating the contribution sport can make when it is used in a coordinated and strategic way, the report challenges the United Nations and its partners to integrate sport into their work. In addition, it aims to garner new support for such initiatives among sport-related organizations, governments and the private sector, suggesting ways to move forward in partnership with civil society.

**The scope of sport :** This report views sport in a broad sense. Incorporated into the definition of 'sport' are all forms of physical activity that contribute to physical fitness, mental well-being and social interaction. <sup>(3)</sup>These include play, recreation, organized casual or competitive sport, and indigenous sports or games.

**Maximizing the positive aspect of sport :** Many of the core values inherent in sport are compatible with the principles necessary for development and peace, such as fair play, co-operation, sharing and

respect. The life skills learned through sport help empower individuals and enhance psychosocial well-being, such as increased resiliency, self-esteem and connections with others. These features of sport are beneficial to people of all ages, but they are especially vital to the healthy development of young people.

**Sport and sustainable human development :** Central to the United Nations notion of development is sustainable human development, which recognizes that development is more than economic growth. Development is a process of enlarging people's choices and increasing the opportunities available to all members of society. Based on the principles of inclusion, equity and sustainability, emphasis is on the importance of increasing opportunities for the current generation to come. The basic human capabilities that are necessary for this are to "lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community". Sport can directly help build these capabilities.

**Sport and peace :** The potential links between sport and peace are also powerful. From international events to the grassroots, sport brings people together in a way that can cross boundaries and break down barriers, making the playing field a simple and often apolitical site for initiating contact between antagonistic groups.

The popularity of sport and its convening power further contribute to sport being a powerful voice for communicating messages of peace and site for symbolic public acts on the global and local levels.(14)

**Sport and Education :** Education is central to the achievement of all of the MDGs and sport has a natural place in education, whether the approach used is formal, non-formal or informal. In schools, physical education is a key component of a quality education and can be used to promote schooling among young people. Outside the class room sports is a 'school for life', teaching basic values and life skills, important for holistic development sport is also a powerful vehicle for public education, while sporting events can effectively increase awareness and galvanize support and action around key issues.(2)

Sport is an ideal school for life. The skills learned through play, physical education and sport are foundational to the holistic development young people these skills, such as cooperation and confidence, are essential for social cohesion and are carried throughout adult life.(21)

**Skills and values learned through sport :**

Cooperation	Fair play
Communication	Sharing
Respect for the rules	Self-esteem
Problem solving	Trust
Understanding	Honesty
Connection with others	Self-respect
Leadership	Tolerance
Respect for others	Resilience
Value of effort	Teamwork
How to win	Discipline
How to lose	Confidence

### **How to manage competition**

#### **Sport, education and inclusion :**

It is imperative that sport programmes both in and out of school include all people and ensure equal opportunity to participate regardless of gender, ethnicity or ability.

#### **Physical education and the disabled**

Giving young people with disabilities the opportunity to participate in physical education programmes at school and through community clubs is crucial given the additional benefits they receive from sport and physical activity.(3)

#### **Sport, education and physical education :**

Physical education is an essential component of quality education and an integral part of lifelong learning. The negligence of physical education reduces the quality of education, with negative future impacts on public health and health budgets.<sup>19</sup> Physical education is the only subject in the curriculum that focuses specifically on the body. In doing so, it helps teach young people respect for the body – their own as well as others- and helps them respond to many of the challenges faced by young people, including the threat of HIV/AIDS and other sexually transmitted diseases, and the dangers of tobacco and drugs. Providing students with the opportunity to play sport at school ensures that they receive a well-rounded education that addresses body, mind and spirit.(17)

#### **Sport and Sustainable development :**

Effective development must be sustainable and human – centred. Sustainable development requires that the needs of the present generation are met without compromising the ability of future generations to meet their own needs, (19) and human development requires that people's choices are enlarged, providing all members of society with increased opportunities and the conditions necessary to

live long and fulfilling lives. (20) Well-designed sport programmes work to assist meeting the objectives of sustainable human development, by contributing to economic and social development and environmental sustainability.(10)

**Crime :**

Factors that contribute to young people turning to crime include the absence of positive role models, a lack of self-discipline and boredom. Sport can tackle these causes of juvenile crime by helping disaffected youth make positive connections with adults and peers, by integrating them into constructive activities within society and by providing a useful activity for their time.(22)

**Drug abuse :**

When social and personal skills are combined, sport can be an effective medium to intervene in a person's decision to abuse or not abuse drugs. While participation in sport does not inherently lead to a drug –free lifestyle, well-designed sport programmes, run by skilled and credible coordinators, and help to reduce high-risk behaviours. This is especially true when the elements of sport are combined with the structured provision of drug –related information and life-skills training. (15)

**Persons with disabilities :**

Sport can integrate persons with disabilities into society, providing an arena for positive social interaction, reducing isolation and breaking down prejudice. Sport programmes for the disabled are also a cost-effective method of rehabilitation.(13) They are highly therapeutic, improving motor skills and increasing mobility, self –sufficiency and self-confidence.

**Sport and Peace :**

Sport is an international language. Its ability to cross cultures enables sport-related programmes to bridge social and ethnic divides. As a result, sport can be a powerful tool to promote peace, both symbolically on the global level and very practically within communities.(12)

The power of sport can be used as both a tool for preventing conflict as well as an element for building sustainable peace. When applied effectively, sport programmes promote social integration and foster tolerance. These core values are the same as those necessary for lasting peace. In post-conflict environments in particular, this can work to reduce tensions and generate dialogue.18

**Community-based peace initiatives :** The use of sport to promote peace is extremely effective in programmes at the community level

since they directly involve those affected by conflict and social tension. (9) Sport is often denied in times of instability and yet it offers a sense of normality, especially for young people. Sport programmes provide structure in an unstructured and destabilising environment and serve as a means to channel energies away from aggression or self-destruction. Concurrently, they help build the individual skills and values necessary to avoid conflict and to ensure peace. Various Groups benefit particularly from sport for peace programmes

#### **Young people :**

In many circumstances young People lack hope, as the practical means to change their situation.<sup>7</sup> Sport is a medium to help build character and confidence, preparing young people to better meet the challenges of a competitive world. These elements can be especially beneficial in the care and support of orphans.<sup>(13)</sup>

#### **Refugees and IDPs :**

The psychosocial benefits from the practice of support help to address the trauma of flight and the distress resulting from displacement. Sport programmes serve as a positive and productive activity for refugees and internally displaced persons, easing many of the problems they face, including violence, limited access to education and broken family structures.<sup>(8)</sup>

Former child soldiers: Child soldiers are uprooted from their communities and social structures and experience extreme brutality. The process of their demobilization is difficult and highly sensitive, requiring physical, psychological and care, as well as opportunities to develop the skills necessary for adult life.<sup>4</sup> Here sport can play a unique role. Sport programmers offer a space to play, giving children back their childhood, while providing an outlet for channeling anger and controlling aggression. Sport teams also allow these young people to build positive connections with peers and adults, creating a sense of belonging that is essential for their effective demobilization. (5)

International peace initiatives

- ❖ Sport has on several occasions successfully brought together the Koreas ,most recently seen at the 2003 Pan-Asian Games when the north and South Korean teams marched side-by-side in the opening ceremony.
- ❖ UEFA began its partnership with ICRC in 1997 when it resources available for the campaign against landmines .The partnership has expanded to raise found and

awareness concerning the importance of protecting children in war , particularly against their recruitment as child soldiers and for the legal provisions to protect them.<sup>3</sup>

- ❖ The Pakistani-Israeli tennis pair Aisam ul - Haq Quereshi and Amir Hadad served as positive role models for peace within their countries, know globally as “a two-man peace initiative ,with rackets”.<sup>(2)</sup>

**Sport and Communication :**

Sports is one of the world’s most powerful communication tools due to its near universal appeal, its convening power and its many positive associations .Together, these features give sport the capacity to reach a range of audiences in a variety of ways, particularly groups that are otherwise difficult to reach .On its own, sport has the ability to communicate messages such as cooperation, co-existence, or how to Graciously manage of victory and defeat. As a powerful channel to communicate, sport can also be an arena to promote United Nations goals for development and peace .whether a one-off event or a longer-term campaign, sport provides valuable opportunities for both advocacy and the mobilization of communities.<sup>(24)</sup>

**Campaigns :** Many United Nations communications campaigns use sport in a variety of innovative ways :

- ILO partners with FIFA and the African Confederation of football (CAF)to promote the Red Card to Child Labor campaign which at the 2002 African Cup of Nations in Mali used sponsors ,the media and promotions at matches and national and local football event s to spread its message.
- WHO dedicated 2002 World Health Day to ‘Move for Health’ and 2002 World Tobacco Free Sports’ in collaboration with FIVB ,FIFA(Tobacco –Free World Cup in Korea /Japan)and the IOC(Tobacco-Free Salt Lake City 2002Winter Olympic Games)

**A common framework on sport for development and peace :**

A strategic approach should be developed in the Nations system to foster field-based partnerships related to sport in a way that is both impact-oriented and cost-

effective, as complementary to technical cooperation projects and broader development goals.

A common framework on sport for development and should be established at the national level that draws a broad range of actors together in order to create strategic partnerships for programmed implementation and assist country-based planning.

**Conclusion :** This report has shown that sport- From play and physical activity to organized and competitive sport – is a powerful and cost-effective way to support development and peace objectives. The many benefits of sport and physical activity are not only enjoyed by the individual, but felt throughout society. There is, therefore, a crucial need for United Nations agencies, governments and concerned stakeholders to integrate sport and economic and social development. By promoting sport is a strategic, systematic and coherent way, the potential of sport as a tool for development and peace can be realized.

When sport is used as an instrument for development and peace it must be implemented in a way that is equity-driven and culturally relevant. Sport program must be based upon the ‘sport for all’ model, ensuring that all groups are given the opportunity to participate, particularly those who gain additional benefits such as women, persons with disabilities and young people. Sport program must also be designed explicitly to draw out the core skills and values that can be learned through sport.

When the positive aspects of sport are maximized, it is a powerful and cost-effective way of supporting a range of development and peace objectives. The time is ripe for the United Nations system to realize the full potential of sport as a viable and practical tool for development and peace.

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## Comparative Study on Cardio Pulmonary Index between Players of Team and Individual Sports

*Harendra Pratap Singh\**

*Prof. Abhimanyu Singh\*\**

*Monitoring physical fitness and functional ability, selected anthropometric and somatic type characteristics and psychological traits will be a definite advantage in the selection of top level sportsman. To attain the purpose of the study, one hundred (n-90) male subjects was selected for this study from Banaras Hindu University who represented inter university tournaments. Forty five players (n-45) was selected from individual sports and Forty five players (n-45) was selected from team games. Names of team games were Volley Ball, Cricket, Kabaddi, Football, Hockey and name of individual sports were badminton, Swimming, Wrestling, Boxing, and Table-Tennis Sports persons was selected on the basis of random sampling technique as subjects for this study. On the source of available literature, findings of the related research studies, expert's opinion, facilities & instruments accessibility, scholars own understanding of the problem and keeping in mind the specific purpose of the study, CPI (Cardio Pulmonary Index) will be selected for the study: **Cardio Pulmonary Index:** was calculated by using Vital Capacity (VC), in 100ml unit, Maximum Expiratory Pressure (MEP) in Mg. Mm, Maximum Breath Holding (MBH) in seconds, Age in complete years, Systolic Blood Pressure (SP) and Diastolic Blood Pressure (DP) in mmHg and Resting Pulse Rate (PR) in beats per minute, using the formula derived by Hyman. On the basis of nature of collected data and based on normality of data descriptive statistics was used to present the status of CPI (Cardio Pulmonary Index) between Players of Individual Games & Team Games. Further t-test was employed to compare the CPI (Cardio Pulmonary Index) between Players of Individual Games & Team Games. The Level of significance was set at .05. CPI (Cardio Pulmonary Index) between Individual Games Players and Team Games Players, which was found statistically significant. It saws that Individual Games players*

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were better than Team Games Players in CPI (Cardio Pulmonary Index) score.

**Keywords:-** Individual and Team Games Players, CPI

### **Introduction :**

Sports by their very nature are enjoyable, challenging, all absorbing and require a certain amount of skill and physical conditions. A sport is many sided social phenomenon which under certain social conditions has general, cultural, ideological, aesthetic, pedagogical and economic significance. Hence the reasons of an all increasing attention of sports in a society become understandable.

As Sport has developed into a distinct scientific discipline in itself and each nation is vying with the other produce top class players to win laurels in international competitions, considerable research is developed to identify factors that will be predictive of achieving high level of skill in a given sport with proper coaching.

Training techniques based on new findings in Exercise Physiology, Bio-mechanics, Sports Psychology etc. are adopted to bring about maximum possible unfolding of potential in sports performance. Today the preparation of an athlete for achievement is a complex dynamic state, characterized by high level of physical and psychological efficiency (physical and psychological readiness) and the degree of perfection of the necessary skills and knowledge, techniques and tactical preparation. Many other factors are also brought into action in his preparation (means of rehabilitating strength after loads, special nutrition, organization of general regime in accordance with the conditions of sports activity etc.) Thus an athlete training today is a multisided process of expedient use of affricate factors (means, methods and conditions) so as to influence the development of an athlete and ensure the necessary level of performance.

Therefore, besides monitoring physical fitness and functional ability, selected anthropometric and somatic type characteristics and psychological traits will be a definite advantage in the selection of top level sportsman.

### **Procedure and Methodology :**

To attain the purpose of the study, one hundred (n-90) male subjects will be selected for this study from Banaras Hindu University who represented inters university tournaments. Forty five players (n-45) will be selected from individual sports and Forty five players (n-45) will be selected from team games. Names of team games were Volley Ball, Cricket, Kabaddi, Football, Hockey and

name of individual sports were Athletics, Swimming, Wrestling, Boxing, and Table-Tennis Sports persons will selected on the basis of random sampling technique as subjects for this study. On the source of available literature, findings of the related research studies, expert's opinion, facilities & instruments accessibility, scholars own understanding of the problem and keeping in mind the specific purpose of the study, CPI (Cardio Pulmonary Index) will be selected for the study: **Cardio Pulmonary Index:** will be calculated by using Vital Capacity (VC), in 100ml unit, Maximum Expiratory Pressure (MEP) in Mg. Mm, Maximum Breath Holding (MBH) in seconds, Age in complete years, Systolic Blood Pressure (SP) and Diastolic Blood Pressure (DP) in mmHg and Resting Pulse Rate (PR) in beats per minute, using the formula derived by Hyman.

$$\text{CPI} = \frac{\text{VC} + \text{MEP} + \text{MBH} + \text{AGE}}{\text{SP} + \text{DP} + \text{PR}}$$

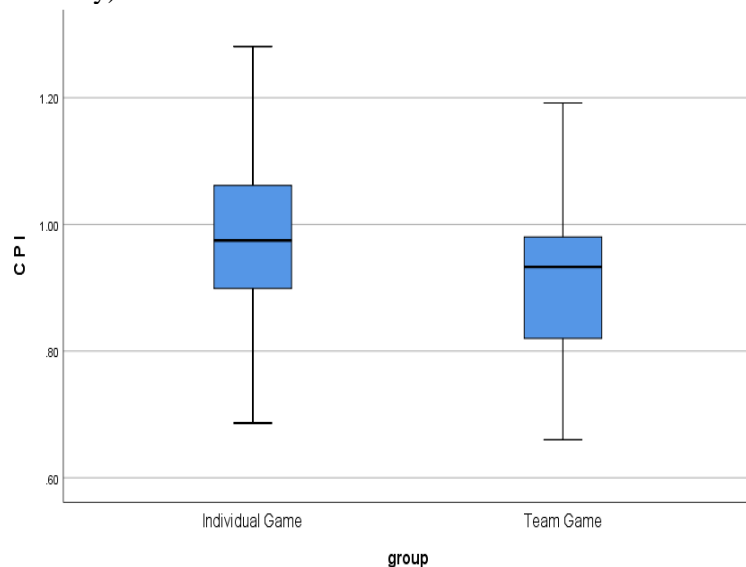
On the basis of nature of collected data and based on normality of data descriptive statistics will be used to present the status of CPI (Cardio Pulmonary Index) between Players of Individual Games & Team Games. Further t-test will be employed to compare the CPI (Cardio Pulmonary Index) between Players of Individual Games & Team Games. The Level of significance was set at .05.

#### Results :

**Table 1 Descriptive Statistics of Individual Games players and Team Games players for CPI**

Groups		Individual Games	Team Games
CPI	Mean	0.984	0.909
	Std. Error	0.019	0.019
	Variance	0.018	0.018
	Std. Deviation	0.132	0.133
	Minimum	0.69	0.66
	Maximum	1.28	1.19
	Range	0.59	0.53
	Skewness	0.155	-0.144
	Std. Error	0.354	0.354
	Skewness		
	Kurtosis	-0.338	-0.397
	Std. Error	0.695	0.695
	Kurtosis		

Table.1 reveals that the mean and standard deviation with standard error of University Sports Players of two different categories i.e. Individual Games and Team Games for CPI Score. The obtained mean and standard deviation of Individual Games players were  $0.984 \pm 0.132$ , and Team Games players were  $0.909 \pm 0.133$  respectively. The table also shows other descriptive statistics i.e. standard error and sample variance along with the range showing minimum and maximum score of the subjects. The value of kurtosis and skewness along with the standard error of kurtosis and standard error of skewness itself indicates the normality (scientific authenticity) of the data.



**Table.2: T-test of CPI between Individual Games and Team Games players**

Group	Mean	SD	Mean Diff.	Df	T value	P value
Individual Games	0.984	0.132	0.075	88	2.687	.009
Team Games	0.909	0.133				

\*Significant Level at  $t_{0.05} = 1.984$

The above Table 2: reveals that comparison of CPI (Cardio Pulmonary Index) between Individual Games Players and Team Games Players, which was found statistically significant. As the observed calculated t- value (2.687) was greater than the tabulated t value 1.984 with 98 df at 0.05 level of significance. It saws that

Individual Games players were better than Team Games Players in CPI (Cardio Pulmonary Index) score.

**Discussion of Finding :**

After analysis and interpretation of the data the above table reveals that comparison of CPI (Cardio Pulmonary Index) between Individual Games Players and Team Games Players, which was found statistically significant. As the observed calculated t- value (2.687) was greater than the tabulated t value 1.984 With 98 df at 0.05 level of significance. It saws that Individual Games players were better than Team Games Players in CPI (Cardio Pulmonary Index) score. This is because exercise is a stressful condition that causes a marked change in bodily functions and the lungs are no exception. Exercise in the form of sports, aerobics or training, when performed regularly, has a beneficial effect on various body systems. PFT is regulated by genetic, environmental and nutritional factors and confirms that physical training while growing helps to develop greater resistance of the respiratory muscles. Lung size can increase with intense and prolonged strength training during adolescence. The result of the related study to the finding of Akhade VV, Muniyappanavar NS (2017). The aim of this research is to study the PFTs in male swimmers, marathoners, cricket players, and kabaddi players and to compare the same with matched sedentary control group. In this study, PFTs such as forced vital capacity (FVC), forced expiratory volume in the first second (FEV1), maximum voluntary ventilation (MVV), and peak expiratory flow rate (PEFR) parameters were studied in 46 swimmers, marathoners, cricket players and kabaddi players in the age group of 18-25 years. These parameters were compared with matched apparently normal healthy sedentary medical students using unpaired t-test. a significant increase was observed in PFT parameters of swimmers, marathoners, cricket players, and kabaddi players than sedentary controls. The study group had a higher mean of percentage value of FVC, FEV1, MVV, and PEFR than controls. However, swimmers ( $P < 0.0001$ ) had highest pulmonary parameters than marathoners, cricket players, and kabaddi players ( $<0.05$ ). Concluded that PFTs were higher among sportsmen compared to sedentary controls. This shows the positive effect of training on respiratory system. In addition to this, the difference of PFTs between different sports types shows that the sports branch influences the pulmonary capacity.

**Conclusion :** CPI (Cardio Pulmonary Index) between Individual Games Players and Team Games Players, which was found

statistically significant. It saws that Individual Games players were better than Team Games Players in CPI (Cardio Pulmonary Index) score.

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## Effect of Common Yoga Protocol on Vital Capacity of school going Children

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*Yoga is essentially a spiritual discipline based on an extremely subtle science that focuses on creating harmony between body and mind. It is an art and a science of healthy living. **Procedure and Methodology:-** To achieve the specific purpose of the study, 40 male school students those who studying in different school in Varanasi, Uttar Pradesh were selected as a subjects on the basis of simple random sampling methods. The age level of the subjects ranged from 14 to 17 years. They was divided into two equal groups of twenty each (n=20) as one treatment group and one control group, in which group-I (n=20) was Yogic Asanas group, for Eight (8) weeks (exclude Sunday), and group-II (n=20) acted as control group who was not participated any special training apart from the regular day to day activities. Keeping the feasibility criterion in mind, the researcher selected the **Common Yoga Protocol** – (Independent Variables) & **Vital Capacity**-(Dependent Variables) for the present study. Vital Capacity was obtained with the help of wet Spiro meter in 100 ml unit. The data was collected two times from all the two groups i.e. before the training, and finally after the training of Common Yoga Protocol. All participants was briefly introduce about general objectives and requirement of Common Yoga Protocol practice. Common Yoga Protocol training was carried for a period of 8 weeks (6 days in a week). On the basis of nature of collected data based on normality of data descriptive statistics was used to present the status of Vital Capacity on school going children. Further ANCOVA was employed to compare the Vital Capacity among two groups of school going children. The Level of significance was set at 0.05. **Results:-** The analysis of co variance ANCOVA for Vital Capacity specify that the resulting calculated f- ratio 0.836 found lower than the tabulated f- ratio 4.03, which was not significant in case of pre-test mean. In addition, there was a notable difference seen when a comparison was made in the post- test scores*

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*(Dependent variable) of the Treatment and control groups with score secured at 5.387 for significance ( $p < .05$ ) with 1, 37 degree of freedom at 0.05 level. Significant difference was seen between the adjusted final mean of the treatment group and control group, the obtained mean difference value was 236.927 The mean difference value was more prominent which demonstrate significance difference at 0.05 level. On the basis of our findings we conclude that regular yogic practice can improve the Vital Capacity of School going Children even for short periods of time (8 weeks) and can also improve athletic performance.*

**Key Words:** - Common Yoga Protocol, Vital Capacity.

**Introduction :** Yoga is essentially a spiritual discipline based on an extremely subtle science that focuses on creating harmony between body and mind. It is an art and a science of healthy living. The word "yoga" comes from the Sanskrit root "yuj", which means "to unite" or "yoke" or "to unite". According to the yoga scriptures, the practice of yoga leads to the union of individual consciousness with that of universal consciousness, indicating perfect harmony between body and mind, man and nature. It helps you look and feel good, open and strengthen your body, calm and focus your mind, relieve tension, increase your self-knowledge and awareness, improve the quality of your life and your outlook on the world to change. It has a deep and lasting effect on how you treat yourself and others. The time you spend doing yoga is an opportunity to intimately reconnect with yourself on many levels and give it your full attention. When was the last time you did this? Through the practice of yoga, you can rejuvenate, nurture, and nurture yourself at the deepest levels, which lead to greater reservoirs of compassion and tolerance for others and a positive impact on your relationships. More importantly, you develop a better relationship with yourself. You experience longer periods of calm and clarity. All those little daily inconveniences, emotional ups and downs and responsibilities are put into a bigger perspective so they can come and go without getting too attached to you. You will begin to understand what is most important to you, the most beneficial, the most durable and the most important. Yoga Asana improves the strength of different body parts like back, neck, shoulders, deep abdominal, and buttocks muscles. It is a fantastic strengthening practice. It's help for building core strength of body. Yoga enhances your functionality in everyday life. It also brings nourishment to internal organs of body. „Yoga asana are the physical

postures and exercises which tone up and make strong the internal and outer organs of the body” (Mallinson & Singleton, 2017).

**Procedure and Methodology :** To achieve the specific purpose of the study, 40 male school students those who studying in different school in Varanasi, Uttar Pradesh were selected as a subjects on the basis of simple random sampling methods. The age level of the subjects ranged from 14 to 17 years. They was divided into two equal groups of twenty each (n=20) as one treatment group and one control group, in which group-I (n=20) was Common Yoga Protocol group, for Eight (8) weeks (exclude Sunday), and group-II (n=20) acted as control group who was not participated in any special training apart from the regular day to day activities. Keeping the feasibility criterion in mind, the researcher selected the **Common Yoga Protocol** – (Independent Variables) & **Vital Capacity**-(Dependent Variables) for the present study. Vital Capacity was obtained with the help of wet Spiro meter in 100 ml unit. The data was collected two times from all the two groups i.e. before the training, and finally after the training of Common Yoga Protocol. All participants will briefly introduce about general objectives and requirement of Common Yoga Protocol practice. Common Yoga Protocol training was carried for a period of 8weeks (6 days in a week).

On the basis of nature of collected data based on normality of data descriptive statistics was used to present the status of Vital Capacity on school going children. Further ANCOVA was employed to compare the Vital Capacity among two groups of school going children. The Level of significance was set at 0.05.

## RESULTS

**Table 1 Descriptive table of Vital Capacityin Respect to Treatment and Control Group**

		Pre-Test		Post Test	
Groups		Control	Treatment	Control	Treatment
Vital Capacity	Mean	2090.000	2160.000	2150.000	2377.500
	Std. Error	82.68	75.358	79.223	63.190
	Median	2100.000	2250.000	2225.000	2350.000
	Variance	136736.842	113578.947	125526.316	79861.842
	Std. Deviation	369.779	337.014	354.296	282.598
	Minimum	1500.00	1550.00	1500.00	1750.00
	Maximum	2750.00	2750.00	2650.00	2800.00

	Range	1250.00	1200.00	1150.00	1050.00
	Skewness	0.075	-0.168	-0.387	-0.415
	Std. Error	0.512	0.512	0.512	0.512
	Skewness				
	Kurtosis	-1.114	-0.517	-1.007	0.173
	Std. Error	0.992	0.992	0.992	0.992
	Kurtosis				

Table no.1 revealed that the descriptive statistics for Vital Capacity of control group and treatment group. The obtained mean and standard deviation for pre –test of Control group was (2090.000  $\pm$  369.779), and Treatment group was (2160.000  $\pm$  337.014) whereas the post-test mean and standard for control group was (2150.000  $\pm$  354.296), and treatment group was (2377.000  $\pm$  282.598) respectively.

The data were further analyzed with the help of analysis of Co-variance to find out the significant difference between adjusted means of pre-test and post-test in relation to Balance.

*Figure No. 1 Box Plot exhibiting the pre -test mean value of Vital Capacity for control and Treatment groups.*

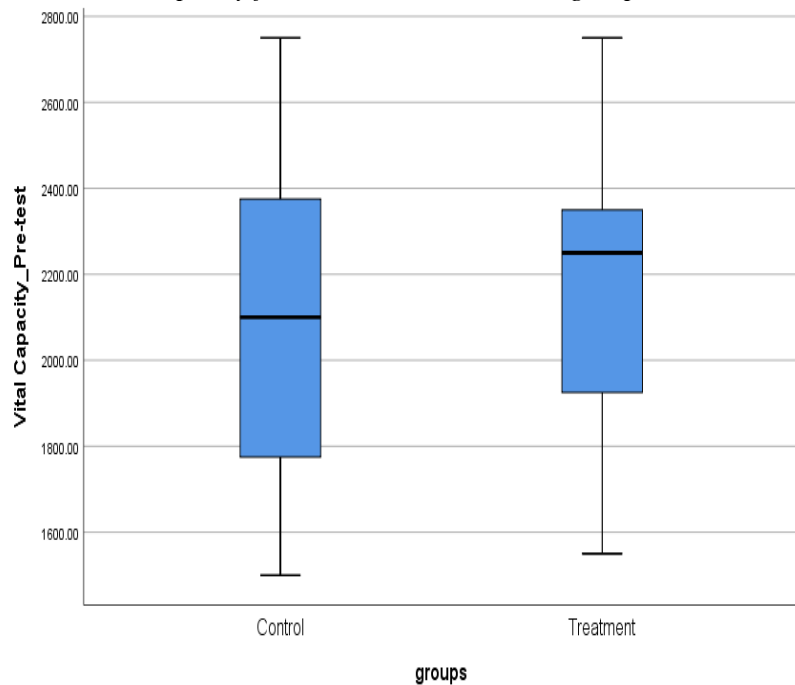


Figure No. 2 Box Plot exhibiting the post -test mean value of Vital Capacity for control and Treatment groups.

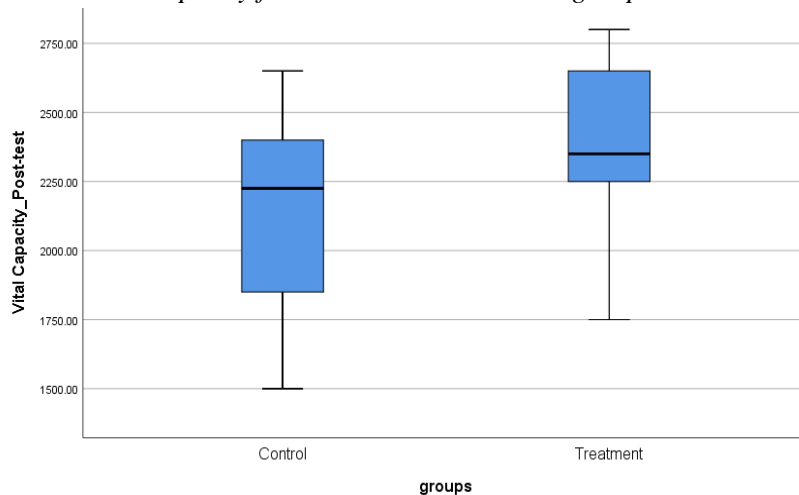


Table 2 Levene's Test of Equality of Variances

Dependent Variable: Vital Capacity	Levene Statistic	df1	df2	Sig.
	1.218	1	38	0.277

Table (2) Levene's test was applied to test the assumption homogeneity of variance as the p-value was .277 respectively of pre-test and post-test for Balance which was more than 0.05, which indicates homogeneity of variance assumption was not violated.

Table 3 Analysis of Co-Variance of the Mean of Treatment Group and Control Group in Relation to Balance

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
VC_Pre	86257.412	1	86257.412	0.836	0.366	0.022
group	555619.795	1	555619.795	5.387	0.026	0.127
Error	3816117.588	37	103138.313			

The table no. 3 depicts the ANCOVA test of difference among the subject effects. We can see a substantial insignificance difference in pre- test values of Vital Capacity variable for all groups with a score found at 0.836 evidencing the base of Analysis of Co-Variance.

In addition, there was a notable difference was seen when a comparison was made in the post- test scores (Dependent variable) of

the Treatment and control groups with score secured at 5.387 for significance ( $p < .05$ ) with 1, 37 degree of freedom at 0.05 level.

**Table 4 L.S.D. Post- Hoc Test for the Difference between adjusted Post Tests paired Mean of Vital Capacity**

		Mean Difference			95% Confidence Interval for Difference <sup>b</sup>	
(I) groups	(J) groups	(I-J)	Std. Error	Sig. <sup>b</sup>	Lower Bound	Upper Bound
Control	Treatment	-236.927	102.079	0.026	-443.758	-30.096
Treatment	Control	236.927	102.079	0.026	30.096	443.758

\*. The mean difference is significant at the .05 level.

Table 4 revealed that the significant difference was seen between the adjusted final mean of the treatment group and control group, the obtained mean difference value was 236.927 The mean difference value was more prominent which demonstrate significance difference at 0.05 levels.

**Discussion of Findings :** The analysis of co variance ANCOVA for Vital Capacity specify that the resulting calculated f- ratio 0.836 found lower than the tabulated f- ratio 4.10, which was no significant in case of pre-test mean. In addition, there was a notable difference was seen when a comparison was made in the post- test scores (Dependent variable) of the Treatment and control groups with score secured at 5.387 for significance ( $p < .05$ ) with 1, 37 degree of freedom at 0.05 level.

Table 4 revealed that the significant difference was seen between the adjusted final mean of the treatment group and control group, the obtained mean difference value was 236.927 The mean difference value was more prominent which demonstrate significance difference at 0.05 levels. This result may be supported well by **Md Iftekher, S. N., Bakhtiar, M., & Rahaman, K. S. (2017)**. Whose aim was to study the effect of yoga on flexibility and balance among shooting trainee athletes at BKSP, Bangladesh. A quasi-experimental study was conducted among shooting trainee athletes. In total 20 athletes took part in this study. In each group we had 10 participants (10 in yoga group and other 10 in non-yoga group). Regular yoga sessions have been conducted early morning biweekly over a period of six weeks. Participant's ages were between 12-17 years. All of them had normal level of BMI. Significant improvement were observed in the yoga group for flexibility (SR,  $P=0.017$ ) and balance

(SS,  $P=0.004$ ) during within group comparison. No significant improvement were seen for flexibility and balance in the non-yoga group. Between group comparison (Yoga and Non-yoga) also shows significant enhancement in both flexibility (SR,  $P=0.018$ ) and balance (SS,  $P=0.021$ ). Our findings helped us to conclude that regular yoga training may improve the balance and flexibility of shooting athletes even within short period of time (6 weeks), can also improve the athletic performances that demands high flexibility and balance.

**Conclusion :** On the basis of our findings we conclude that regular yogic practice can improve the Vital Capacity of School going Children even for short periods of time (8 weeks) and can also improve athletic performance.

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## **Comparative study of Occupational Stress among Physical Education Teachers working in schools Affiliated to Different Boards in Prayagraj**

**Dr. Bhaskar Shukla \***

**Akshay Pathak \*\***

*Work stress is defined as an adaptive reaction to an external situation, which leads to physical, psychological and / or behavioral deviations in the members of the organization. Stress is associated with constraints and demands. Total numbers of 300 Physical Education teachers who are working in three different boards were selected for the study as a subject. Appropriate sample size (N=100 for each group) which is 100 Teachers from the ICSE board, 100 teacher from CBSE board and 100 teacher from U.P. Board were chosen. The selection of the variables to collect the data plays a vital role in any study. After a critical study of various tests and on the basis of related literature the psychological variables was selected to assess the Occupational Stress of Physical education teachers working in three different boards of Prayagraj. The Occupational stresses of the subjects were obtained by using Teachers Occupational Stress Questionnaire (TOSS) prepared by Sajid Jamal & Abdul Raheem. In order to find out the status and nature of the data descriptive statistics were calculated Further In order to find out the significant differences between the mean scores of three groups Analysis of Variance (ANOVA) was applied along with Post Hoc test, wherever applicable. Based on the data obtained and in the context of the study, this conclusion was drawn. No statistically significant difference was found between CBSE, ICSE and UP Board of Prayagraj for the job stress variable, since the resulting calculation was below the tabulated debt significance level of  $P < 0.05$ .*

**Key Word : Occupational Stress**

**Introduction :** Work stress is defined as an adaptive reaction to an external situation, which leads to physical, psychological and / or behavioral deviations in the members of the organization. Stress is

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associated with constraints and demands. The first prevents a person from doing what he wants. The latter refers to the loss of something desired. Constraints and demands can lead to potential stress. In organizations, common causes of stress are task demands, role demands, and interpersonal demands. Activity demands are factors related to a person's job. It includes the design of the working conditions of the individual and the arrangement of the physical work. Jobs where the temperature, noise, or other working conditions are dangerous or undesirable can increase anxiety. Occupational stress can be defined as the adverse physical and emotional reactions that occur when job requirements do not match the skills, resources or needs of the worker. Stress at work can harm your health and even cause injuries. The concept of work stress is often confused with the concept of a challenge, but it is not the same. Challenge energizes us psychologically and physically, and it motivates us to learn new skills and master our Occupations. When a challenge is met, we feel relaxed and satisfied (U.S NIOSH, 1999).

Though there are a number of factors which may be considered extremely important. On the basis of personal experience and related studies, the present researcher has occupational Stress of Physical Education teacher as some of very important areas to be focused on.

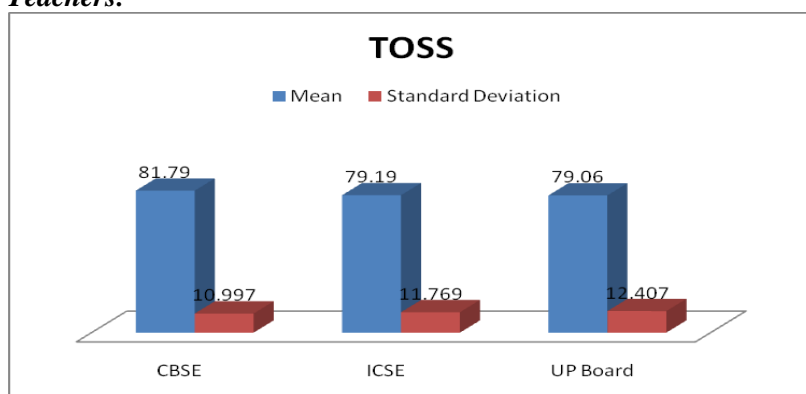
**Procedure :** Total number of 300 Physical Education teachers who are working in three different boards i.e. ICSE, CBSE and U.P.BOARD were selected for the study as a subject. Appropriate sample size (N=100 for each group) which is 100 Teachers from the ICSE board, 100 teacher from CBSE board and 100 teacher from Prayagraj Board were chosen randomly. The Occupational stress of the subjects was obtained by using Teachers Occupational Stress Questionnaire (TOSS) prepared by Sajid Jamal & Abdul Raheem. In order to find out the status and nature of the data descriptive statistics were calculated and represented in tabular and graphical form in relation to Occupational Stress among various boards of Physical Education teachers. Further In order to find out the significant differences between the mean scores of three groups Analysis of Variance (ANOVA) was applied along with Post Hoc test, wherever applicable.

**Results :****Table 1 Descriptive Statistics of CBSE, ICSE and UP Board in relation to Total Occupational Stress**

	<b>CBSE</b>	<b>ICSE</b>	<b>UP Board</b>
Mean	81.790	79.190	79.060
Std. Error	1.099	1.176	1.240
Standard Deviation	10.997	11.769	12.407
Variance	120.955	138.519	153.936
Range	61.00	51.00	52.00
Minimum	47.00	54.00	47.00
Maximum	108.00	105.00	99.00
Kurtosis	.674	-.553	-.366
Std. Error of Kurtosis	.478	.478	.478
Skewness	-.717	-.178	-.705
Std. Error of Skewness	.241	.241	.241

Table 1 reveals that the mean and standard deviation with standard error of Physical education teachers affiliated to three different Boards i.e. CBSE, ICSE and UP Board of Prayagraj in relation to Total Occupational Stress Score. The obtained mean and standard deviation of CBSE Board teachers were  $81.790 \pm 10.997$ , ICSE Board teachers were  $79.190 \pm 11.769$  and UP Board teachers were  $79.060 \pm 12.407$  respectively. The table also shows other descriptive statistics i.e. standard error and sample variance along with the range showing minimum and maximum score of the subjects. The value of kurtosis and skewness along with the standard error of kurtosis and standard error of skewness itself indicates the normality (scientific authenticity) of the data.

**Figure 1 Graphical Presentation of Mean and Standard Deviation of Occupational Stress in relation to CBSE, ICSE and U.P. Board Teachers.**



**Table 2 Computation of Analysis of variance (ANOVA) on Total Occupational Stress of CBSE, ICSE and UP Board**

Variable		Sum of Square	df	Mean Square	F	P
TOSS	BG	474.327	2	237.163	1.721	.181
	WG	40927.620	297	137.803		
	TOTAL	41401.947	299			

The results presented in table 2 ANOVA pertaining to occupational stress among Physical Education teachers working in CBSE, ICSE and UP Board of Prayagraj reveals that statistically no significant differences among these three boards were seen as the obtained calculated F-value 1.721 has been found to be insignificantly lower than the tabulated value of 3.03 required to be significant at  $P < 0.05$  level of significance.

**Discussion of Findings :** On the basis of the results of the present study, comparison of the occupational stress score among physical education teachers working in schools affiliated to three different boards in Prayagraj. Results show that statistically no significant differences among these three boards were seen as the obtained calculated F-value 1.721 has been found to be insignificantly lower than the tabulated value of **3.03** required to be significant at  $P < 0.05$  level of significance. The obtained mean and standard deviation of CBSE Board teachers were  $81.790 \pm 10.997$ , ICSE Board teachers were  $79.190 \pm 11.769$  and UP Board teachers were  $79.060 \pm 12.407$  respectively will be more likely to be the same. This may be

attributing that occupational stress in relation to teachers working at CBSE Board had more stress than the teachers of ICSE Board. The teachers of ICSE also had more job stress than the teachers of U.P. Board. **Thakur (1993)** investigated the significance of difference between the means of job stress and job satisfaction and also to determine the relationship between the scores of job stress and job satisfaction of physical education teachers working in different management schools of Madhya Pradesh. Revealed that the teachers working at private schools had more stress than the teachers of semi government schools. The teachers of semi government schools also had more job stress than the teachers of government schools. The analysis of data also revealed that the teachers of private schools are more dissatisfied than the teachers working in semi government schools and government schools. The teachers working in semi government schools had high dissatisfaction than the teachers of government schools. The co-efficient and co-relation of score showed that there was a significant relationship between the scores of job stress and job satisfaction test scales.

**Conclusions :** Based on the data obtained and in the context of the study, this conclusion was drawn. No significant difference was found between CBSE, ICSE and UP Board of Prayagraj for the Occupational stress variable, since the resulting calculation was below the tabulated debt significance level of  $P < 0.05$ .

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## **India's Development Projects in the the Shadow of Russia - Ukraine War**

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Centuries ago, Revered Bhishma Pitamah, the greatest warrior of ancient great war 'Mahabharat' preached on his death-bed, but of course after the Mahabharat war was over "If we see in front of us, an unjust crime being committed and being capable of stopping it, neither oppose nor try to stop it, we are also equally to be blamed as of the person committing the unjust crime." This is equally relevant, today as would have been in the past. On this scale, if we value the Russian invasion of Ukraine, all the global nations of the whole world and in particular, the U.S.A. European Union, and NATO countries by neither opposing nor trying to stop it of their own strength have committed rather on committing the same crime. Since 24<sup>th</sup> February 2022 when war began as a result of this war in Ukraine thousands of innocent people have been killed, amongst dead most of them suffered a dreadful cruelty after being murdered in a planned way. They were engraved in masses; lakhs of people are feared to take shelter in neighboring European countries after somehow fleeing from Ukraine and crores of people are rendered homeless. The genocide in Bucha city of Ukraine is a black spot on the faces of the so called civilized and cultured people of the advanced countries. In the present era of globalization this kind of brutal cruelty is intolerable whereas some countries are still trying to hide the facts. The fact is Ukraine is sovereign state and Russia has invaded it. Even the schools, colleges and hospitals are demolished in bombing. Residential colonies are devastated and ruined and lakhs of people including elderly persons, ladies and children have suffered brutal cruelty and forced to live in below zero-degree temperatures like animals without having water supply and electricity supply etc. Because of heavy bombardment and airstrike attacks, there is a great shortage of food and medicines in Ukraine. As per media reports the

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dead bodies are lying scattered here and there on the roads and in streets and people are enforced to engrave their near and dear ones even in their residential premises.

In this regard, the past history of America is not very spotless, who invaded Iraq on the false pretext of being the process of producing atomic and other weapons of mass-murder on Saddam Hussain in 2003. Thereafter, by attacks through B-52 Bombers, Tomahawk and Patriot missiles, America pushed back Iraq, the most developed nation of the Arab world, at least 50 years back in development.

NATO nations too, are also on the same footing in this respect. Taking the case of Libya, where going much ahead, even not caring for United Nations directives attacked the army of Lybia and the result came as de-throning of Colonel Ghaddafie's legal regime.

This prolonged Russia-Ukraine war has created such a tentative global challenge, that a time has come when all the nations of the world to think that if a powerful nation being a permanent member of the Security Council in the United Nations, does not hesitate to attack a weaker nation and the United Nations can not interfere first because the attacking nation is very powerful and is a permanent member of Security Council, the present global inactivity would surely encourage this kind of aggression by some other strong nation in the future as is speculated the forceful annexation of Taiwan by China.

#### **Russian Ukraine War at A Glance**

Russian-Ukraine conflict when it started almost more than two months ago on 24<sup>th</sup> Feb. 2022 now on the ground appears to have reached stalemate. Few would have thought that Russia's so called "special military operation" would last this long. After all, Russia has overwhelming military superiority over Ukraine in terms of active troops- 9 lakh to 2.1 lakh and likewise in all other warfare equipment's and other lethal arsenal. Why then have Russian troops failed to overrun any of Ukraine's largest cities, notwithstanding the on-group siege of Mariupol? There must have been some miscalculations or mis-anticipations while Russian President Vladimir Putin ordering the military invasion of Ukraine.

#### **Expectation of Short-term War :**

Russia began its campaign by largely targetting Ukraine Military sites but of late has been bombing civilian areas that too, inside Ukrainian cities. This indicates that Russian operation has not gone to plan while Moscow line up 1.5 lakh to 1.8 lakh troops for the

Ukrainian operation. This posture and composition of the force deployed, indicate to a short –term duration campaign. That is why the capture of many Russian conscripts by Ukrainian forces has surprised military experts. This shows that the conscripts are not well trained and not equipped for long duration military action. Also, baffling are the videos of Russian mechanized units stuck in mud-pits formed by thawing snow. Hence there is reason to believe Putin was expecting little resistance and banking on the Ukrainian military melting away.

#### **U.S. and NATO support for Ukraine**

The main reason Ukrainian forces have faced the war so long, is the compact support from the U.S. and the E.U. Russia should have anticipated this, but it probably underestimated NATO unity. President Putin might have anticipated NATO countries to be a divided camp, incapable of mounting a meaningful joint posture on Ukraine. Putin may have assumed U. S. President Joe Biden to be a risk, disinclined and status quoist leader. It is quite possible that the last year U S disgraceful exit from Afghanistan and Europe's dependance in Russian energy might have contributed to Moscow's miscalculations. But Joe Biden managed to rally much of the American establishments and society behind his punitive economic and diplomatic actions against Russia, and reunified NATO to an extent not seen in the last five years.

#### **International Opinion :**

Russian President may never have anticipated the kind of international reaction he is currently facing. Kicking out major Russian Banks from the International SWIFT payment system was accepted in general. But the freezing of Russian foreign reserves, widespread Western targeting oilgarchs and the mass exodus of multinationals have come as a huge blow for the Russian economy. More than four hundred corporations, including energy majors, B.P., Exyon and Shell have left or drastically scaled bode their operations.

Additionally, countries like Germany which are heavily dependent on Russian energy and were initially cautious about criticizing Russia –are now changing their attitude. This shows their governments are under pressure from their own citizens to act. In that sense the Ukrainian resistance is galvanizing public opinion across the world.

#### **From Conflict to Invasion/ Genocide by Western Media:**

In the run-up to the invasion, the Russian leaderships tried to portray 'the Special Military Operation as a move to liberate



Ukrainian citizens from a Neo –Nazi regime, but this pitch back fired, because Ukrainian President Volodymyr Zelensky himself is a Ukrainian Jew .In the early days of war the conflict Zelensky easily won the war of perception by putting out personalized videos and successfully creating a narrative of Ukrainian resistance against an unjust invasion and later on the Western media propagated it to an extent of genocide in a desperate bid to present a horrified view of Russian forces. This is surprising as Russia is a past master of disinformation campaigns and cyber warfare techniques. Its messaging blunders may be the result of deeper intelligence failures or a cloistered autocratic system.

**Stiff Resistance by Ukrainian forces :**

Ukrainian forces have out done themselves in this war with Russia. It was always assumed that they would be highly motivated in defending their homeland and their tactics have been spot on. Relying on mobile units equipped with anti-tank weaponry like the US made Javelin missile launcher and the Turkish Bayraktar combat drone, Ukrainian have managed to halt or immobilize large Russian mechanized convoys. In addition, Ukrainian forces have been facing Russian backed separatist in Donbass since 2014. This shows that they were not only cognisant of Russia military tactics but also preparing for a possible Russian invasion for the last eight years. They had been receiving training from the Western nations before the Russia invasion commenced.

**Sinking of Moskva Warship in Black-Sea:**

The Russian Warship Moskva was the flagship of Russia's Black Sea Fleet before it sank on 14th April 2022, during the Russian invasion of Ukraine. Ukrainian official claimed to have hit the ship with two R-360 Neptune anti-ship missiles, while Russia said it sank after a fire of unspecified origin in stormy sea without stating the cause of the fire. Originally built in the Soviet-Union Moskva entered service in early 1980.

The sinking of the Moskva warship is however a severe blow to Russian National pride, once upon a time, a symbol of Russian might and ambition, now lies at the bottom of the Black Sea. This is the heaviest loss to Russian navy after World War –II.

“It is more about psychological damage then material damage” Mykola BieGeskov from Ukraine's National Institute for strategic studies told the BBC. Mr. Bielieskov who advises the Ukrainian Government or military strategy, further said “it won't remove Russia's naval blockades on Ukraine completely but it is

powerful symbol that we can employ sophisticated weapons effectively” and he did predict that a Russian ship will now be forced to move further from the Ukrainian shore, where they no longer feel secure.

Thus, we came to conclusion as Mr. Rudvonal Ghosh has commented “These factors have left Russia fighting a war it can not win without massive cost”.

#### **Impact of Ukraine- Russia war on India :**

Now so far as India’s political stand is concerned there are very many limitations and compulsions of maintaining strategic supply chains and logistic support. India’s dependence on Russia for its supply chains of defence requirements, help and guidance in technological transfer in the production of Brahmos missiles and assault rifles, India’s for financial investment in the energy sector of Russia; supply hold ups of carriage-wheels for semi-high speed ‘Vande Bharat Trains’ and history of Russian support in the international arena of politics and in various strategical hangovers, particularly in the present conflict, safely taking out the Indian medical students approximately twenty thousands in number, out of Ukraine on priority basis. So, considering all these points in view, absence of India in the voting of Security Council has been very precisely right and as per needs and requirements to maintain the sovereignty, unity, integrity, and geopolitical affinity of India. As such United States or European Union Nations or other country has no right to dictate India for not purchasing the crude oil on discount from Russia. One should not forget, the India’s political stand, when the Indian Government was being led by a foresighted political leader, like Late Atal Bihari Bajpai, our parliament passed a resolution unanimously, against one sided attack of America on Iraq.

Just as if we throw even a small stone in the still water of a pond, the surge of waves emerging over the surface of water are unaccountable. Likewise, the present Russia-Ukraine conflict is going to influence all the nations of the world, in many respects, of course, to varying magnitudes as per their geo-political relations with Russia and Ukraine. Here in this paper, my study precisely limited and confined merely to the problems, India is facing or is likely to face in near future, related with India’s economic development, security and strategic defence and space programs.

Russia and Ukraine are important trading partner. India’s total export to Ukraine was 472.68 US\$ Million with 0.112 percent share of

India's total import 2913.61 US\$ Million which is 0.476 percent of India's total imports.

**Table-No 1 India's Trade with Ukraine and Russia**  
**Value in US\$ MILLION**

Country	2020-2021	%Share	2021-2022	%Share	%Growth
Export to UKRAINE	450.97	0.1545	472.68	0.112	4.81
<b>India's Total Export</b>	<b>2,91,808.48</b>		<b>4,21,894.29</b>		<b>44.58</b>
Import From UKRAINE	2,139.86	0.5425	2,913.61	0.4756	36.16
<b>India's Total Import</b>	<b>3,94,435.88</b>		<b>6,12,607.71</b>		<b>55.31</b>
Export to RUSSIA	2,655.52	0.91	3,254.68	0.7714	22.56
<b>India's Total Export</b>	<b>2,91,808.48</b>		<b>4,21,894.29</b>		<b>44.58</b>
Import from RUSSIA	5,485.75	1.3908	9,869.99	1.6111	79.92
<b>India's Total Import</b>	<b>3,94,435.88</b>		<b>6,12,607.71</b>		<b>55.31</b>

Source: Export-Import Data Bank

India's total export to Russia is 3254.68 US \$ million and import 9869.99 US \$ Million with 0.771 and 1.61 percent respectively in 2021-22.

**Held up for large supply of Carriage, wheelsets of semi high speed Vande Bharat trains :**

Owing to continuing Russian-Ukraine conflict, a large number of what-sets of Vande Bharat trains coaches are held up for delivery in a manufacturing company of Ukraine. However, courses disclose that 128 of these wheels have somehow managed to reach the neighbouring country, Romania, by road and are expected to be

airlifted shortly to bring them to India for trial purposes. Sources also say that to fulfill the declared schedules of target running this semi-high speed 'Vande Bharat Trains' in the seventy-five main trunk rail routes of India by the end of this year. So to meet the additional supply requirements of these wheels, supply orders have been placed with Czech Republic, Poland and America, and if further exigencies exist, supply order may be given to China too by the Govt of India. But so far Ukraine has been one of the biggest suppliers of these wheels.

#### **Crucial Defence Projects hanging in Balance :**

There is a clear and evident danger that international sanctions against Russia, and the likely hood of "Secondary Sanctions" like the U.S. law called CAAT-SA (Counting America's Adversaries through Sanctions Act) being invoked against India could lead to a major disruption in the supplies from the Russia and Ukraine in near future. The Indian defence establishment, in fact, is scrambling to compile the fall out of sanctions in short, medium, and long-range terms.

Presently given its huge dependence on Russian origin weapon system and platforms, India is now confronted with the daunting challenge of maintaining high operational military readiness against China in the light of the escalating U.S. led sanctions against Russia. With the Indian armed forces going in for the massive emergency procurements of arms supplies and spares after the multiple Chinese intrusions into eastern Ladakh in May 2020 when many of our soldiers lost their precious lives. So, the preparedness of defence becomes of paramount importance.

It was the reluctance of the U.S. to sell F-104 Starfighters to India in the early 1960's after giving them to Pakistan that made India turn to Russia for the much more cost effective MIG-21 jets. Later on with the passage of time, Russia became the largest defence supplier to India. Just since 2007, with India and the U.S. getting into a tighter strategic clinch, Washington begged lucrative Indian defence deals worth over 21 billion dollar.

But upset with Russia's propensity to not stick to delivery schedules, jack up costs mid-way through execution of contracts, create hurdles in transfer of technology and unreliability about spares, India began to increasingly turn to countries like the U.S. , Israel and France for its military requirement after the 1999 Kargil conflict with Pakistan.

Russia still remains India's largest arm supplier, and the only one which helps India with the strategic defence projects like, building nuclear submarines with ballistic missiles, Brahmos & supersonic cruise missiles, 4000 Ton-Grigorovich class guided missiles frigates, N-Powered attack sub-marines, 6 Lakh A.K.203 Kalashnikov assault rifles and negotiations on for 21 MIG-29 and 12 Sukhoi -30MKI fighters, along with the upgradation of the existing squadrons of these fighter planes.

#### **Four 4000-Ton Grigorovich –class guided missiles**

##### **Frigate Project :**

In 2016, India and Russia signed an agreement of one billion dollars (100Cr) for the purchase of four stealth warship ( ship which employs Stealth technology construction Techniques, to ensure that the ship becomes harder to be detected by one or more radar, visual, Sonar or infrared method). According to agreement the two stealth frigates were to be constructed in Russia costing Rs.8000Cr, whereas under transfer of technology remaining two frigates were to be constructed in Goa Shipyard in India costing Rs.13,000 Cr. The construction of all the four frigates is in progress.

This warship will be equipped with the major Indian supplied equipment such as surface to surface missile. The first two Russian made frigates were scheduled for delivering to India by the end of 2022, but owing to pandemic last year it is already getting delayed and now with a delay of about eight months delivery may be expected by the middle of 2023.

The other two frigates being constructed in Goa Shipyard, the supply of 1<sup>st</sup> one is scheduled in 2026 and the other after another six to eight months.

##### **Dependence on Ukraine for Engineers :**

As per defence expert, the gas turbine engines of all the four frigates are to be procured for Zorya-Mash proekt company of Ukraine. The main complex of the company is in the city of Mykolaiv which has been very badly damaged by the Russian missiles attack on 13<sup>th</sup> March 2022. In videos pictures, the fire and heavy smoke on a largescale have been seen from the factory complex owing to missile attacks. In addition to this frigates, Indian Navy is making use of the various gas turbine engines of this factory on a very great extent in many other various installations.

**Engines for 2 frigates (Russian made) received but not tested Operationally :**

The two engines meant for the 2 frigates being built in Russia by Zoryo Masch prockt company have already been delivered to India before the Ukraine war broke-out. These two gas turbines engines have already been sent to Russia but the necessary operational test, could not have been conducted so far due to conflict.

**Ukrainian Engines necessary for Indian Navy :**

At present Indian Navy to a very great extent is depending upon the gas turbine engines of Zoyo Masch prockt company. More than 30 main frontline warships of Indian Navy are powered by the engines of this company. These warships include Rajput class destroyers and Delhi class destroyers.

**Other Major projects underway are :**

- a) 5 Triumf surface to air missile squadrons by 2023 under Rs.40000 Cr contract. First already delivered to Indian Navy. The second manufacturing Brahmos Next one scheduled in June / July 2022.
- b) Brahmos Supersonic cruise missile worth Rs.36000 Crore with Russia –India collaborations. To meet export order \$ 375 million to Philippines in Jan -2023.
- c) N-Powered attack, Sub marine (Chakra III) to be delivered to India by 2025-26 under \$ 3 billion lease deal.
- d) 6 Lakh AK-203Kalashnikov assault Rifles to be manufactured at the Korwa, Amethi ordinance factory with Russian Collaboration under Rs. 5124 Cr contract for a period of 2021-2031, This deal comes with a time when India is aggressively emphasizing on “Make in India” especially in the defence manufacturing sector
- e) Negotiations are already in progress for the purchase of Twenty one MIG -29 and 12 Sukhoi -30 MKI jet fighters, along with upgradation of existing squadrons of these fighter planes.

**Oil Prices, Inflation and Current Account Deficit :**

While presenting the Budget on Feb.1, 2022, the Government had assumed an oil price of \$ 70-75 a barrel. No one could imagine at that time that all their calculation could go away in just few weeks with Brent crude flirting with \$ 120 a barrel level amid predictions that it could go up to \$ 150 in case the Ukraine Russia conflict persists for much longer period.

While policy makers and analysts say the direct impact of the conflict will be muted but oil alone could have a significant bearing by stocking inflation, expanding trade and current account deficits, increasing subsidy burden and hampering economic recovery, just at a time when economy seemed to be gaining momentum from the pan-epidemic.

Presently inflation is the biggest worry, Government sources say edible oil supplies and payment dues of exporters are the other aspects. The Central Government has to work on. With the Ukraine being a major source of crude Sunflower, supply disruptions are anticipated.

Companies will have to look at other sources or push for substitution through rice bran and other cooking mediums at the house hold level.

The impact of high prices, disruptions in supply chains and overall uncertainty could lead to a fresh slow-down in growth. The trade sector covered also could face the brunt of sanctions. Although India's trade with Russia and CIS (Common wealth of independent states) countries is around \$11 billion. Pharma companies and Tea exporter are worried a lot assuming that shipments may be halted for the time being, not just because of payment glitches but on account of absence of shipping services.

**Gems and jewellery** could also be hit here is uncertainly as nearly 30% of diamonds came from Russia, with 10% coming directly. We hope that the conflict may be resolved soon.

Impact will also be felt on the fertilizer industry due to the ban on the export of Ammonium Nitrate by Russia, which accounts for 30% of the product shipped into the country.

**Russian –Ukraine conflict to further worsen electronic chip shortage :**

Since Russia controls as much as 44% of global palladium supplies, Ukraine produces significantly 70% of the global supply of Neon- the two key raw materials that go into making of chips. The markets can expect the global chip shortage which began with the pandemic to worsen if the military conflict lingers on further. Palladium and Neon are the two main resources that are key to the production of electronic chips and these chips are necessary in almost all other industries like automobiles, mobile phones and consumer electronics.

The Russian-Ukraine war can thus hit the global supply chains that are already constrained due to the pandemic and the

worse impact will be ongoing chip shortage ,because the warring nations i.e. Russia and Ukraine brutally control supplies of Key raw materials that go into making of semi-conductors.

**Delay in ISRO Space Program :**

While National Aeronautics and Space Administration (NASA) has made it clear that it will continue to work with Russian space agency (ROSCOSMOS) on international space station, practical cooperation may get sharply divided along national political links in the years ahead. India's Gaganyaan human space flight project, which relies on Russian Corporation, will probably experience delays. Sanctions and political considerations are also likely to place limitations on India's ability to work simultaneously with Russia, the European Union, and United States. The US may target many more Russian organizations as the war in Ukraine bloodily grinds on.

Paradoxically, the decline in space cooperation between Russia and the West could offer India some opportunities. A cash-strapped Russia may offer more favorable terms of cooperation to India. Similarly, India could also offer to launch satellites left stranded by sanctions.

However, the challenge for India would be to find the launch capacity. The pandemic has already created delays, forcing ISRO to schedule an unprecedented eleven launches in the coming financial year. India is still many years away from the sort of nimble private sector led space economy that can easily take advantage of such opportunities.

**India's own space projects with Ukraine :**

Russia's invasion has also created uncertainty about India's own collaborative projects with Ukraine. Most important among these are the development of semi-cryogenic engines that will allow ISRO to launch heavier payloads into geostationary orbit. Even if, Ukraine's space-related facilities survive the war intact, their ability to collaborate with India will depend on the new political dispensation. ISS (International Space Station) has been emblem of the promise of space cooperation for more than two decades. However, the War in Ukraine could make such cooperation untenable. Both Russia and United States are major space farers. America's allies in Europe and Asia are also key sources of technologies that support the use of space. Even Ukraine has a significant aerospace industry.

Even as Russia's armed forces commenced operation in Ukraine in the early hours of 24<sup>th</sup> Feb., the multinational crew of



International Space Station, consisting of four Americans one German, and two Russian continued to work together to keep their fragile outer space habitat functioning.

Mr. Aditya Ramanathan has stated “The risk to space could come in three ways. One is through sanctions already being put up in place. The 2<sup>nd</sup> is through the physical destruction or control of aerospace facilities in Ukraine and the third, a less discussed risk is potential attempts by either side to disrupt the others use of space for military purposes”. As India navigates a treacherous diplomatic loud scapi, it will need to keep an eye on how each of the risks could affect its interest.

#### **Effects of Sanctions on Russia :**

President Joe Biden has always announced the U.S. will impose sweeping sanctions on Russia that would among other things “degrade” its space performances. Existing American and European restrictions dating back to the annexation of Crimea in 2014 have already caused major space problems for Russia. For example, in 2021, the head of ROSCOSMOS Dmitry Rogozian, told law makers that Russia did not have satellites ready to launch because it could not acquire the necessary microprocessors.

#### **Suggestions :**

These developments ought to impress some urgency into India's own efforts to defend its assets in space. The services Defence Space Agency formally set up in Bengaluru in 2019, it has made very little progress. Besides prioritizing the Defence Space Agency and ensuring its well funding, India should develop and publish a military space doctrine that lays out how it will respond to any attempt to contest its uses of space. India's nuclear doctrine offers a substantial precedent for such an effort.

Russia's war in Ukraine could cause problems for India's own space ambitions but it also offers lessons. One, India must reduce risks to itself by diversifying its space partnerships and encouraging foreign direct investment into its private space sector. Two, India must develop the wherewithal to seize opportunities caused by Russia-Ukraine conflict and geopolitical tension - both of which are likely to be found in abundance in the decade ahead. Finally, India must develop the capacity to defend its ability to use space for its own prosperity and security, keeping in mind the principles of ‘Atma Nirbhar Bharat’ and ‘Make in India’ always.

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## **Right to Free Legal Aid : in the Light of Judicial Interpretation**

*Dr. Suresh Nagar\**

**Introduction :** India is a country with poor and illiterate masses. Majority of the Indians are not aware of their legal and constitutional rights. Even if they come to know of their rights, they are in a helpless position because they cannot afford to engage the services of a legal counsel, which has become a costly affair. Legal aid to the poor and weak is necessary for the preservation of rule of law which is necessary for the existence of the orderly society. Until and unless poor illiterate man is not legally assisted, he is denied equality in the opportunity to seek justice. Legal aid is a constitutional right supported by Articles 21 and 39-A of the Constitution of India. Article 21 of the Indian Constitution states that no person shall be deprived of his life or personal liberty except according to procedure established by law.

Public Interest Litigation is one shining example of how Indian judiciary has played the role of the vanguard of the rights of Indian citizens especially the poor. It encouraged the public spirited people to seek justice for the poor. This article highlights the importance of free legal aid in a constitutional democracy like India where a significant section of the population has still not seen the constitutional promises of even the very basic fundamental rights being fulfilled for them.

**Concept of Legal Aid :** Legal Aid implies giving free legal services to the poor and needy who cannot afford the services of a lawyer for the conduct of a case or a legal proceeding in any court, tribunal or before an authority. Legal Aid is the method adopted to ensure that no one is deprived of professional advice and help because of lack of funds. Therefore, the main object is to provide equal justice is to be made available to the poor, down trodden and weaker section of society.

Legal aid strives to ensure that constitutional pledge is fulfilled in its letter and spirit and equal justice is made available to the poor, downtrodden and weaker sections of the society.

**Free Legal Aid in India :** The impression of legal aid is considered under Article 39A of the Constitution of India. Further, Article 39-A

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\* S/O Rajbir Singh

directs the State to ensure that the operation of the legal system promotes justice on a basis of equal opportunities, and shall in particular, provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities.

Since the 1952, the Government of India got to be quick to give legal aid to poor people and various conferences of Law ministers and law commissions were accounted for. In the year 1960, a couple of rules were set up by the legislature. In various states of the nation, the provisions of legal aid were lifted through Legal Aid Boards, Societies and Law departments.

**Constitutional Framework :** The constitution seeks to provide a framework for achievement of these objectives. The theme has been elaborated in part III and part IV of the constitution that deals with the fundamental rights and directive principles of state policy respectively. The constitution are articles 14, 21 and 22 truly speaking the idea of legal aid is derived from article 14 of the constitution. The right to free legal service must be held implicit in the guarantee enshrined in article 21. apart from the fundamental rights, the state has been directed to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice- social, economic and political shall inform all the institution of national life. Article 39A which has been included through constitution 42<sup>nd</sup> amendment Act 1976 specially provides 39A equal justice and free legal aid.

**Statutory Provisions :** These are many statutory framework like the code of criminal procedure, 1973 contains section 303, 304. And the code of civil procedure, 1908 contains an order XXXIII entitled "Suits by Indigent Persons.". the legal services authorities act, 1987 and the legal service authorities amended act, 2002. the advocate act, 1961 contains the provision, section 9A entitled "Constitution of legal aid committees".

**The Contribution of Judicial Interpretation :** The Supreme Court of India got a major opportunity to make an emphatic pronouncement regarding the rights of the poor and indigent in judgment of *Hussainara Khatoon*<sup>1</sup> where the petitioner brought to the notice of Supreme Court that most of the under trails have already under gone the punishment much more than what they would have got had they been convicted without any delay. The delay was caused due to inability of the persons involved to engage a legal counsel to defend them in the court and the main reason behind their inability was their

poverty. Thus, in this case the court pointed out that Article 39-A emphasized that free legal service was an inalienable element of 'reasonable, fair and just' procedure and that the right to free legal services was implicit in the guarantee of Article 21. In ***Suk Das v. Union Territory of Arunachal Pradesh***<sup>2</sup>, Justice P.N. Bhagwati, emphasized the need of creating the legal awareness to the poor as they do not know their rights more particularly right to free legal aid and further observed that in India most of the people are living in rural areas are illiterates and are not aware of the rights conferred upon them by law. Even literate people do not know what are their rights and entitlements under the law. It is this absence of legal awareness they are not approaching a lawyer for consultation and advice. Moreover, because of their ignorance and illiteracy, they cannot become self-reliant and they cannot even help themselves. That is why promotion of legal literacy has always been recognized as one of the principal items of the program of the legal aid movement in the country. I would say that even right to education would not fulfill its real objective if education about legal entitlements is not made accessible to people and our constitutional promise of bringing justice to the door steps of the people would remain an illusion.

Justice Krishna Iyer, who is crusader of social justice in India, had rightly said that 'if a prisoner sentenced to imprisonment is virtually unable to exercise his constitutional and statutory right of appeal inclusive of special leave to the Supreme Court for want of legal assistance, there is implicit in the Court under Article 142 read with Articles 21 and 39-A of the Constitution, the power to assign counsel for such imprisoned individual 'for doing complete justice'.<sup>3</sup> It is a statutorily recognized public duty of each great branch of government to obey the rule of law and uphold the trust with the constitution by making rules to effectuate legislation meant to help the poor.<sup>4</sup> Though the law has been enacted to protect the poor the governments are lazy to implement the enacted law. The same was observed by the Supreme Court in ***State of Haryana v. Darshana Devi***<sup>5</sup>, that "the poor shall not be priced out of the justice market by insistence on court-fee and refusal to apply the exemptive provisions of order XXXIII, CPC. The state of Haryana, mindless of the mandate of equal justice to the indigent under the magna carta of republic, expressed in article 14 and stressed in article 39A of the constitution, has sought leave to appeal against the order of the high court which has rightly extended the 'pauper' provisions to auto-

accident claims. **Tara Singh v State** AIR 1951, SC 441 – the court held that the state had no duty to provide an accused with a counsel. **Ranjan Dwivedi v Union of India** AIR 1983, SC 624 – The court held that right of an accused to be supplied with a lawyer by the state. **State of Maharastra v M.P Vashi** AIR 1996, SC 1 – The court held that the scope of right to free legal aid.

**Conclusion :** The judiciary as one of the instrumentalities of the state services for elimination of inequalities in facilities and opportunities in using its process, which is integral part of Article 38. New people's courts not merely procedural alterations are envisaged by Article 39-A to ensure a new legal system and procedure which are suited to social justice and elimination of all kind of disabilities of the reasons in getting real remedial justice. To make this constitutional mandate a reality, we should attempt many new methods of decentralized, non professional people participatory justice system. We must device flexible system suited to local conditions. for the preservation of rule of law and democracy and for making the fundamental rights meaningful, the legal aid to the poor and weak person is necessary. Thus free legal aid and lok Adalat are the instruments of speedy justice for the poor and the needy. The constitutional obligation of access to justice can be achieved only through these mechanisms, which delivers the justice to the doorsteps of the poor.

#### References :

- 1 Articles 14 and 22(1) of the Indian Constitution.
- 2 AIR 1986 SC 991.
- 3 *M.H. Hoskot v. State of Maharashtra* (1978) 3 SCC 81.
- 4 Order 33, Rule 9A, Code Civil Procedure, 1908.
- 5 AIR 1972 SC 855.
- 6 [https://en.wikipedia.org/wiki/Legal\\_aid](https://en.wikipedia.org/wiki/Legal_aid)
- 7 [https://en.wikipedia.org/wiki/National\\_Legal\\_Services\\_Authority](https://en.wikipedia.org/wiki/National_Legal_Services_Authority)
- 8 P.M. Bakshi "The Constitution of India" Bare Act., Universal Law Publication Co., Pg. no.-87-88.
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# Factors Affecting Employee Turnover: A Study on Private Schools Teachers in Butwal Municipality

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## **Abstract**

**Purposes:** The main purpose of the study is to identify the factors that influence teachers' turnover in private schools. However, the specific objectives of the study are to identify the factors that affect the employee turnover in private schools in Butwal as well as to analyze the degree to which these factors are related to employee turnover in private schools in Butwal.

**Methodology:** A descriptive research design has been followed with convenient sampling. However, as the result indicates the position of job security is very poor, which is the most contributing factor for higher employee turnover in the private schools.

**Implications:** The implication of the study has been associated with the private schools in the study area with special consideration upon job security the most influencing factor as regard the high employee turnover. Therefore the "job security" has been having direct link with all the private schools operating in this locality i.e. Butwal.

**Key Words:** Employee Turnover, Job Security, Employees

**Paper Type:** Research Paper

technique followed by survey of five degree Likert Scale structured questionnaire with 133 samples with simple descriptive analysis.

**Findings:** The study documents that present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support, and supervisors' support are better in the work place so that they are not the contributing factor of employee turnover in the private schools.

## **I. Introduction**

A high employee turnover has been a massive problem in the whole world. Employee turnover can be the result of job dissatisfaction, recruitment and selection practices, low pay, facilities

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provided, illness and so on. Significant numbers of employees in early stage of their profession are school teachers. Research has shown that approximately one quarter of all beginning teachers leave teaching within 4 years. In Chicago, a report on teacher turnover released on June 29<sup>th</sup> 2009 revealed that within 5 years most schools lose about half of their teachers. The problem here is: what are the actual factors affecting teachers' turnover?

The exit of both new and experienced teachers is a great challenge for schools as this usually carries along with negative consequences. So, the present study is mainly carried out realizing that the teachers' turnover has reached out a catastrophic stage in Butwal. The study is especially aimed to identify the factors that actually lead to teachers' turnover in Butwal as none of the previous research attempted to explore it. The study will be helpful to human resource managers and administrators of private schools to reduce the rates of teachers' turnover and consequently ensure a stable and well-motivated staff in private schools. To the society, the study will add knowledge in the educational field.

The main objective of this study is to find the factors that influence teachers' turnover in private schools. However, the specific objectives of the study are to identify the factors that affect the employee turnover in private schools in Butwal and to analyze the degree to which these factors are related to employee turnover in private schools in Butwal.

The rest of this paper is organized as follows: section II provides a brief review of literature with theoretical framework; section III deals with methodology of the study; section IV presents study results and section V reveals conclusion of the study with implications and limitations.

## **II. Literature Review and Theoretical Framework**

Turnover refers to the amount of movement of employees in and out of an organization, normally present in terms of the turnover rate (Chruden & Sherman, 1972). But of all those, human resources have come to be the most important resources. Mobley (1982) gave the meaning of employee turnover as the discontinuance of membership in an organization by the person who received monetary compensation from the organization. If this is the case, then every school should strive to retain the best and right quality of teachers. A school is an avenue through which many children's future events and opportunities can be realized; unfortunately, it is the teaching profession that loses thousands of dedicated members each year.



Tanke (2001) has defined turnover as the movement of employees out of the organization. Carley (1992 as cited in Tham, Pee, Kankanhalli & Tan, 2008) states that employees turnover means the rotation of workers around the labor market, between organizations, jobs and careers.

Fitz-enz (1987) defines employee turnover as the movement of employees into and out of organizations while Grobler et al. (2002) simply refers to it as “the movement of employees out of the organization”. Fitz-enz (1987) states that there are voluntary and involuntary turnover. When an employee leaves the company of his/her own will is called voluntary turnover. On the other hand, employee termination for poor job performance, absenteeism, or violation of work place policies is called involuntary turnover. Dismissals, retirements, death are the examples of involuntary turnover. At the other side of literature, Grobler et al. (2002) proposes employee turnover as functional and dysfunctional turnover. The authors argue that functional turnover is necessary in an organization because among other things it brings in new employees who might have good ideas on how to improve organizational productivity. On the other hand, “excessive turnover creates an unstable workforce and increases human resource costs and organizational ineffectiveness” and this was referred to as dysfunctional turnover (Grobler et al. 2002).

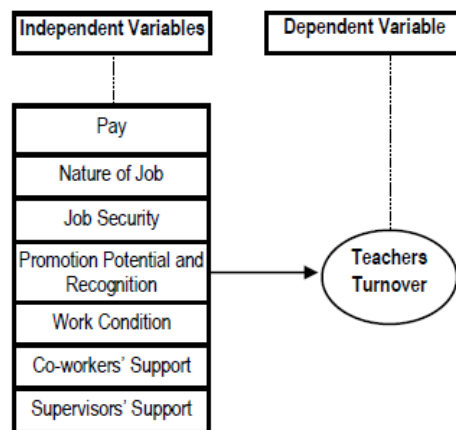
Many studies conducted in different settings found a significant negative correlation between the facets of job satisfaction and turnover intention. Rahman et al. (2008) found that job satisfaction had negative effect on turnover intentions of IT professional. Khatri and Fern (2001) concluded that there was a modest relationship between job satisfaction and turnover intentions. Sarminah (2006) found a moderate relationship between job satisfaction and turnover intentions.

A teacher is likely to remain working in his/her present job if he/she knows that performance will be measured, evaluated and rewarded with positive outcomes like pay rise, benefits, promotion, recognition and others. Failure to be rewarded as expected may get a teacher frustrated, reduce his/her effort, be demotivated and eventually quit the job. Reports in countries such as South Africa (Xaba, 2003), Zambia, (Papau, New Guinea & Malawi VSO, 2002) indicated that the problem had almost reached a serious stage and so it is the case of Nepal. Turnover refers to the ratio of leavers to the average number of employed during the course of year.

It is commonly believed that teacher turnover is unusually high and that this is a sign of failure in the education system. Grissmer and Kirby (1997) use earlier versions of the SASS and find that teacher turnover follows a U-shaped curve, and, as a result, they give much greater weight to the importance of teacher retirements. In an earlier study these same authors find that returning teachers comprised 40 percent of all new teacher hires during the 1980s and argue that teachers are much less likely to return after the age of forty (Grissmer & Kirby, 1992).

It should be noted that if the rate at which teachers leave the school is high, the figure may reflect an ineffective human resource management strategy. This study was guided by Herzberg's motivation-hygiene theory of job satisfaction. Herzberg proposes that every worker has two sets of needs or requirements- motivational and hygiene needs. This theory indicates that teachers will stay in the school as long as they can satisfy their needs and they are motivated, but when their needs surpass their income and they feel they are no longer motivated, they will seek better employment where they will feel motivated. This theory is selected because it deals with job satisfaction, an element which when not met, usually leads to labor turnover and in this reference teacher turnover which is of interest in this study. This study, therefore, focused on factors affecting turnover in private school in Butwal. Based on the evidences documented in the cited literatures, this study there is a relation between teachers' turnover in private school and the factors that affect it. Some of the factors (independent variables) that affect teachers' turnover in private school are present position of pay, nature of job, job security, promotion potential and recognition, work conditions, co-workers' support, supervisors' support and so on.

**Figure 1**  
**Schematic Diagram Representing Factors Affecting Teachers' Turnover**



The schematic diagram in Figure 1 shows the relation between the dependent and independent variables of this study. In Figure 1, dependent and independent variables of the study are presented along with their relation i.e. higher the pay, better the nature of job, job security, promotion potential and recognition, work conditions, co-workers and supervisors' support, lower will be teachers' turnover and vice-versa.

### III. Methodology

#### Population and sample

The descriptive research design is the base of the study and the population for the study includes all the teachers of private schools in Butwal Municipality, Nepal. There is no verified source of information about number of teachers in private schools in Butwal. For this study, sample of 133 teachers from different private schools in Butwal have been taken. The sampling approach used in this study is the convenient sampling approach. This sampling method allows researcher to identify the potential respondents to satisfy the stated purposes.

#### Nature and sources of data

The study is entirely based on the primary data. Structured questionnaires were distributed among the teachers in private schools in Butwal. A total of 133 questionnaires were distributed to the teachers in different private schools. Among them only 60 respondents gave timely responses and have been included in the study. The questionnaire was divided into two sections, namely, background information and turnover intention. In section one, respondents were asked to provide some background information

containing gender, age, academic qualification, marital status and family structure. In section two, 22 statements representing the turnover intention in five point Likert Scale items were provided. The respondents were asked to state their level of agreement or disagreement on the statements provided in this section.

#### **Method of data analysis**

Information obtained from questionnaires is analyzed using various tools. The method of data analysis used in this study consists of tables, simple descriptive statistics such as frequency, percentage, mean, and standard deviation.

#### **Variables and Measures**

The variables like Pay, Nature of Job, Job Security, Promotion Potential, and Recognition, Work Condition, Co-workers' Support, Supervisors' Support have been considered as independent and Teachers' Turnover as a dependent variable to study the factors responsible for teachers turnover in Butwal, Nepal.

### **IV. Study Results**

#### **Respondents' Profile**

Table 2.1 shows the profile of the respondents based on their gender, age group, academic qualification, marital status, and family structure. Panel A of the Table 2 shows the gender composition of respondents. Out of total 60 respondents covered in this study 20 are male and 40 female. Hence, the majority of the respondents are female.

Panel B of the Table 2 shows the age group composition of respondents. Out of total 60 respondents covered in this study, 38 respondents are below 30 years of age and 22 are 30 years and above. Hence, the majority of the respondents are below 30 years of age. Similarly, Panel C shows the academic qualification of the respondents. Out of the total respondents, 17 are with intermediate or below level of education, 28 are with Bachelors Degree and 15 are with Masters Degree. The qualification structure of the respondents indicate that significant number of them are either bachelor or masters degree holders.

**Table 2**  
**Respondents' Profile**

<b>Panel A: Based on Gender</b>		
<b>Gender</b>	<b>No.</b>	<b>Percent</b>
Male	20	33.33
Female	40	66.67

<b>Total</b>	<b>60</b>	<b>100.00</b>
<b>Panel B: Based on Age Group</b>		
<b>Age Group</b>	<b>No.</b>	<b>Percent</b>
Below 30 Years	38	63.3
30 Years and Above	22	36.7
<b>Total</b>	<b>60</b>	<b>100.00</b>
<b>Panel C: Based on Academic Qualification</b>		
<b>Qualification</b>	<b>No.</b>	<b>Percent</b>
Intermediate or Below	17	28.3
Bachelor Degree	28	46.7
Masters Degree	15	25
<b>Total</b>	<b>60</b>	<b>100.00</b>
<b>Panel D: Based on Marital Status</b>		
<b>Marital status</b>	<b>No.</b>	<b>Percent</b>
Married	42	70
Unmarried	18	30
<b>Total</b>	<b>60</b>	<b>100.00</b>
<b>Panel E: Based on Family structure</b>		
<b>Family structure</b>	<b>No.</b>	<b>Percent</b>
Nuclear	46	76.7
Joint	14	23.3
<b>Total</b>	<b>60</b>	<b>100.00</b>

The composition of respondents based on marital status is shown in Panel D of Table 2. It shows that, out of the total 60 respondents, 70 percent are married and 30 percent unmarried. Panel E shows the family structure composition of the respondents. Out of total respondents covered in this study, 46 live in nuclear family and 14 live in joint family. Hence, the majority of the respondents live in nuclear family.

#### **Factors affecting Employee Turnover**

Table 3 reports the result of aggregate analysis of seven factors associated with employee turnover in the primary schools. The seven factors are present pay position, nature of job, job security, promotion potential and recognition, work condition, co-workers' support and supervisors' support. The respondents were asked to state their level of agreement and disagreement on a total of 22 statements associated with these seven factors indicating the causes of employee turnover. The reported statistics are weighted mean score and the standard deviation.

**Table 3**  
**Descriptive Statistics of Employee Turnover Attributes**

<b>Variables</b>	<b>Mean</b>	<b>S.D.</b>
Present Pay Position	3.4611	.74937
Nature of Job	3.3667	.72700
Job Security	2.2417	.82077
Promotion Potential and Recognition	3.1528	.65906
Work Condition	3.3222	.85253
Co-workers' Support	3.9000	.74674
Supervisors' Support	3.6186	.95294

The result indicates that present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support, and supervisors support are better in the work place (mean score above 3) so that they are not the contributing factor of employee turnover in the private schools. However, as the result indicates the position of job security is very poor (mean score below 3), which is the most contributing factor for higher employee turnover in the private schools.

#### **Employee Turnover with respect to Gender**

Table 4 reveals the result of analysis of seven factors associated with employee turnover based on gender. The result shows that male respondents are satisfied with their present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), they are not the contributing factor of employee turnover; however the result also shows that there is strong co-workers' support among male respondents (mean score above 4). The result also indicates that the male respondents are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor for higher employee turnover in private schools.

With respect to female respondents, the results show that they are satisfied with the present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not contributing factor for employee turnover in private schools. However, the result also indicates that female respondents are not satisfied with their position of job security (mean score below 3), so

this is the most contributing factor for employee turnover in private schools.

**Table 4**  
**Descriptive Statistics of Employee Turnover Attributes by Gender**

<b>Variables</b>	<b>Male</b>	<b>Female</b>
Present Pay Position	3.3833	3.5000
Nature of Job	3.5125	3.2938
Job Security	2.1500	2.2875
Promotion Potential and Recognition	3.2667	3.0958
Work Condition	3.7333	3.1167
Co-workers' Support	4.1250	3.7875
Supervisors' Support	3.8684	3.5000

#### **Employee Turnover with respect to Age**

Table 5 indicates the result of analysis of seven factors associated with employee turnover based on age. The results show that respondents below 30 years of age are satisfied with their present pay position, nature of job, promotion potential and recognition, work conditions, co-workers' support and supervisor's support (mean score above 3), so that they are not the contributing factors for employee turnover. However, the results also indicate that the respondents below 30 years of age are not satisfied with the position of job security (mean score below 3), so this is the most contributing factor for high employee turnover in private schools.

The results show that the respondents 30 years of age and above are satisfied with their present pay position, nature of job, promotion potential, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not the contributing factors for employee turnover in private schools. However, the results also indicate that the respondents 30 years of age and above are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor for high employee turnover in private schools.

**Table 5**  
**Descriptive Statistics of Employee Turnover Attributes by Age**

Variables	Below 30 years	30 years and above
Present Pay Position	3.3684	3.6212
Nature of Job	3.4605	3.2045
Job Security	2.2500	2.2273
Promotion Potential and Recognition	3.0789	3.2803
Work Condition	3.1140	3.6818
Co-workers' Support	3.9211	3.8363
Supervisors' Support	3.6022	3.5455

#### Employee Turnover with respect to Qualification

Table 6 presents the result of analysis of seven factors associated with employee turnover based on academic qualification. The results show that respondents with intermediate or below level of education are satisfied with their present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not the contributing factor for employee turnover. However, the results also indicate that the respondents with intermediate or below level of education are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor for high employee turnover in private schools.

**Table 6**  
**Descriptive Statistics of Employee Turnover Attributes by Academic Qualification**

Variables	Intermediate or Below	Bachelor Degree	Masters Degree
Present Pay Position	3.6471	3.4881	3.2000
Nature of Job	3.3676	3.3929	3.3167
Job Security	2.5588	2.0714	2.2000
Promotion Potential and Recognition	3.3137	2.9464	3.3556
Work Condition	3.2941	3.0595	3.8444
Co-workers' Support	3.6471	3.8750	4.2333
Supervisors' Support	3.4412	3.5741	3.9000



The results show that the respondents with Bachelor degree are satisfied with their present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score below 3), so that they are not the contributing factor for employee turnover. However, the results also indicate that the respondents with Bachelor degree are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor for high employee turnover in private schools. The results show that the respondents with Master's degree are satisfied with present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not the contributing factors for employee turnover in private schools; however the results also that there is strong co-workers' support among respondents with Master's degree (mean score above 4). The results also indicate that the respondents with Master's degree are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor for high employee turnover in private schools.

#### **Employee Turnover with respect to Marital Status**

Table 7 reveals the results of analysis of seven factors associated with employee turnover based on marital status. The results show that the respondents who are married are satisfied with present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not the contributing factors for employee turnover in private schools. However, the results also indicate that the respondents who are married are not satisfied with their position of job security (mean score below 3), so that this is the most contributing factor for high employee turnover in private schools.

**Table 7**  
**Descriptive Statistics of Employee Turnover Attributes by Marital Status**

<b>Variables</b>	<b>Married</b>	<b>Unmarried</b>
Present Pay Position	3.4206	3.5556
Nature of Job	3.2321	3.6806
Job Security	2.2381	2.2500
Promotion Potential and Recognition	3.0714	3.3426

Work Condition	3.3095	3.3519
Co-workers' Support	3.8690	3.9722
Supervisors' Support	3.5976	3.6667

The results show that the respondents who are unmarried are satisfied with present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not the contributing factors for employee turnover in private schools. However, the results also indicate that the respondents who are unmarried are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor of high employee turnover in private schools.

#### **Employee Turnover with respect to Family Structure**

Table 8 presents the result of analysis of seven factors associated with employee turnover based on family structure. The results show that respondents who have nuclear family are satisfied with their present pay position, nature of job, promotion potential and recognition, work conditions, co-workers' support and supervisor's support (mean score above 3), so that they are not the contributing factors for employee turnover in private schools. However, the results also indicate that the respondents who have nuclear family are not satisfied with the position of job security (mean score below 3), so this is the most contributing factor for high employee turnover in private schools.

**Table 8**  
**Descriptive Statistics of Employee Turnover Attributes by Family Structure**

<b>Variables</b>	<b>Nuclear</b>	<b>Joint</b>
Present Pay Position	3.5362	3.2143
Nature of Job	3.3152	3.5357
Job Security	2.1957	2.3929
Promotion Potential and Recognition	3.1558	3.1429
Work Condition	3.3551	3.2143
Co-workers' Support	3.9130	3.3871
Supervisors' Support	3.5556	3.8214

The results show that the respondents who have joint family are satisfied with the present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support and supervisors' support (mean score above 3), so that they are not the contributing factors for employee turnover in private schools. However, the results also indicate that the respondents who have joint family are not satisfied with the position of job security (mean score below 3), so that this is the most contributing factor of high employee turnover in private schools.

#### **V. Conclusion**

The main conclusion of this study is that poor job security among private schools in Butwal Municipality is the major contributing factor for higher employee turnover. Based on the aggregate analysis of different factors of employee turnover, the study also concludes that present pay position, nature of job, promotion potential and recognition, work condition, co-workers' support, and supervisors support are better in the work place so that they are not the contributing factor of employee turnover in the private schools. However, as the result indicates that the position of job security is very poor, which is the most contributing factor for higher employee turnover in the private schools.

The study further concludes that on the basis of analysis of employee turnover attribute based on gender, male teachers are satisfied with their pay, nature of job, promotion potential and recognition, work condition, co-workers support and supervisors' support so, that these are the contributing factor whereas male teachers are not satisfied with their position of job security, so that this is the most contributing factor for high teacher turnover in private schools in Butwal. And so is the case of female teachers. Based on analysis of employee turnover attribute by age, academic qualification, marital status and family structure; all below 30 years of age and 30 years of age and above of teachers, all the teachers with intermediate or below level of education, teachers with Bachelor's degree and with Master's degree, married and unmarried teachers and teachers having nuclear and joint family are satisfied with their pay, nature of job, promotion potential and recognition, work condition, co-workers support and supervisors' support so, that these are the contributing factor whereas they all are not satisfied with their position of job security, so that this is the most contributing factor for high teacher turnover in private schools in Butwal.

Despite of the sincere efforts made on arriving at meaningful conclusions, this study is not free from limitations. This study is based on the survey through structured questionnaire among teachers in private schools so the study is completely based on the responses derived from the primary data. Ideally, this study should have been conducted in all private schools in Butwal but time constraints dictated a smaller sample. The limitations of convenient sampling are also applicable in the study.

The study has argued that for a school to reduce on the rate of teacher turnover, it must change its administrative policies, must put in place strategies that will ensure teachers' job satisfaction, for example- better pay, work conditions, ensure job security, try to meet teachers' expectations and value them. There is need for all stakeholders especially, the principal and school directors to devise means of regulating the phenomenon of teacher turnover in private schools in Butwal Municipality.

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## **“Constitutional Rights and Protection of Transgenders in Indian Society”**

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“Sex is what you are born with, gender is what you recognize and sexuality is what you discover.” Operationally defined, a hijra refers to a human person who appears to have characteristics of both the genders that is masculine and feminine. The transgender community lives a life of exclusion- socially, culturally, economically and politically. The Indian government census did not include transgenders for the first sixty four years after independence. Later when the community was given the option for identifying themselves as transgenders in the statistical exercise for the first time in 2011, half a million persons identified themselves as transgenders. Uttar Pradesh is one of the top state, which represents highest concentration of self identified transgenders in India. The problems faced by them generally include social exclusion, disrespect, discrimination, verbal and physical abuses, forced Prostitution, human trafficking, harassment, violence like rape, elimination from family property, exclusion from own home, loneliness and lack of educational facilities. A watershed moment in the history of transgender rights in India was in July 2009. Facilitating the transgenders, the law and order are providing help to develop their own community. Indian constitution endow them equal rights and equal protection with from discrimination on the grounds of race, caste, religion, sex, place of birth or any of them, as entitled in our fundamental rights of article (14) and (15). Recently the Indian cabinet approved the draft of the transgender person (Protection of rights) Bill, 2016 this was introduced in the Lok sabha (the lower house of the Indian parliament) on 2<sup>nd</sup> August 2016. The rights guaranteed under the bill follows: Gender Recognition, Protection from Discrimination, Welfare, Education, Social security and Health. Also, the Modi government has reworked the definition and several

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crucial clauses with clearance of 27 amendments to the transgender Persons (Protection of Rights) Bill and accepted nine of the eleven major suggestions of the parliamentary standing committee, which had earlier examined the bill. Along with these constitutional amendments, large scale sensitization is needed to give a better future for transgender community.

**Key words :** Transgender community, Prostitution, Human trafficking, Harassment.

Everyone knows gender is a problem, yet no one thinks of it as a human right issue.

***Riki Wilchin.S***

Transgender refers to a person “who have both the characteristics of gender which is masculine and feminine. In Indian society, transgenders lives a long period of life which involves social exclusion, cultural exclusion, economical exclusion and political exclusion as it is well known that transgender is an umbrella term that is used for persons whose gender identity, gender appearance or behaviour does not confirm to their gender assigned at birth. Depending on the cultural and religious orientation, the assignment of names for a transgender varies. Ancient Indian texts such as “Vedas” categories them as individuals belonging to the third nature (neither masculine nor feminine). [1]

*Living conditions of transgenders:* As a top state Uttar Pradesh represents highest concentration of self identified transgenders in Indian society. Transgenders include binary trans-men and women, non binary people, gender-queer persons and gender non-conforming persons. In Indian society they are divided into many categories or groups generally they refer as, hijras, shivshaktis, kothis, kinnars, eunuchs, aravanis and thirunangi. The different transgenders identities are oftenput aside or clubbed under simplistic terms like LGBTIQ (Lesbian, gays, bisexual, transgender, intersex and Queers). It is shocking to believe that they are the part of the society but they are treated as invisible people and live a life of exclusion.

*Problems of Transgender in Indian Society :* the transgenders have to face many problems like disrespect, discrimination, Downtrodden, child nabbing, prostitution, forced to leave parental home, unwanted attention, rejection of entry in social places, verbal and physical abuses, lack of education facilities, rape, violence and sexual assault, sexually transmitted diseases and HIV/AIDS, Human trafficking, social exclusion, mental harassment, unemployment,

restriction in public places, exclusion from decision making and lack of social security in society. These problems generate by the social environment make them frustrated in spending whole life as a burden. [2]

*Transgender Constitutional Rights in India:* Preamble to the Constitution mandates Justice social, economic, and political equality of status. Thus the first and foremost right that they are deserving of is the right to equality under Article 14. Article 15 speaks about the prohibition of discrimination on the ground of religion, race, caste, sex or place of birth. Article 21 ensures right to privacy and personal dignity to all the citizens. Article 23 prohibits trafficking in human beings as beggars and other similar forms of forced labor and any contravention of these provisions shall be an offence punishable in accordance with law. The Constitution provides for the fundamental right to equality, and tolerates no discrimination on the Supreme Court judgement on rights of transgenders.[3] The court also protects one's gender expression invoked by Article 19 (1) (a) and held that "no restriction can be placed on one's personal appearance or choice of dressing subject to the restrictions contained in the article 19 (2) of the Constitution."

The Supreme Court of India in its pioneering judgment by the division bench of Justices K.S. Radhakrishnan and A.K. Sikriin. *National Legal Services Authority v Union of India and others* recognized the third gender along with the male and female. By recognizing diverse gender identities, the Court has busted the dual gender structure of 'man' and 'woman' which is recognized by the society. "*Recognition of Transgenders as a third gender is not a social or medical issue but a human rights issue,*" Justice K.S. Radhakrishnan told the Supreme Court while handing down the ruling[4].

*The Transgender Persons (Protection of Rights) Bill, 2016:* The Indian Cabinet approved a draft of the Transgender Persons (Protection of rights) Bill, 2016 introduced in the Lok Sabha (the lower house of Indian Parliament) on 2<sup>nd</sup> August 2016. The Bill is part of a series of developments on transgender rights in India, which follow the seminal Supreme Court judgment of *National Legal Services Authority v Union of India and others (NALSA v UOI)* in 2014. [5] The Cabinet cleared the Transgender Persons (Protection of Rights) Bill, 2016, which will pave the way for the community to be declared as the third gender with an option to identify themselves as male, female or transgender. However, the bill cleared by the cabinet



does not explicitly talk about giving reservation to such transgenders who by birth do not belong to Scheduled Castes or Scheduled Tribes. [4] The rights guaranteed under the Bill are mostly substantive rights such as the right to equality and non-discrimination, life and personal liberty, free speech, to live in a community, integrity, along with protection from torture or cruelty and abuse, violence and exploitation. There is a separate clause for transgender children. Education, employment and social security and health are also covered under the Bill. The bill envisages at constituting committees. There is penalty by way of imprisonment for up to a year for hate speech against transgender people. [6]

Rights Guaranteed under the, The Transgender Persons (Protection of Rights) Bill, 2016 [7] include

1. *Gender Recognition*: Chapter III of the Bill provides for a mechanism to facilitate legal gender recognition. As per the Bill, a transgender person may make an application to the District Magistrate for a certificate of identity as a transgender person. On receiving this application, the District Magistrate will refer the application to a District Screening Committee. The committee will be constituted of a medical officer, a social welfare officer, a psychologist or psychiatrist, a transgender community representative and a government officer. The Committee makes its recommendations on the application following which the Magistrate will issue the certificate of identity to the applicant. The identity certificate then serves as official proof of the individual's gender identity, entitling people to change their details in other official identity documents, as well as serving as a tool through which to access rights and entitlements that might accrue to them as transgender individuals. The NALSA judgment was celebrated for its self-identification principle vis-à-vis legal gender recognition. The principle underlying that notion would be a barrier-free process to accessing gender change.
2. *Protection from Discrimination*: Two separate provisions in the current Bill deal with the duty not to discriminate. The first, in section 3 of chapter II, lays down a general duty against discrimination, under which no person shall discriminate, on a number of defined grounds, against a transgender person. The grounds correspond to the nature of certain relevant sectors – the provision effectively prohibits discrimination in educational establishments, employment settings, healthcare services, and in

the housing context, among others. However, there is no enforcement mechanism provided in case of a violation of the anti-discrimination duty under this provision. Second, in an entirely different chapter – section 10 in chapter V - the Bill specifically prohibits “establishments” from discriminating against transgender persons in any matter relating to employment. “An establishment” is defined under the Bill as including a range of bodies, such as companies, firms, etc. that provide certain services. I

3. *Welfare*: Chapter IV of the Bill as currently drafted requires the government to take steps to secure the participation and inclusion of transgender persons in society, including by “formulating” relevant welfare schemes; facilitating transgender persons’ access to these schemes; and taking steps towards the “rescue, protection and rehabilitation” of transgender persons. Chapter V provides for non-discrimination in matters relating to employment, including in the private sector. This chapter also states that transgender persons have the right to reside in and use the facilities of the house where their immediate family resides without discrimination.
4. *Education, social security and health*: Chapter VI focuses on education, social security and health. It states that government-funded or recognized educational institutions must provide inclusive education and recreational activities to transgender persons; and that the government will develop schemes to support vocational training and self-employment opportunities for transgender persons. Chapter VI also provides for health-related measures, including pre and post- sex reassignment surgery and hormonal therapy counseling, a comprehensive medical insurance scheme for transgender persons to cover medical expenses, and a review of medical curriculum. However, there is no mention about making these measures economically and otherwise accessible to people who would not be able to afford them. The 2014 Bill, on the other hand, specifically states that state governments must provide “sex reassignment surgery, free of cost”.

*Administrative bodies involved under the Bill*: The Bill sets up a “National Council for Transgender Persons”. It provides details about the composition of this Council, saying that it will consist of representatives from certain governmental ministries, the National Human Rights Commission and National Commission for Women,

state governments, the transgender community and non-governmental organizations, all to be appointed by the Central Government. However, while the Council’s functions are detailed in the Bill as including advising the government on laws and policies regarding transgender persons; monitoring and evaluating the impact of governmental measures for transgender persons; and coordinating activities of governmental and non government bodies.

*Offences included in the Bill:* This bill provides four specific criminal offences:

1. Compelling or enticing a transgender persons to indulge in the act of begging
2. Denying a transgender person right of passage or access to public place
3. Forcing a transgender person to leave their place of residence and
4. Endangering the life, safety and well-being of a transgender person.

These four distinct offences are all given the same punishment which is to vary between six months and two years imprisonment.

**The Transgender Persons (Protection of Rights) Bill, 2018:**

On December 17, 2018, the Lok Sabha passed the “The Transgender Persons (Protection of Rights) Bill, 2016, with 27 amendments. The amended bill, apart from an improved definition of the term transgender is unacceptable and needs to be redrafted. The Cabinet cleared 27 amendments to the Transgender Persons (Protection of Rights) Bill and accepted nine of the 11 major suggestions of a parliamentary standing committee, which had examined the Bill. The amendments suggested by Opposition members were rejected. Responding to the debate, Social Justice and Empowerment Minister Thawar Chand Gehlot said, “The Bill has been prepared after due discussion with all stakeholders. Work on the Bill has been going on since 2015. There was a private member’s Bill as well which has been discussed by Parliament. The Bill had gone to the standing committee, and as many as 27 amendments have been accepted by the government. Whatever other suggestions are there will be incorporated in the rules of the Act.” The definition, which had received a lot of flak from social right activists and the parliamentary panel, has been changed. Earlier the Bill was first introduced in the Lok Sabha in August 2016, following which it was sent to a 31-member parliamentary standing committee. The amendments recently passed include a change in the previous definition of transgender persons as “neither wholly female or wholly male”,

which was criticised as being insensitive or in other words, the new definition terms a transgender person as one “whose gender does not match the gender assigned to that person at birth and includes trans-men or trans-women, persons with intersex variations, gender-queers, and persons having socio-cultural identities such as *kinnar*, *hijras*, *aravani* and *jogta*”.

The Modi government, however, has refused to address two major issues – decriminalising homosexuality under Section 377 that directly concerns transgenders and reservation for transgender community in educational institutions and government organisations. Social justice minister Thaawar Chand Gehlot said, “The issue of decriminalising homosexuality is under the Supreme Court purview. It is being examined so we cannot take a call on this. The amendments suggested by Opposition members were rejected. Responding to the debate, Social Justice and Empowerment Minister Thawar Chand Gehlot said, “The Bill has been prepared after due discussion with all stakeholders. Work on the Bill has been going on since 2015. There was a private member’s Bill as well which has been discussed by Parliament. The Bill had gone to the standing committee, and as many as 27 amendments have been accepted by the government. Whatever other suggestions are there will be incorporated in the rules of the Act.”[8] [9]

*Efforts to be taken for the upliftment of transgenders* : Large scale sensitization, done at base level and changing of the mind set with positive attitude formation is needed for the better and secure future of transgenders in Indian society. Some of them can include the following steps:

- Ensuring better education from school level
- Equality in social participation
- Welcoming Job opportunities to the transgenders
- Promotion of health and well being among transgenders
- Availability of medical facilities and services to the transgenders
- Cultural acceptance of transgenders in the environment.

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# Learning and Educational Development in the Viewpoint of Humanist Philosophers

*Dr. NotnargornThongputtamon & Dr. PhramahaPhaithunNiwat\**

## 1. Introduction

Education is a critical component in the process of human growth and transformation; it also contributes to the strengthening and reorganization of societal structures. Whether it is education inside the system or education outside of the system, Education is learning that takes place either as a result of the training of instructors in schools or by one's own efforts to educate oneself. The advancement and growth of people may contribute to the differentiation of societies and the creation of equality in the sense that they can make a difference. I am not talking about differences in people; rather, I am referring to differences that a person may bring to the table to assist in improving their own lives as well as the lives of others around them so that everyone can have a higher overall quality of life. Because individuals feel better about themselves and are able to make various improvements to the way they live their lives as a result, People who have received an education will have the information and the concept of being able to differentiate between good and evil, as well as the knowledge and competence in many sectors of science that they have studied. Learning should be made a priority in order to fill in the blanks by giving possibilities for professional progression. He had met the requirements, he had a positive attitude, and he was an ideal candidate for getting job chances. It is stated that “the foundation of a structure is brick”, which means that any community that does not have access to comprehensive education will never be able to flourish to its full potential. Education is the cornerstone of a successful life. This interpretation highlights the significance of receiving an education. Education is the cornerstone of a successful life. This interpretation highlights the significance of receiving an education.

Education is something that will assist a person in developing to the point where they can advance and live in peace with society. The formation of good individuals relies heavily on the

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processes that are facilitated by educational opportunities. The capacity to adjust consciously to changing conditions in the context of increasing globalization. The administration of education should be offered as an approach that is relevant to the economic, social, political, and cultural demands of the nation so that it can contribute to the progression of society. This can help the country go forward. The issue occurs when several nations, civilizations, and communities all have uniquely structured approaches to the administration of their educational systems. It is feasible to provide educational opportunities to every individual resident of a developed country, as is the case in many of those nations. According to the system, it will be possible for children who have reached the age when they are required to attend school to do so. However, several nations are experiencing challenging times. It is challenging to organize a proper education due to the fact that it is challenging just to live each day in order to maintain one's life. People tend not to think about things that need them to spend time doing something that seems to be a waste of time in order to earn a livelihood. If parents or members of certain households have this perspective, it is unlikely that they will provide their children with the chance to pursue an education. As a result, the most significant challenge faced by any nation is the fact that its growth is falling behind.

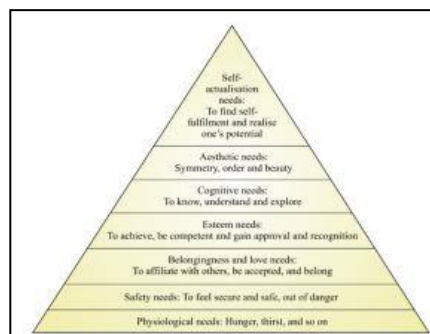
In order to develop education in each country, it is necessary to dismantle the system of instilling values and reinforce new ideas while enhancing morality and citing it as the main development that should be coupled with the teaching of academic knowledge and to provide administrative freedom by giving small-group communities access to educational opportunities to avoid social inequality. Increase the number of educational personnel to ensure thorough coverage in all areas. An important aspect is the question of how to develop the entire system and the educational process that directly affects the learners. This is to strengthen the thought process. When children are able to think and deal with things, Children can be brave enough to face problems and dare to go outside the original box, leading to further development and development. Because today's children are tomorrow's adults. The development of children with assertiveness, morality, and good ethics, able to follow the rules and regulations in society by themselves, would see a peaceful society and a country that has progressed both materially and spiritually. It can proceed in parallel without damage.

Humanist philosophers see that humans can develop their own potential. Education is a hierarchy of human development. It can help reduce adversity and stave off hunger. In this way, I believe that considering Maslow, Rogers, and Combs' human philosophy will assist the education community in adopting appropriate aspects for the benefit of both youth and adults. This will be added to the education system and will also benefit society. Another important thing is that benefits come to those who are educated and given academic and habitual training. Another question that arises is how to maximize the effectiveness of education for learners. How is there a way to make learning not to force the mind but to open up ideas for students to learn themselves and learn society at the same time?

## 2. Maslow's Humanistic Theory of Learning

Maslow's most major contribution as a psychologist was to humanistic and transpersonal psychology, where he is regarded as a pioneer, if not a founder. Maslow's hierarchy of needs has ramifications for education, corporate administration, and religion; it's a psychological theory with trans-disciplinary implications and applications.<sup>1</sup> Maslow's hierarchy, developed by Abraham Maslow in 1954, is a way of organizing the basic needs of students on different levels.<sup>2</sup> Human needs tend to be hierarchical, he said. One's requirements are manifest in prepotency hierarchies. They are ranked from lowest to greatest personality development. He presented five categories of fundamental demands to explain human motivation for learning and achieving.<sup>3</sup> In this pyramid show the structure of needs described level wise as under.

- Level one: Psychological needs such as hunger, thirst, sex, relaxation and bodily integrity must be satisfied before the next level of needs.



*Maslow's hierarchical structure of needs (Mangal, 2019, p. 97)*



- Level two: safety needs call for a predictable and orderly world. If these are not satisfied will aspire to satisfy their needs of level three.
- Level three: Belongingness and love needs involve the desire for being affiliated.
- Level four: self-esteem needs involve the desire for strength, achievement, adequacy, mastery and competence. They also involve confidence, independence, reputation and prestige.
- Level five: self-actualization is the full use and expression of talents, capacities and potentialities.<sup>4</sup>

Maslow categorized human needs to explain why and how humans learn. Needs determine perception, he said. One learns or strives to meet a need. In the course of meeting his wants, he may have events that drive him to modify his behavior, i.e. learn one or more ways of acting or striving for his needs.<sup>5</sup> According to Maslow, 'learning' may be termed as *the process of bringing desired changes in the behavior of an individual for helping him to satisfy his one or the other needs depending upon his individuality and interaction with his environment*.<sup>6</sup> The type and quality of learning rely on the requirements supplied and the resulting changes in behavior. Satisfying lower order desires like belongingness and affection, esteem and self-actualization may assist him ingest and incorporate higher order values and attributes for the full and overall development of his personality.<sup>7</sup> This notion helps a youngster achieve self-actualization. Maslow considers it the most important goal of human existence, so he emphasizes that every learning process must constantly strive to help the child achieve self-actualization.<sup>8</sup> In the words of Maslow, "*A musician must make music, an artist must paint, a poet must write poetry, if he is to be ultimately at peace with himself. What a man can be, he must be. He must be true to his own nature. This need we may call self-actualization.*"<sup>9</sup>

## 2.1 Application of Maslow's Theory to Education

- Children's role in education: Abraham Maslow's Hierarchy of Needs advocates student-centered education. Teach them based on their nature, interests, abilities, etc. First, instructors must investigate students' attitudes, skills, potentialities, talents, aspirations, social, emotional, intellectual, physical, aesthetic development, mental health, and more. After observing, they prepare a lesson plan.

- Individuality-focused: This one loves humans. Everyone is unique. Education should recognize and nurture everyone's uniqueness. Every individual's diversity must be recognized, and internal values must be fostered.
- Know well about the children: According to the humanistic method, instructors must know everything about their pupils, including what they enjoy, how they act, their talents, and where they're from. All the listed factors aid learning and teaching. Before teaching, know everything about the pupils. If you don't know about them as a teacher, you'll fail the learning and teaching process.
- Teaching styles: Using psychological concepts, this approach develops instructional methods. Learning is active. The preparedness, mental set, and motivation of the pupils are considered while choosing a teaching method.
- Discipline: The self-discipline strategy is discipline. Self-control is another theme.
- Teacher's role: In the humanistic method, the teacher is a guide, friend, and assistance to the pupils. They are also a key part of pupils' overall growth.
- Curriculum: Abraham Maslow's Hierarchy of Needs may unite everyone. With the correct education, these pupils' potential can shine. Hidden student potential, including their will to study, might emerge.

Humanistic is democratic. This method identifies children in rich environments and supports all-around growth. This technique to learning also has a few other benefits, including:

- Teachers must know their topic. They should also employ studies on motivating learning strategically. They should also realize they are instructional aids.
- Teachers must remember that students bring themselves to class. Think and feel with their brains. All carry values that filter what they see and hear. It's beneficial since learning methods differ.
- Teachers must help pupils decide who they are and what they want to be. Every pupil may choose what's best. Their minds can make decisions. Their choice is irrelevant. What matters most is that they can acquire self-necessity so they may live productive lives.
- Teachers must know how they feel. Teachers may put themselves in pupils' shoes. Accept the reality and do not try to alter their mind.<sup>10</sup>

## 2.2 Importance of Maslow's Theory to Education

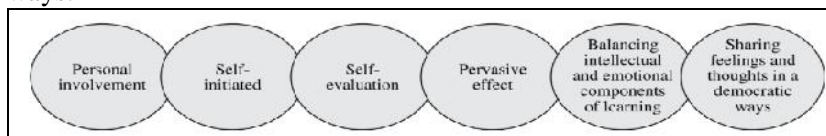
Learning is the top educational aim. Another objective is to make students' new knowledge and information relevant and helpful in their lives. Motivation is key to achieving these objectives. Unmotivated pupils are likely to learn little or not remember what they do learn. This idea affects schooling. Administrators and instructors must examine student needs and hierarchy to enhance school-wide and classroom teaching initiatives. This must be a major emphasis in program creation so students may realize their full potential. If a kid does not have breakfast before school, she will not be able to focus on learning. Many children arrive at school without eating breakfast; therefore, schools must provide breakfast programs to help them learn.<sup>11</sup>

## 3. Rogers' Theory of Experiential Learning

"From the humanistic psychotherapies, Carl Rogers, experiential learning has its focus the personal involvement and personal experience of the learner as a primary shaping influence over the individual's learning activity."<sup>12</sup>

In his search of the basic nature of learning, Rogers tried to distinguish two types of learning-. They are 'cognitive' and 'experiential'.<sup>13</sup> (1) Cognitive learning, which is unimportant to the self because it is based on academic knowledge that does not address the needs and knowledge that does not address the needs and wants of the learners and (2) Experiential learning, which is significant because it is related to learning that has relevance to the individual's life or work experiences.<sup>14</sup>

Experimental learning is learner-centered. That is to say, it cares for the needs and wants of the learner. Carl Rogers has tried to enumerate these qualities of experiential learning in the following ways:



*Roger's theory of experiential learning. (Mangal, 2019, p. 289)*

Care Rogers suggested that experiential learning is equivalent to personal change and growth. Rogers felt that all human beings have a natural propensity to learn, and the role of the teacher is to facilitate such learning. He proposed that learning should include the following characteristics: (1) setting positive climate for learning, (2) clarifying the learner's purpose, (3) organizing and

making available learning resources, (4) sharing feelings and thoughts with learners (but not dominating them), and (5) balancing intellectual and emotional components of learning.<sup>15</sup>

According to Carl Rogers, learning is facilitated by students' direct participant learning process which the following:

<b>Carl Rogers's ideas Regarding Student Participation in Teaching and Learning</b> (Dreeben-Irimia, 2010, p. 207)
The student participates completely in the teaching and learning process and has control over its nature and direction.
Learning is primarily based upon the student's direct confrontation with practice, social, personal, or research problems.
The student's self-evaluation is the principal method of assessing progress of success.

Through his theory of experiential learning, Carl Rogers advocates a humanistic and learner-centered approach to be adopted in the classroom by teachers, with the sole purpose of making the learning process more human and suitable to the needs and interests of the learners, and turning it into more significant and purposeful events from the angle of their personal and social growth and development.

#### **4. Truly Adequate Person Theory of Arthur W. Combs**

Combs was born in 1912 and was an American psychologist. "A perspective of perceptual psychology. He based his work on the premise that the goal of education is to develop a truly healthy, adequate, self-actualizing person. Combs postulated four characteristics of the way fully functioning individuals see themselves and the world-characteristics of their perceptual field: (a) a positive view of self (including belief about uniqueness, worth, and importance, as well as expectations for success), (b) identification with others, (c) openness to experience and acceptance, and a rich and available perceptual field".<sup>16</sup>

His theory similar to Levin's idea of 'life space', the majority of an individual's actions are influenced by his or her perception of the current environment. Instructors should make an effort to comprehend the teaching and learning environment. Understanding how learners see things from this vantage point leads to the conclusion that in order to assist learners in learning, it is necessary to encourage learners to alter their beliefs and perceptions until they can see things differently. and have distinct behavior. Combs' notion some of them are similar to the Brunner in the cognitive category, but their emphasis will be on the learners' perceptions of their thinking

and reasoning. It is essential for a person to have a good self-perception. Hence, an important aspect in teaching and learning management is to assist students in developing these sentiments. Maslow and Combs both highlight that humans are defined by self-sufficiency and self-actualization, but only Maslow stresses that intrinsic drive is the driving force behind human action. Combs says in the hierarchy of requirements that a person's conduct is self-sufficient. This suggests that sufficiency is the fundamental need of man. It will encourage the individual to behave. If this is the case, then learners want as much sufficiency as feasible in every circumstance. Consequently, the job of a teacher is distinct from that of a group.

According to Combs' theory, then, the following are some admirable qualities that may be found in educators: 1) is knowledgeable, 2) It is to collaborate with the kids, 3) Have trust and think that every student has the potential to capability of learning, 4) He is the kind of guy who maintains an optimistic outlook on life self, which will ultimately result in pleasant sentiments and thoughts with other people, 5) Believe that they are able to assist every student in achieving the highest possible level of success for themselves, and 6) may be used to apply to the major

Teaching and learning management both make use of several theories.<sup>17</sup>

## **5. Conclusion**

Education is something that will assist a person in developing to the point where they can advance and live in peace with society. The administration of education should be offered as an approach relevant to the economic, social, political, and cultural demands of the nation so it can contribute to the progression of society. The humanistic method identifies children in rich environments and supports all-around growth. Experimental learning is learner-centered and cares for the needs and wants of the learner. Teachers must help pupils decide who they are and what they want to be. Motivation is key to achieving the objectives of learning and self-control.

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# **Medical Negligence & Consumer Protection Act : A Review**

*Pramod Kumar Kanaujiya \**

*Dr. Saroj Kumar \*\**

From ancient era medical profession is considered to be the most humanitaria & noblest social service Doctors are given the stature next to God all over the world. They are healers, lifesavers & who take care of our near & dear ones. But commercialisation, privatisation and globalisation of the medical profession leads to increasing no. of medical negligence cases. A code of conduct is required in any profession which contains the basic ethics and moral values to governs a professional practice and maintains its dignity.

Breach in code of conduct in any profession leads to negligence. Many factors are responsible for the negligent act such as commercialisation, lack of ethics, deterioration of skills and growing awareness towards legal options and empowerment has lead to hike in no. of such cases.

## **Medical Negligence**

Malpractices and medical negligence are the grey area in health system which give rises to legal issues.

Negligence is the absence of reasonable care & skill or willful negligence of a doctor in the treatment of a patient, which may result in injury or death the essential components to negligence are –

- ❖ Duty – Existence of duty of care by the doctor.
- ❖ Dereliction – Failure of doctor to maintain care & skill.
- ❖ Direct Causation
- ❖ Damage

The judiciary concept differs in civil and criminal negligence. The negligence in civil law may not necessarily be negligent in criminal law. The element of mensrea must exist for a negligence to amount an offence.

IPC 1860 section 52, 80, 81, 83, 88, 90, 91, 92, 304-A, 337 & 338 cover the offences and punishments pertaining to crime related to medical negligence in India.

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A civil wrong is known as tort. In civil negligence a patient brings charges of negligence against doctor for monetary compensation for the damage suffered by him.

The suit for negligence must be filed in a civil court within 2 years from the date of alleged negligence. If the court has taken a decision on a particular case the same case can't be reopened in any other court (*res judicata*). The burden of proving negligence lies on the patient, whereas criminal negligence occurs when doctors show gross lack of competency, gross inattention, criminal indifference to the patient's safety.

It is practically limited to the cases in which patient has died. The doctor may be prosecuted by the police in a criminal court.

### **Consumer Protection Act**

CPA was enacted by parliament in 1986 to provide better protection of the interests of consumers. CPA act has played a crucial role in protecting the consumer from hazards to their health & safety & providing an effective consumer redressal forum. According to CPA (Consumer Protection Act) a consumer is a person who buys, hires or avails any good or service for a consideration and has been paid or partly paid or deferred payment. The buyer ought to be a consumer and not a reseller. A patient, as a beneficiary of services for which he or his family member or attendant pays, is also a consumer.

CPA provides speedy judgement, safeguard & protect the interest of consumers within a limited time frame.

In 1995, the supreme court of India (*IMA Vs V.P. Shantha*) includes medical services under the ambit of CPA.

A complaint is to be filed within 2 years from the date on which a cause of action has arisen.

Under CPA, the consumer dispute redressal agencies have been set up at three levels i.e. at district level, state level & national level to provide speedy and inexpensive judicial remedies to the consumers.

#### **3 tiers of CPA**

**District forum** – If the value of services and compensation claimed is less than 20 lakh.

**State commission** – if the value of the services and the compensation claimed doesn't exceed more than/crore.

**National commission** – if the value of the services and the compensation exceeds more than Rs. /crore.

During past few years there is an increase in cases of medical negligence as there is commercialisation of everything and healthcare



couldn't be untouched. Though CPA is double sword it is the need of the hour in current scenario by presenting medical profession to become a profitable business and making health facilities better.

It is a profession which is related to new inventions, innovative techniques, unconventional methods, advanced theories, inventive materials and futuristic approach- hence, restrictions, like cases at every juncture, will act as a deterrent, leaving a negative impact on the society!

**"It is the duty of the doctor to prolong life and it is not his duty to prolong the act of dying"**

**- Surbhi Aggarwal**

**(Founder & CEO, School of Legal Education)**

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## **Bay of Bengal Initiative For Multi - Sectoral Technical And Economic Cooperation (Bimstec) And Its Various Aspects: An Overview**

*Dr. Kaushik Mitra\**

*The overall global progress and national security of any country depends on the progressiveness of its allies, the coordination of military might and the compatibility of shared ideas. Without regional cooperation and trade synergies, it is almost impossible to make a mark on the global stage in this era full of open competition and diplomatic challenges.*

*(BIMSTEC) is an economic and technical cooperation organization of South Asia and South-East Asian countries, established on 6 June 1997 through the Bangkok Declaration. Its main objective was to develop cooperation in mutual trade, energy, fisheries, transport and technology. Later it was mutually agreed to share efforts in agricultural development, poverty alleviation, terrorism, culture protection, public relations, development of public health facilities, environmental protection and climate change and natural disasters.*

**Keywords :** Regional Co-operation, Trade, Indian sub-continent, Economic and Technical co-operation, Development, Poverty alleviation, Terrorism, Culture protection, Public relations, Summit, Task Forces, Plan Implementation.

The overall global progress and national security of any country depends on the progressiveness of its allies, the coordination of military might and the compatibility of shared ideas. Without regional cooperation and trade synergies, it is almost impossible to make a mark on the global stage in this era full of open competition and diplomatic challenges. For developing countries like India, its importance increases even more. SAARC, ASEAN, BRICS and BIMSTEC are some different efforts in this link. Pakistan's negative attitude and apathy on important questions such as regional terrorism and border disputes are almost a formality, in view of the postponement of the Islamabad summit of the South Asian Organization - SAARC and China's growing dominance in the South-Pacific and Indian Ocean region. BIMSTEC is being seen as an

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alternative. Its fourth summit, which began recently in Kathmandu, Nepal, on August 19, 2018 and the rapid dynamism of the organization, has made it the centre of international debate in the Indian sub-continent.

### **The Beginning of a New Era in Regional Cooperation And Partnership**

*Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)* is an economic and technical cooperation organization of South Asia and South-East Asian countries, established on 6 June 1997 through the Bangkok Declaration. Its main objective was to develop cooperation in mutual trade, energy, fisheries, transport and technology. Later it was mutually agreed to share efforts in agricultural development, poverty alleviation, terrorism, culture protection, public relations, development of public health facilities, environmental protection and climate change and natural disasters. Its total number of member countries is seven including *India, Nepal, Bangladesh, Sri Lanka, Myanmar, Bhutan and Thailand*. Initially, the number of its allies was only four (India, Bangladesh, Sri Lanka and Thailand), and it was named BIST-EC. It was renamed as BIMST-EC after Myanmar joined it in 1997. After that again on 31 July 2004, Nepal joined this organization as an official partner, since then it is known as BIMSTEC. Its headquarter is situated in Dhaka, Bangladesh. So far four apex meetings (SUMMIT) of BIMSTEC have been held. Its first summit was held in Bangkok in 2004, second in 2008 in New Delhi, 2014 in Myanmar and recently in 2018 in Kathmandu, Nepal. The presidency of its summits is determined by the alphabetical order of the words in its name. India has chaired this organization twice so far. At the same time, Bhutan is the only country, which has not taken up the task of chairing this organization even once. The structural mechanism of this organization depends on its planning body, implementation body, and associate body. The planning body includes the *BIMSTEC Summit* and *Council of Ministers* meetings.

### **BIMSTEC Mechanism**

*The Bangkok Declaration provides for the following institutional mechanisms:*

- Annual Ministerial Meetings, to be hosted by the Member States on the basis of alphabetical rotation.
- Senior Officials Committee, to meet on a regular basis as and when required.

- BIMSTEC Working Group, the lower tier of the BIMSTEC process comprising Ambassadors/Representatives from Member States to carry on the work in between Annual Ministerial Meetings.
- Specialized Task Forces and other mechanisms as deemed necessary by the Senior Officials to be coordinated by Member States, as appropriate.

There are *Special Official Meetings (SOM)* and *Special Business and Economic Development Meetings (STEMO)* under the Plan Implementation Body. The utility and importance of this organization can be gauged from the fact that its member countries represent 22% of the world's population. At the same time, one-fourth of the annual global trade by sea takes place in the Bay of Bengal located in its enclaves alone. Out of its seven member countries, five countries are also members of SAARC while the remaining two are members of ASEAN. Not only this, its geographical location is very important for all the countries connected with the Indian Ocean and South Pacific Ocean from a commercial and strategic point of view. Among the important things mentioned in the Kathmandu declaration of the fourth BIMSTEC summit, which is also being seen as a renewal of this organization, is the target of increasing the combined GDP to \$ 2.8 trillion. , Organizing University Hackathon Competition to engage students and youth, Agreement on Mutual Cooperation in Disaster Management, Announcement of 30 scholarships per year in Nalanda University, Arrangement for 12 Research Fellowships in the field of Advanced Medical Study. India's 100 technologies and economic development programmes, introduction of special courses for BIMSTEC diplomats, setting up of Forum of BIMSTEC Women Parliamentarians, Agreement on Countering Regional Terrorism and Drug Trafficking, and International Buddhist Conferenceto be organized in India at the end of August 2020. Apart from these, it has been decided to organize start-up conferences of all member countries at the end of every year and joint military exercise of BIMSTEC countries for strategic partnership and cooperation. Under this, the *Asia Development Bank (ADB)* has been established in the year 2005 which is working to conduct BTILS (BIMSTEC Transport Infrastructure Logistics Study).

This organization is important for India in many ways. On the one hand, due to the negative and obstinate attitude of Pakistan and Maldives, its role is being seen as an option to re-realize its progressive objectives which SAARC has failed to achieve and

efforts should also be made for development in this direction. On the other hand, in view of China's increasing interference in the Indian Ocean and constantly increasing its power, it is also being seen as a far-reaching diplomatic strategy of the member Asian countries led by India. Emphasis is being laid on increasing connectivity of all types (water, air, land, cyber space etc.) between BIMSTEC countries. Except for Nepal and Bhutan, all other member countries share their borders with the Indian Ocean, which in itself is an increased means of world trade. Therefore, increasing sea-connectivity between BIMSTEC and its member countries will be of great benefit to develop barrier free trade and transport through sea by relaxing maritime laws. Apart from this, there is also a plan to develop a road link connecting Thailand through the north-eastern states of India. In this era of globalization and information, cyber space and control connectivity, is very necessary for every developing country including India, which has been targeted in this sector. Along with this, there is also a plan to provide sea embankments (blue-economy) to the new member countries (Nepal and Bhutan) whose borders do not meet the sea, for business interests and to share the profit of mountain-economy of these countries, which will be beneficial to all other member countries including India.

A common understanding has been reached between the BIMSTEC countries on combating terrorism. This will go a long way in curbing infiltration and extremism from the North-east border of India. It is to be known that many armed insurgent parties including Assam Liberation Army, Naga Liberation Front are active in the north-eastern states. Previously the incident of destroying the camps of militant organizations by the Indian Army inside the Myanmar border is an example of cooperation. Apart from this, infiltration and drug smuggling from Bangladesh and other border areas will also be effectively controlled. All member countries have expressed their acceptance in dealing with natural disasters and the damage caused by them. The role of mutual economic cooperation and coordination of member countries in times of cyclone and tsunami, landslides in mountainous areas, floods, earthquake of Nepal and other natural disasters will be helpful in restoring and rehabilitating the affected areas at the earliest. Cooperative exercises like the three day long Joint military exercise of BIMSTEC countries (except Nepal) held in Pune in 2018, will prove to be effective in helping the armed forces of all member countries to understand each other's warfare

techniques, and to act unitedly on joint/common national security issues as well as develop strategic harmony among themselves.

India's north-eastern states can play a very important role due to their geographical location to connect India-Nepal and the rest of the BIMSTEC countries. These can also be developed as East-West Asia Corridors. Due to which the development policy of these states will strategically improve than before. Apart from this, SAARC members have often complained that their interests are being lost because of strained India-Pakistan relations. In such a situation, BIMSTEC is emerging as the only alternative Asian organization of SAARC countries, through which its goals can be achieved again. As *Nepal's Prime Minister Mr. Oli* said in his concluding remarks – “*we will work towards giving energy to the failed goals of SAARC.*” It should be noted that Pakistan, Maldives and Afghanistan are not member countries of BIMSTEC. Due to which India will be empowered on one hand as the leading country of Asia and on the other hand its ‘*Look-East*’ and ‘*Act-East*’ policy will also be strengthened. In this way, for India, this organization is going to prove very helpful for political reasons as well. The process of development of any nation cannot wait for a neighbouring country to improve. We have to move forward in some way or the other. With the opening of commerce and trade, the *Make in India* and *Ease of Doing Business* scheme in India is going to benefit a lot. At the same time, due to the expansion of the market, reduction in import-export duty and ease of other economic means, there are definite estimates of increase in the GDP of the country. Apart from this, from the cultural and historical point of view, these Asian countries are connected by their shared history, ancient culture, monolithic geographical structure, natural resources, and traditional customs. Buddhist, Islamic and Hindu culture and archaeology and common heritage will give further strength to their steps in the direction.

### **Conclusion**

Despite all these positive aspects, BIMSTEC countries also have their own problems which will be very challenging for them to overcome. Their internal issues like the Rohingya problem, Bangladeshi infiltration, China's heavy investment and political pressure over member countries, economic inefficiency (developing economies), Indo-Nepal relations (with regard to new constitution making), Indo-Sri Lanka relations (Tamil problem), extremism, trade deficit, religious differences and conflicts, and most important the implementation of plans. In fact, the most critical aspect of India's

foreign policy is that it makes plans, as well as agreements, but has a very poor record in terms of their timely deliverance and implementation. It should be expected that this regional Asian organization will be able to work positively in future by not repeating its previous mistakes, and establish South Asian and South-East Asian countries as self-sufficient and prosperous economies in the global arena.

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# The Effects of Vocational Education on Girl's Towards Skills and Employment

Dr. Hemlata Dinkar\*

**Abstract :** *We have shown that vocational education does not perform as well as academic education both in labour market outcomes and in the level of basic skills, including literacy and numeracy. This is especially true for higher education. Only at the upper secondary or post-secondary level does vocational education perform slightly better than academic education in the probability of being currently employed as well as in the time spent in paid employment, although the differences we find are small.*

**Introduction:** Vocational education and training (VET) are highly valued by many. For instance, VET is expected to play an important role in achieving targets set in the education field: (a) reduce the rate of early school leavers from education. In this paper we investigate the effects of VET on girls skills and labour market outcomes. This survey especially valuable to study the different facets of VET as compared to more academic education. Our approach is to consider the education careers available to individuals as alternative treatments in a secondary level girls. Our key assumption is that, after controlling for individual differences in parental education, the assignment of individuals to these treatments can be considered as good as random. This assumption implies that our selection on observables is capable of controlling for the sources of self-selection into educational tracks. We discuss its plausibility in the context of the data being used. This is important for the interpretation of our results.

**The effect of vocational education in skills and competency:**

**Research Questions:**

Is the contribution of vocational education to girls' proficiency in basic skills (literacy, numeracy and ICT skills) larger or smaller compared to that provided by academic education?

How vocational education affect problem solving skills and economic status of girls?

This question is relevant because a proper command of basic skills is a necessary condition for an active and independent life, for updating and extending advanced skills and competences and for

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remaining competitive in the labour market, but also for being able to access administrative, financial and health services and to profit from the broad range of advantages offered by the new technologies. Literacy and numeracy are often described as “basic” skills, because they provide a “foundation” on which the development of other competencies rests.

Problem solving in technology-rich environments which is defined as the ability to use digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks. The assessment of problem solving proficiency focuses on the abilities to solve problems for personal, work and civic purposes by setting up appropriate goals and plans, and accessing and making use of information through computers and computer networks.

**Population and Sample of the Study:**

Population drawn from the girls of higher secondary schools of MP. and sample have selected from higher Secondary Schools situated in Bhopal and Indore. Total 500 girls students selected randomly from sample of the study.

**Research Methodology:** The survey methods used by self-made questionnaire with the relevant content literacy, problem solving, economic status.

**Findings**

Our results on the relative employability of individuals with vocational education clearly reflect the current economic situation, and the current balance of demand and supply of skills. But what about future demand developments? Is the number of jobs requiring vocational skills expected to decline or to increase in the future? Statistics Norway ([2013](#)), has produced projections up to 2030 on the expected labour demand by type of education. These projections show that the relative number of jobs requiring upper secondary vocational education are likely to grow faster than supply in the near future, especially in the health care industry-because of the progressive ageing of the population, with potentially positive developments for the earnings and employability of those having the required skills. Of course, if the demand for jobs requiring academic tertiary education grows even faster, thereby offering better earnings and employment prospects, enrolment in vocational education may decline even in the presence of favourable demand developments.

Result shown that the employability skills of girls affect by her economic conditions and literacy. Problem solving skill also reflect the employability skills of the girls students and dropouts also.

**Conclusion:**

The technical and vocational education and training (TVET) programs are rendering a significant contribution in leading to up-gradation of information, skills and aptitudes among the individuals. They are able to make use of them in acquiring employment opportunities, generating income and to promote better livelihoods opportunities in an effective manner. The meaning and significance of TVET is recognized, as it renders a significant contribution in the development of human resources. The important factors of TVET are, development of skills and abilities, education for the manual work, education is focused upon certain concepts, training is craft-oriented, productive purposes, inculcation of the traits of diligence and conscientiousness, promoting hands-on training, apprenticeship training, augmenting research and development and leadership and accountability. The individuals, belonging to rural communities and economically weaker sections of the society normally depict interest and enthusiasm in making selection of the field of TVET. Finally, it can be stated, upon acquiring TVET, the individuals are able to acquire different types of employment opportunities that would enable them to up-grade their skills and abilities, enhance their career prospects and sustain their living conditions in a well-organized manner

The technical and vocational education are rendering a significant contribution in leading to up-gradation of information, skills and aptitudes among the individuals. They are able to make use of them in acquiring employment opportunities, generating income and to promote better livelihoods opportunities in an effective manner. The vocational Education a significant contribution in the development of human resources. The important factors of vocational education are, development of skills and abilities, education for the manual work, education is focused upon certain concepts, training is craft-oriented, productive purposes, inculcation of the traits of diligence and conscientiousness, promoting hands-on training, apprenticeship training, augmenting research and development and leadership and accountability. The individuals, belonging to rural communities and economically weaker sections of the society normally depict interest and enthusiasm in making selection of the field of Vocational Education. Finally, it can be stated, upon

acquiring vocational Education , the individuals are able to acquire different types of employment opportunities that would enable them to up-grade their skills and abilities, enhance their career prospects and sustain their living conditions in a well-organized manner.

We have shown that vocational education does not perform as well as academic education both in labour market outcomes and in the level of basic skills, including literacy and numeracy. This is especially true for higher education. Only at the upper secondary or post-secondary level does vocational education perform slightly better than academic education in the probability of being currently employed as well as in the time spent in paid employment, although the differences we find are small. Partially provided by the recent evolution of vocational curricula in many countries, which are characterized by increasing emphasis on more academic education.

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# Effectiveness of the use of Apps and Online Platforms in Teaching Practices for Strengthening Digital Learning during COVID-19

*Dr. Hemlata Baghel\**

*In the pandemic of COVID 19, Indian universities and schools were shut down and used various apps or online platform in teaching process to teach their students. Using a Community of Inquiry (CoI) framework, the authors reflect on the effectiveness of various apps and online platform in teaching practices based on their own experience. In this study seven principal teaching methods to create an effective blended environment for students and faculties in Indian schools and universities: reframing virtual spaces through online knowledge repository and virtual labs. using reflective thinking for andragogical and pedagogical approach. teachers' readiness to offer various genres of courses on demand. Reinforcing resilience in schools and universities through meaningful participation and conflict resolution. purposeful learning and inquiry-based learning for students. experiential learning through an inclusive online pivot 7. useful apps are discussed to reach out to parents and teachers' community. These initiatives can influence academicians, educationists, podcasters, and the entire teacher fraternity to design an efficient and adequate teaching plan for the student community.*

**Key words:** COI (Community of Inquiry), COVID (Corona Virus Disseise), BE (Blended Environment)

## **Introduction:**

The introduction of digital tools has enabled educators towards a blended approach for learning; for instance, flipped classrooms providing room for the enhanced classroom experience. Educators are using the technology to develop videos that enrich the digital content, thus enabling them to utilize the free time for other innovations. teaching practices during COVID 19, adoption of technology in higher education, learning and teaching pedagogy,

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digital learning during the lockdown, online teaching, education policy. In the COVID 19 era great efforts are in place to ensure social and physical distancing by convincing the public to stay at home. These endeavours are primarily directed to break the infection chain and ensure a reduced burden on the civic-health machinery. The consequential fiscal and communal exercise of social distancing has led to some major policy changes in the functioning of higher education guided towards “online pivot”. Due to COVID education system, shift from a face-to-face teaching model to a completely online. The extensive use of digital media is in place. Teachers across the section of the society variably or invariably have had to quickly get used to the online mode of teaching guided towards a digital mindset The student community is also deeply affected. They have had to let go of their campus life, stay indoors, and attend online classes Some researchers believe that students who adopt an online learning mode are slightly more receptive than those who “prefer to learn in a traditional face-to-face environment.

**Literature:**

Muthuprasad (2021), The students opined that flexibility and convenience of online classes makes it attractive option, whereas broadband connectivity issues in rural areas makes it a challenge for students to make use of online learning initiatives. However, in agricultural education system where many courses are practical oriented, shifting completely to online mode may not be possible and need to device a hybrid mode, the insights from this article can be helpful in designing the curriculum for the new normal. In recent research, Florence Martin and colleagues (2019) conducted a survey that examined the perspectives of award-winning online faculty from across the United States on the effectiveness of different teaching practices. Martin et al.’s (2019) results show that faculty recommended using timely response and feedback, availability and presence, and periodic communication. Lokanath Mishra and colleagues (2020) investigated teachers’ and students’ perceptions of the shift to OTL at an Indian university during the pandemic. Their findings revealed that resources, instructors’ readiness, student motivation and access to the internet have valuable roles in achieving integrated learning, particularly during exceptional circumstances such as COVID-19 ,From the student perspective, online education is convenient as it offers learners flexible location and time (Petrides 2002; Poole 2000; Schrum 2000). For many business schools, switching to online and hybrid teaching has become a necessity to

increase the convenience for many students who work part-time while pursuing their higher education and expand their educational opportunities (Hill 2002; Hofmann 2002; Rourke 2001; Trammell and Laforge 2017).

#### **Statement of the study:**

“Effectiveness of the use of Apps and Online Platforms in Teaching Practices for Strengthening Digital Learning during COVID 19”

#### **Objectives of the study:**

The main objectives of the paper are as follows

1. To identified the apps or online platform in used by teachers for Teaching Practices forstrengthening digital learning during covid 19.
2. To analyse the effectiveness of the use of apps or online platform in Teaching Practices strengthening digital learning by the teachers of universityand schools during COVID 19.
3. To analyse principal of teaching methods to create an effective blended environment for students and faculties in Indian schools and universities.

#### **Methodology**

##### **Research design:**

The research design of the study was survey methods to find students, and teachers feedback related to Effectiveness of the use of Apps and Online Platforms in Teaching Practices for Strengthening Digital Learning during COVID 19” .

##### **Data Collecting Tools**

The self-made questioners used to administer the research through online mode.

**Sample Of The Study:** sample have drawn teachers and students from open university of m.p. Randomly 455 students and 100 teachers have selected randomly from under graduate programme of the open university mp. out of 455 students 250 were female and 205 male students. out of 100 teachers 50 were male and 50 female teachers have selected randomly.

##### **Data Analysis**

The Self-made questionnaire have administered through online mode.

##### **Validity and Reliability**

Research is related to effectiveness of the use of apps and online platforms in teaching practices for strengthening digital learning; it is

valid and reliable according to content given in questionnaire and all the dimensions of research point of views.

### Research Procedures

The research administered through online mode questionnaire filled by students and teachers. Quantitative data analysis done and find out the result. Quantitative analysis has done. The data have been presented through various charts, tables and diagrams.

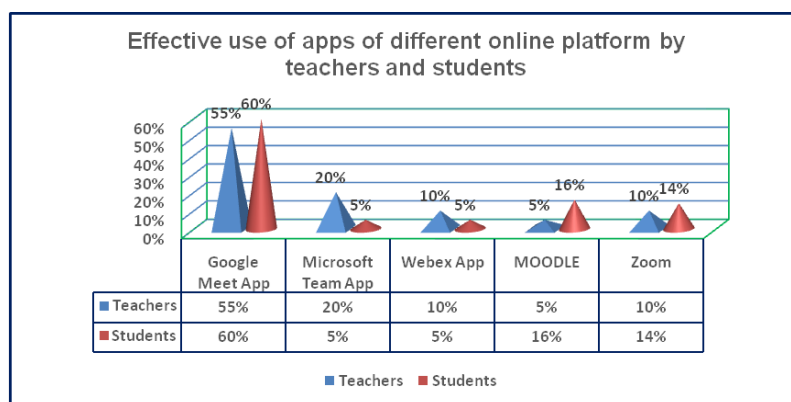
### Findings And Discussions

1. To identified the apps or online platform in used by teachers for Teaching Practices for strengthening digital learning during covid 19. Identified apps were google meet app, Microsoft team app, Webex app, MOODLE, Zoom etc.
2. To analyse the effectiveness of the use of apps or online platform in Teaching Practices strengthening digital learning by the teachers of university and schools during COVID 19

**Table 1.1**

S.No.	Online Platform/Apps	Teachers	Students
1	Google Meet App	55%	60%
2	Microsoft Team App	20%	5%
3	Webex App	10%	5%
4	MOODLE	5%	16%
5	Zoom	15%	14%

**Result:** from the obtained data most of the teachers and students used google meet during COVID 19 lockdown situation for online learning Teachers were unfamiliar with MOODLE platform and other apps as well as students. Result shown in figure and table 1.1.



**Figure 1.1**

3. To analyse principal of teaching methods to create an effective blended environment for students and faculties in Indian schools and universities.

**Table: 1.2**

S.No.	Teaching Methods	Teachers	Students
1	reframing virtual spaces through online knowledge repository and virtual labs	20%	30%
2	using reflective thinking for andragogical and pedagogical approach	20%	15%
3	teachers' readiness to offer various genres of courses on demand	30%	5%
4	reinforcing resilience in schools and universities through meaningful participation and conflict resolution	5%	10%
5	purposeful learning and inquiry-based learning for students	5%	12%
6	experiential learning through an inclusive online pivot	5%	13%
7	useful apps are discussed to reach out to parents and teachers' community.	15%	15%

**Result :**

From the obtained data 30% of the teachers were agreed to readiness to offer various genres of courses on demand and 20% has given to wattage to using reflective thinking for and ragogical and pedagogical approach and 20% reframing virtual spaces through online knowledge repository and virtual labs to use for effective blended learning environment. In case of students 30 % were reframing virtual spaces through online knowledge repository and virtual labs. 15% useful apps are discussed to reach out to parents and teachers' community and 15 % using reflective thinking for and ragogical and pedagogical approach has given preference. Result shown in figure and table 1.2.



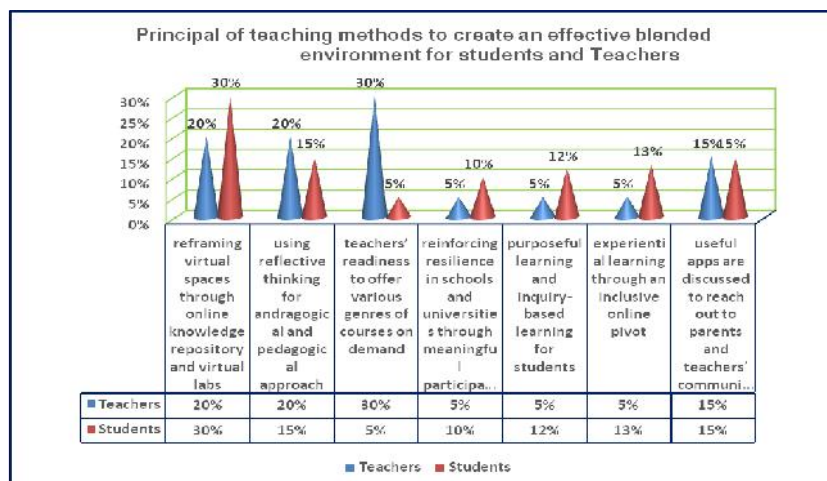


Figure 1.2

### Conclusion And Suggestions

In the present study “Effectiveness of the use of Apps and Online Platforms in Teaching Practices for Strengthening Digital Learning during COVID 19” Result shown most of the teachers and students used google meet during COVID 19 lockdown situation for online learning Teachers were unfamiliar with MOODLE platform and other apps as well as students and the teachers were agreed to readiness to offer various genres of courses on demand and 20% has given to wattage to using reflective thinking for andragogical and pedagogical approach and 20% reframing virtual spaces through online knowledge repository and virtual labs to use for effective blended learning environment. In case of students 30 % were reframing virtual spaces through online knowledge repository and virtual labs. 15% useful apps are discussed to reach out to parents and teachers’ community and 15 % using reflective thinking for andragogical and pedagogical approach has given preference. Researcher concluded that due to lack of knowledge of digital and communication technology affect the teaching learning process. Technophobia is also responsible for lack of teacher interest for some software and apps for using teaching process. So that the teachers and learners both should be facilitated and learn about various educational technology.

### Implications of the Study

The present study would be benefited to find out the learner’s opinions and facing challenges to use of various

technology, apps and online platform. This will help to train the teachers and learners technically by various mode of learning.

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## **Ford Foundation and the Politics of Birth Control in India, 1951-1971.**

*Saurabh Vatsa \**

India was the first post colonial state to launch an official policy to control population. The stated aim was to reduce the burden of poverty by reducing the number of people. Poverty, itself was presented as the result of extremely high fertility of the poor masses. An arbitrary rate of population increase was considered desirable which would lead to an equally desirable yet arbitrary population number. This number would then sit in well with the idea of development. There was a conflation of population with development, a process which developed throughout the first half of twentieth century.

The nationalist movement, which contested colonialism, generated a narrative of “strong motherland” and in the process made certain demands on the women. Primarily seen as mothers they were to bear healthy children for a healthy nation. Catherine Hall sees this construction, of women only as mothers of the nation and not as citizen subjects, as placing their reproductive capabilities, at the centre of their service to the nation.<sup>1</sup> Looked at in other way, the state equated population numbers with development, and claimed the right to control women’s reproduction to serve the needs of the nation and the state. Population control was to be achieved through family planning with the use of new birth control technologies. In making the women the targets of its population control program and by forcing invasive technologies of fertility control on women, the policy affected women’s reproductive consciousness negatively.

National Governments and the International agencies have constructed birth control in terms of an agenda dominated by development. This paper is located in the context of the extensive literature on development. There has been a sustained criticism of the idea of development and the various assumptions that go into it. Development ideology has been critiqued on various fronts including its close association with cold war objectives, an over dependence on modernisation theories, the failure to accommodate the aspirations of the marginalised sections and the continuous violence against them

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and the failure to deliver on the goals of development. I must emphasise that the relationship between development paradigm and the population, has an older history, that is often not recognised in most of these writings on India. Population retained a prominent position in the calculations of the Indian economists' and the nationalist leaders, along with Eugenacists, and Women Rights activists, much before independence. There is a marked continuity in this discourse, to the extent that the actors, ideas and programs in many cases remained the same. This continuity is important to emphasise as the period following independence has been treated as being fundamentally different from the one that preceded it. It was presented as the Indian experience, with linkages to socialism<sup>2</sup> or is presented in terms of dichotomies of modernity versus tradition<sup>3</sup>, indigenous versus foreign, and autonomous versus derived from the experiences of post World War II development discourse.

Incidentally much of this discourse on development went together with the attempts to control the growth of population. While post colonial national government sought to control population to achieve a certain level of development and other 'national goals', the international agencies saw the rising population of the Third World as a matter of high politics. This dual agenda turned birth control into the realm of population control. Birth control was displaced from being a women's demand to a concern with controlling women's fertility for the larger purpose of population control.

In this paper, I will look at the practices of the Ford Foundation in the field of population assistance to India. As will be clear, from its position of power, it created meanings about the local social reality and manipulated understandings about reproduction through developmental scientific and cultural discourses. Indian women's reproductive decisions came under scrutiny and manipulation in ways more than one. It is crucial to engage with the practices of international agencies from the perspective of those affected by them.

Ford Foundation started its operation in India in 1951 under the leadership of Douglas Ensminger.<sup>4</sup> Incidentally the national government under Nehru was not convinced of the urgency of population control. This is evidenced by the ambivalent position taken by the first five year plan on the issue. Quite naturally the government was not secure enough to start a policy on what was seen as a contentious issue. Gradually, the "scientific" orientation of the Foundation and its keenness, attracted the attention of Nehru and his

colleagues.<sup>5</sup> Through out the four decades before independence a very vocal group of economists, medical health professionals and women leaders had been advocating some measure of population control.<sup>6</sup> In reaching the conclusion that population needed to be controlled, the Foundation was both, drawing upon and further extending this line of thought.

The Foundation's intervention in the Indian Family Planning Program has three phases. The first phase, beginning in the 1950s extended through the sixties, saw direct assistance to the program. It was phased out when the Foundation's technical assistance became unwelcome. After this the foundation turned to the building of capacity for social science and management research, which, it hoped, would help Indians understand their population problem scientifically. This would have led to a more efficient management of the programs. As part of this, funding was provided to research centres and individual fellowship for graduate studies abroad. This went on for much of 1970s. The third phase focused on broader areas of health promotion, including reproductive health and nutrition.

Due to the opposition of the Rajkumari Amrit Kaur, the then health minister, the only method that could be promoted was the rhythm method.<sup>7</sup> The result was the famous menstrual necklace. It was devised to help women without any formal education to keep track of their menstrual cycle.<sup>8</sup>

The rhythm method did not make any significant impact on birth rates. In 1959, the foundation began a Family Planning Communication and Action Research program with \$330,000 five year grant to the Ministry of Health.<sup>9</sup> The program's overall objective was to find ways of motivating people to make use of the state run family planning clinics established in the 1950s and which dispensed the contraceptives then available-condoms, diaphragms and foam tablets and offering birth control advice.

Another part of the Foundation's activity was to provide grants to conduct knowledge, attitude and practice studies, which were considered the principal avenue through which social science research could contribute to family planning. These studies revealed that while a large number of Indian households were aware of the methods of birth control, relatively few practiced it, even when there was a widespread desire to limit families. These studies provided a "scientific" basis to the concerns being expressed by the population experts. The most well known of these studies was the Khanna study.<sup>10</sup> One of the chief criticism of the Khanna study was that it

did not consider the social context in which women and men were making decisions about the size of their families. Population control was thought to substitute for fundamental social change. The “experts” looked at population “problem” independently of other aspects of social relations and so did not understand the rationality of the decisions made by these actors. Such rationality originated and was contextualised by their social experiences. These social contexts were largely ignored by these studies.<sup>11</sup>

Perhaps, the deeper motives of the Ford Foundation, being a product of ideological and political battles of the Cold War deserve a closer look. It was a project for winning political hegemony, the struggle for the “heart and the minds” of people, a massive effort at securing consensus for everything that the west stood for. The Foundation was deeply embedded in the belief in the superiority of the western system of liberal democracy, Western knowledge and technology and Western civilisation as a whole. At the same time as the Indian mission was carrying out the population policies, very interesting policies were being developed at the “headquarters”. Rowan Gaither, who took over the presidency of the foundation in 1952, while rendering intellectual guidance to the foundation initiatives, also underlined the need for efforts on the cultural front as a “quest for the hearts and minds of men”.<sup>12</sup> In this way Gaither report underlay the rise of the Foundation from a largely locally-oriented to a national and international donor. The entire exercise of the grants of the Foundation, bore the deep imprint of the Cold War. In the 1950s much of Europe still lay in ruins. U.S. while being deeply involved in the reconstruction of Europe also was alarmed by the potential growing appeal of Communism and Marxism among the European intelligentsia. The increasing Soviet involvement in the Middle East, the communist coup in Czechoslovakia, and the victory of Mao in China, provided a crucial backdrop to the process.

In 1952, the Foundation started an Intellectual Publications program which began to publish a journal, *New Directions*. The stated purpose of the effort was “..not so much to defeat the leftist intellectuals in dialectical combat as to lure them away from their positions by aesthetic and rational persuasion..”<sup>13</sup>. As a part of this effort a series of country publications were included in various issues. The publishing initiative was an attempt to gain “expertise about “non-western” societies-that is nearly all countries beyond the boundaries of Western Europe and North America.” The way to do this was to support training and research within universities.<sup>14</sup>

In these specific country profiles, particular attention was paid to India. It was because of two reasons. India was the first country where the Foundation had been engaged in overseas activities. Secondly, Marxism and Communism were feared as making a great deal of headway in India. Around this time India was receiving large quantities of inexpensive books from the Soviet Union. These were regional language translations, by some highly acclaimed Indian writers, of the Soviet War-time and post-communist Soviet Russian classics. This literature was very popular among the University students and commanded a large readership among urban middle classes. To combat this Soviet influence, the Ford Foundation launched a "Books for India" program in 1953. State department was closely involved in this endeavour. The idea was to present the point of view of the "Free World" to India, and to "...acquaint Indian readers of the basic traditions of democracy in the West"<sup>15</sup>.

Quite in contrast with the spirit of scientific nationalism with which Nehru was building a 'modern' nation, the Foundation launched the Southern Languages Book Trust in 1955 with a massive 500,000\$ grant. The book trust was started with the dual purpose of translating western literature and strengthen the local religious belief system. This was done not out of any belief in the superiority of the local cultural system but as they were thought to act as a barrier to Indians accepting Communist ideology. The book trust was thought to "intensify revitalisation of traditional indigenous values- a potential spiritual and intellectual force which may prove an even stronger barrier to the acceptance of Communism by Hindus and Moslems than imported Western ideals"<sup>16</sup>

In the early 1960s the Foundation's aid to international cultural activities was replaced by the assistance provided to the process of "nation building" and the development of universities to train the growing ranks of the indigenous managerial elites within the developing countries. In 1963 a separate Population office was established in New York. It was to focus on supporting university based research and training in social and biomedical sciences in the United States. In other countries population councils were established as special purpose institutions. During the period 1952-58 the foundation made big grants to medical research. This research excluded work in reproductive biology because in the United States such research (in the field of contraceptives) was too controversial at the time. But in the 60s the focus in research shifted towards

reproductive biology. Much of it had to do with the respectable status being achieved by the birth control movement, with the establishment of the International Planned Parenthood Foundation and the acceptability of contraception for strengthening the family and marital relations in the United States.

The Foundation was in search of a ‘miracle seed’<sup>17</sup> for controlling reproduction in the ‘Third World’. It was gaining respectable status for its research in reproductive biology. It was suddenly no longer a low status field for scientists, since huge amount of funds were made available for research in the areas. There was an explosion of research in the area.<sup>18</sup>

As a part of the research in the area, the Foundation began to develop institutional capacity and a scientific community which believed in the Western reason in the biomedical field. Dr. Sheldon Segal was flown to India and was given a visiting appointment at the prestigious AIIMS. He established a laboratory for reproductive research to develop new provider controlled contraceptives. While in US, Segal reviewed the science literature in search of publications by Indians in the US universities. Once in India, he tracked those researchers and involved them in research.<sup>19</sup> It was in AIIMS that the most promising new lead in contraceptive research - a contraceptive vaccine was made.<sup>20</sup> Pran Talwar, a foundation grantee, began the work of preparing a contraceptive especially suited to the third world women.<sup>21</sup> The characteristics of such a contraceptive were described as: inexpensive and provider controlled.

By its own account this research in demography for “understanding human reproduction” was highly “successful”. The research was deemed to have resulted in productive research activities along with providing training to the future generation of the Indian scientists. A senior University of California scientist, Dr. Howard Burns, was highly impressed with the efforts of the young Indians in the laboratories.<sup>22</sup> The result of this continuity was that the Indian scientists, understood the “problem” in terms in which it was framed.

In 1965 the Foundation designed a vigorous popular family planning campaign, the red triangle and the four faces. It was to motivate people to limit the size of their families, and to visit the family planning centres. The logo was an equilateral triangle, painted vermillion, with a downward apex, and the smiling faces of a father mother and two children-a son and a daughter. The yellow background contained a very specific message: “Have only two or



three children, that's plenty".<sup>23</sup> This was conceived by the consultants at Ford Foundation. Acclaimed as an Indian symbol, it was thought to popularise the western nuclear family norm<sup>24</sup>. It could be easily reproduced and popularised everywhere. The campaign was vigorous: soon every kind of surface was painted with the symbols. At certain places, elephants were draped in a red triangle and four face robe. Pamphlets were distributed to urge men and women to have less children.<sup>25</sup>

In the 1965-1966, India experienced a severe famine. Food grains were sent to India under the infamous PL-480 agreement. This increased dependence on food aid strengthened the foreign influence on population policies. USAID was the largest supplier of food grains and following the US federal law, Foreign Assistance Act (1961), made family planning a condition for food aid<sup>26</sup>, credit by USAID and the World Bank came with increasing emphasis on family planning. The World Bank insisted on market reforms and shifted the emphasis from agriculture to industrial sector. At this time a focus on rural reconstruction and reformation of agriculture could have enabled the majority to climb out of poverty and share in the development process. Instead the programs focused on urban industrial development, to meet the balance of payment "problem". To deal with hunger, technology was pressed into action, mainly in the form of HYV seeds which later led to Green Revolution. On the population front, the technological solution came in the form of Intra-Uterine devices. Jack Lippes developed the Lippes Loop with financial help from the Population council. He was pressed into duty in India to motivate people to use the pill.

IUD's had been introduced in India, in a "crash program of insertions" in 1956. They were introduced even before instructional manuals were written or details about the field programs were developed.<sup>27</sup> Because of the absence of patient counselling and insufficient training of those who inserted the devices, there were enormous side effects. IUD's proved to be intra uterine death devices. At an international conference in 1962, the Population Council tried to revive the device. The proposal was strongly opposed by Sushila Nayar, who turned the requests for even a small scale clinical trial in India.<sup>28</sup> However due the economic crisis of the 1960s the use of IUD's were finally approved.

Ironically as these campaigns were being launched, pushing men and women to adopt family planning the program was hopelessly deficient in birth control methods. There still were no new

safe methods of contraception for people. Besides sterilisation, the family planning program was offering jellies, douches, diaphragm and vaginal suppositories, which had already proved ineffective for the majority of women who lacked separate bathrooms, and were far from running water which made the application of devices difficult if not impossible. These methods also required high motivation, and with extremely high child mortality rates and an economic interest in large families, these methods obviously made little sense to people.<sup>29</sup>

Oral contraceptives, such as the Pill, introduced in the Western Market in 1940s, were not yet popular in India and not a part of the national family planning program. The international “population community” blamed the conservatism of the Indian medical profession for not showing interest in oral contraceptives.<sup>30</sup>

After the red triangle followed the “social marketing” of contraceptives in 1968. This large scale project involved distributing subsidised contraceptives, through commercial marketing channels. It was an example of public private partnership, wherein the large corporations as the Lipton Tea and Hindustan Lever used their existing sales channels to reach wholesalers and retailers throughout India. Although innovative, the project was not very successful, as the birth rates continued to swell and spacing had not been achieved. Moreover, the reality of consumer’s objectives were not in line with what the marketers assumed. Only a segment of the population wanted to practice the two child norm. The larger failure lay in the fact that there was no mechanism for opening channels of communication with the mass of people, and resultantly, the social marketing strategy could not succeed.

In the 1960s, the Ford Foundation once again renewed its interesting cultural programs believing they could make a contribution to the development process. It was also that ideas of cultural development were vague enough to accommodate a variety of aspirations and choices. Douglas Ensminger declared “that the idea of cultural development would “help national leaders awaken to an understanding of the social, cultural and political aspects of nation building”.<sup>31</sup> Under the guidance of population field representatives, the cultural development program focused on four main concerns: preservation of the cultural material, enhancing the role of culture in strengthening national identities, tapping the educational potential of museums and traditional performing arts and increasing possible economic benefits from tourism. Ensminger declared “The Past is not an obstacle to modernisation, it was a source of dignity and worth, to

be explored and constructed in the present and carried forward proudly in the national future.”

As the foundation expanded its cultural activities, its involvement in the family planning programs came under critical scrutiny. The political climate of moving to “self determination”, increasing Indian expertise in the population field and the growing importance of multilateral aid as an instrument of assistance made foreign especially U.S. technical help in the population field an easy target.<sup>32</sup> The imperial lifestyles of the resident experts, the elaborate parties, and the royal treatment of the visiting Board of Trustees that included hunting trips on the back of elephants drew flak from the middle class intelligentsia.<sup>33</sup> It was too much of a painful reminder of the colonial past, when the backwardness of the country and its cultural practices were used by the British for the continuance of the colonial rule. The fact that the foreign experts controlled the decision making process, also did not sit comfortably with the local bureaucracy.<sup>34</sup> In the 1970 the Government of India decided that it did not want any interference in its family planning program. The services of the Foundation were terminated by January 1971. As a signal several of the experts of the Foundation were fired. The Government was ready to operate without the day to day advice of the foreign experts. The Foundation preserved but it reduced its staff drastically.

The Ford Foundation’s work was the result of the anxiety with the rising population of ‘Third World’. Population in the third world was presented as a problem that required a western, scientific, expert solution. The intervention in India’s population policy was the result of this expert knowledge position. It manipulated understanding about reproduction through developmental scientific and cultural practices. In the course of this, the indigenous systems of knowledge were presented as being irrational. The expert knowledge constructed women primarily as reproductive beings and it was followed by attempts to bring their reproduction under more and stricter controls. Women were to have no control over their bodies, or over their reproductive rights. Birth control in India, did not remain a women’s issue. It remained concerned with population numbers as issue of global security and sustainability. The very framing of the “population problem” formed a backdrop for development and applications of reproductive technology and fertility management that renders gender invisible.<sup>35</sup> While working with reproduction, the foundation de-emphasised the gendered nature

of reproduction. It made invisible the role of women in reproduction and disregarded the role of family planning in women's reproductive freedom. Moreover the Family Planning Program offered no safe options while it blamed women for adding to already swelling population numbers.

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<sup>1</sup>Catherine Hall, 'Gender, Nationalism, and National Identities', *Feminist Review*, (No. 44, 1993), p.100.

<sup>2</sup>J. Bhagwati and P. Desai, "Socialism and Indian Economic Policy", *Jagdish Bhagwati : Writings on International Economics*, ed. V.N. Balasubramanyam (Delhi :Oxford University Press, 1995)

<sup>3</sup>Partha Chatterjee, "Development Planning and the Indian State", in *The State and Development Planning in India*, ed. T.J.Byres (Delhi: Oxford University Press, 1993); Ashish Nandy, ed. *Science Hegemony and Violence :A requiem for Modernity* (Tokyo: The United Nations University, 1998).

<sup>4</sup> Mr. Douglas Ensminger was a former professor of demography at the University of Missouri and believed passionately in the threat of population growth. He was a firm believer in the power of ostentatious display of the power of money. At the New Delhi office, there was a plethora of foreign expatriates, a couple of airplanes to take the staff to project sites. For the residences Mr. Ensminger constructed a lavish campus with tennis court and a swimming pool. Each morning, He would arrive in a black Victoria, horse drawn and take a salute from Indian guards and inspect the premises.

Oskar Harkavy, *Curbing Population Growth: An Insider's Perspective in the Population Movement* (New York : Plenum Press, 1995)

<sup>5</sup>Ashok Mitra, *India's Population: Aspects of Quality and Control* (New Delhi: Abhinav Publication, 1978), p.4.

<sup>6</sup>This was further concretely put out in the reports of the National Planning Committee. (Expand)

<sup>7</sup>She was a confirmed Gandhian. This was the tradition of anti contraception and following sexual abstinence. It was however, the insistence of the Foundation that she later agreed to request the consultancy of the World Health Organisation on natural family planning. It meant that the official position of the Indian government was the rhythm method.

<sup>8</sup>It was basically a string of 28 beads : red for the fertile days, green for non fertile, and orange for days of menstrual flow. The necklace was custom designed for each wearer in accordance with her own

cycle and user was to keep track of her safe days by moving the beads from one side of the necklace to the other. Incidentally they ended up in all sort of places-adorning the horns of cows and bulls (still a common piece of decoration for the animals), as ornaments of village deities.

Oskar Harkavy, *Curbing Population Growth: An Insider's Perspective in the Population Movement* (New York : Plenum Press, 1995)

<sup>9</sup>The largest share of the grant went towards the foundation consultants from the United States and fellowship for people who were trained in public health at schools of Public health at Harvard, Berkley and the University of North Carolina.

John Caldwell and Pat Caldwell, *Limiting Population Growth and the Contribution of Ford Foundation* (London : Frances Pinter, 1986)

<sup>10</sup>John B. Wyon and John E Gordon, *The Khanna Study: Population Problems in Rural Punjab* (Massachusetts :Harvard University Press, 1971).

<sup>11</sup>Mahmood Mamdani, *The Myth of Population Control :Family, Caste, and Class in an Indian Village* (New York: Monthly Review Press), pp. 18-21.

The KAP studies were standardised surveys of the views of a population on the knowledge attitude and practice of birth control. They were conducted by the population planners in numerous countries, primarily during the 1950-60. These sample surveys were hailed by the population planners as a fundamental tool for policy formulation and program design in family planning social action. Mamdani provides an excellent critique of the methodology of these studies.

<sup>12</sup>H. Rowan Gaither, (eds.), *Report of the Study for Ford Foundation on Policy and Program*,

*Vol II: 'Report of the Humanities Division', The Ford Foundation, New York,1949*, in Kathleen D. McCarthy, 'From Cold War to Cultural Development: The international Cultural Activities of the Ford Foundation, 1950-1980', *Daedalus: The Journal fo the American Academy of Arts and Science*, (Vol. 116, No. 1, 1987), p.96.

<sup>13</sup>H. Rowan Gaither, (eds.), *Report of the Study for Ford Foundation on Policy and Program*,

*Vol II: 'Report of the Humanities Division', The Ford Foundation, New York,1949*, in Kathleen D. McCarthy, 'From Cold War to

Cultural Development: The international Cultural Activities of the Ford Foundation, 1950-1980', *Daedalus: The Journal fo the American Academy of Arts and Science*, (Vol. 116, No. 1, 1987), pp.94-95.

<sup>14</sup>Richard Magat, *The Ford Foundation at Work: Philanthropic Choices, Methods and Styles* (New York :Plenum Press, 1979), p.103.

<sup>15</sup>Richard Magat, *The Ford Foundation at Work: Philanthropic Choices, Methods and Styles* (New York :Plenum Press, 1979), p.166

<sup>16</sup>Kathleen D. McCarthy, 'From Cold War to Cultural Development: The international Cultural Activities of the Ford Foundation, 1950-1980', *Daedalus: The Journal fo the American Academy of Arts and Science*, (Vol. 116, No. 1, 1987), p.98.

<sup>17</sup>The Foundation was simultaneously engaged in the research for the high yielding variety of seeds in Agriculture along with the Rockefeller foundation. Largely due to the failure of land reforms agricultural productivity did not increase and India's dependence on imported grains expanded. Simultaneously with the shift in agriculture came the emphasis on the miracle method to control population.

Francine R. Frankel, *India's Green Revolution: Economic Gains and Political Losses*(Princeton University Press, 1971), Lester Brown, *Seeds of Change: The Green Revolution and Development in the 1970's* (New York: Prager Publishers, 1970) Vandana Shiva, *The Violence of the Green Revolution: Ecological Degradation and Political Conflict in Punjab (Dehra Dun: Research Foundation for Science and Ecology, 1989)*, pp.8-28.

<sup>18</sup>Richard Magat, *The Ford Foundation at Work: Philanthropic Choices, Methods and Styles* (New York :Plenum Press, 1979), p.94

<sup>19</sup>Ford Foundation, 'Introduction to the Reproductive Biology Grants, Their General Background and Objectives', The Ford Foundation in India and Nepal, Status Report, October 1966, p.49.

<sup>20</sup>Richard Magat, *The Ford Foundation at Work: Philanthropic Choices, Methods and Styles* (New York :Plenum Press, 1979), p.95

<sup>21</sup>Pran Talwar continued to carry out trials in India. His anti-hCG vaccine, amidst wide scale protests from women's organisations , was developed in the 1990s.

<sup>22</sup>Richard Magat, *The Ford Foundation at Work: Philanthropic Choices, Methods and Styles* (New York :Plenum Press, 1979), p.140.

<sup>23</sup>Incidentally, the latest logo of the family planning program-360, a new holistic strategy depicts a couple with an infant in the arm of the mother. The couple do not have faces, but only blobs of colour.

<sup>24</sup>T.K. Tyagi quoted in, 'Editors Introduction', *Demography*, (Vol. 5, No.2, 1968), p.569.

<sup>25</sup>Oskar Harkavy, *Curbing Population Growth: An Insider's Perspective in the Population Movement* (New York : Plenum Press, 1995),p.138.

<sup>26</sup>Ramla Buxamusa, 'The Price of Assistance', *Socialist Health Review*

<sup>27</sup>Kathleen D. McCarthy, *The Ford Foundation's Programs in India, Pakistan and Bangladesh, 1959-1981* (Ford Foundation Archive Report)

<sup>28</sup>Quite famously Nayar had threatened the Commissioner of Family Planning for disciplinary hearing before a Medical Council.

Oskar Harkavy, *Curbing Population Growth: An Insider's Perspective in the Population Movement* (New York : Plenum Press, 1995),p.154.

<sup>29</sup>The Child Mortality rate in the 1960s was 165 and despite listed as one of the main reason for high fertility, the Indian state could not bring it down. The rate was still 68 in 1995, and bringing it down to the UN mandated Millennium Development Goal target has proved to be impossible.

UNDP, *Human Development Report*, 1996.

The World Bank, *World Development Indicators*, 2015 (Washington : The World Bank, 1998),p.8

<sup>30</sup>USAID office of Population in Washington, launched a worldwide campaign to purchase oral contraceptives on a large scale and convinced client countries to use them in their national programs. India, however showed strong resistance, mainly because of the side effects of the pill which, due to the absence of medical facilities for a large number of women was a big cause of concern.

Susie Tharu and Tejaswini Niranjana, 'Problems for Contemporary Theory of Gender', *Social Scientist*, (Vol. 22, No. 3-4, 1994)

<sup>31</sup>Douglas Enslinger quoted in Kathleen D. McCarthy, *The Ford Foundation's Programs in India, Pakistan and Bangladesh, 1959-1981* (Ford Foundation Archive Report)

<sup>32</sup>Meredith Minkler, ' Consultants or Colleagues: The Role of US Population Advisors in India', *Population and Development Review*, December 1977,pp. 403-404.

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<sup>33</sup>Oskar Harkavy, *Curbing Population Growth: An Insider's Perspective in the Population Movement* (New York : Plenum Press, 1995),p.146.

<sup>34</sup>This stranglehold was so tight that when asked about giving more power to Indians, one advisor put it, “(giving more power to Indians would be like giving the keys to the car to a ten year old child”. Meredith Minkler, ‘Consultants or Colleagues: The Role of US Population Advisors in India’, *Population and Development Review*, December 1977,pp. 403-404.

Minkler studied the responses of fifty men and women, all of whom served as long term advisors to the Ford Foundation or USAID in India.

<sup>35</sup>Sandra Whitworth, *Feminism and International Relations: Towards a Political Economy of Gender in Interstate and Non-Governmental Organisations* (London:Macmillan, 1994).

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# Relationship Between Academic Motivation And Academic Performance Among Adolescents

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*The main purpose of this research was to study the relationship between academic motivation and academic performance among adolescents. The sample for this research consisted of 300 (150 males and 150 females) adolescents from of U.P. Purposive sampling technique was used. Data analysis was done descriptively by using mean and standard deviation and further pearson coefficient correlation was used. Research results revealed that academic motivation had a high positive correlation ( $r = 0.598$ ,  $p < 0.01$ ) which was significant at 0.01 level.*

**Keywords:** *academic motivation, academic performance*

## **1. Introduction:**

### **1.1 Academic Motivation**

Human activity is triggered by motivation. Motivation is "the process by which goal-directed activity is prompted and maintained," according to Schunk and Pintrich (2002, p. 5). This definition emphasises how both contextual circumstances and personal qualities influence and constrain motivation (Anderman and Dawson, 2011). Motivation is a complicated, multidimensional construct; it is not a one-dimensional construct. Researchers have spent the last 40 years trying to understand how motivation improves students' academic performance and learning. According to Wentzel and Wigfield (2009), academic motivation refers to students' views, objectives, and values that influence the academic or educational tasks they will continue to work . According to Gottfried (1990), academic motivation is "enjoyment of academic learning characterised by a sense of competence, persistence, curiosity, task-endogeny, and the understanding of hard, complex, and unusual tasks."

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### **1.2 Academic performance**

The quality of education is a problem that affects students, parents, teachers, and authorities not only in our nation but also in many other nations and continents. Beginning with its idea, academic performance is complex. It can also be referred to as academic success, school performance, and school preparedness, although these terms are typically used as synonyms, therefore there is no real distinction between them that can be explained by anything other than semantics. It is commonly accepted to use academic achievement for populations in higher education settings and school performance for populations in basic education settings, both traditional and alternative. Given the variety of definitions, we will just highlight a handful. Many scholars concur that academic success is the outcome of learning, which is stimulated by the teaching activity of the instructor and created by the student. Academic achievement is "the output produced by the students and it is typically expressed through school grades," according to Martinez (2007), who takes a humanistic perspective (p. 34). Exams and other forms of continuous evaluation are frequently used to assess academic success, but there is no consensus on the optimal method for doing so or on which components—declarative information like facts or procedural knowledge like skills—are most crucial (Ward, A. et al., 1996). While creating models of academic performance, aspects including test anxiety, surroundings, motivation, and emotions must be taken into account because there are conflicting data regarding which individual characteristics correctly predict academic performance. Schools now receive funding based on the academic performance of their students. A school that has achieved better, academically would be given more funding than a school that has achieved less (Ziedner & Mosche; 1998).

### **2 Review of Literatures**

In a study conducted by Ahmad and Nigam (2008), they examined the impact of motivation on the academic performance of 250 aided and 250 private higher secondary students. The findings showed that both groups of students' academic motivation and academic performance are strongly correlated. For both assisted higher secondary girls and private higher secondary boys, there is no discernible correlation between motivation and academic performance. The most likely explanation, according to the author, is that assisted higher secondary girls and private higher secondary boys are more self-assured, encouraged, and enthusiastic when they

obtain strong academic results, thus they do not need as much external incentive as other types of pupils. In a study involving 110 students from Allahabad City, Dubey (2010) examined the effect of academic motivation on academic achievement in English. The results of the study showed a positive association between academic motivation and English achievement. Students with high and medium academic motivation outperformed as compared to who had low academic motivation in terms of English proficiency. Christiana (2009) conducted research on the relationship between student motivation and academic achievement, and the findings indicated a strong positive relationship between the two. For improved results in academic performance, student motivation is crucial.

### **3: Methodology:**

#### **Objectives:**

- Present study aimed to elucidating the relationship between academic motivation and academic performance among adolescents.

#### **Hypothesis:**

- There is positive relationship between academic motivation and academic performance among adolescents.

**Sample :** Present study was conducted on 300 students. 75 male and 75 female adolescents were taken from rural area. 75 male and 75 female adolescents were taken from urban area . Purposive sampling technique was used.

#### **Measures:**

##### **Academic Motivation Inventory**

The academic motivation inventory (AMI - MKS) constructed by Prof. K. S. Mishra. This inventory consists of 46 items. Participants can respond their answer on five-point rating scale which is strongly agree, Agree, undecided, disagree, strongly disagree. It was administered on IX to XI class students. The Split half reliability for AMI has been found to be 0.875. Face validity has been ascertained with help of expert opinion.

##### **Academic performance**

Academic performance was assessed and categorized on the basis previous year of grades. In this study we are following the CBSE grading scheme. The CBSE grading system has a five-point scale, in which students will be awarded grades from A to E.

### Analysis tools

To achieve a logical conclusion, the collected data was analyzed by SPSS 20.0 by using various relevant statistical tests like mean, SD, Pearson coefficient correlation.

### Result :

**Table-1** Table showing the values of Mean and SD of parenting style and academic motivation among adolescents:

Variables	M	SD	N	r
Academic Motivation	194.27	9.251	300	<b>0.598**</b>
Academic Performance	7.27	1.561		

The results (table 1) revealed the correlation between academic motivation & academic performance of total adolescents was 0.598 which was significant at 0.01 level ( $r = 0.598$ ,  $p < .01$ ). Findings also revealed the positive correlation between them. It means that adolescents who had high level of academic motivation, they had high level of academic performance too.

### Discussion :

The results indicated a significantly high positive relationship between academic motivation and academic performance; it means that academic motivation was highly related to students GPA or academic performance. It was shown in the result that students who enjoyed learning were likely to perform well in their school and also their surroundings too. It can be assumed that when adolescents are highly motivated then they can achieve satisfactory grades in their colleges too. As a result, motivated students are frequently those who understand that good grades will likely translate into improved performance in higher education and the workplace. In other words, they think that their academic performance now will make it easier for them to achieve their ambitions and goals in the future. Thus, it was expected by this study that students who had a high level of future time line would score better on their exam. Present findings are similar with the findings of Kaur (2013) who found that academic performance and academic motivation of high school adolescents had a significant positive relationship. Amrai et al., (2011) conducted a study and found positive and significant relationship between academic motivation and academic performance. It was concluded that academic

motivation was significantly related with academic performance (Awan et al., 2011, Jen & Young 2013, Haider et al., 2015).

### **Conclusion & Suggestions**

Thus it can be conclude that academic motivation was highly related with academic performance among adolescents. According to this research it was evident that adolescents who were academically motivated would perform better in their education because academic performance is the student's ability to reproduce of knowledge and tasks.

Authorities and education professionals should focus more on the factors that contribute to motivation because these factors are crucial for student academic success and also because of societal development is related with student academic success.

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## **The Concept of Buddhist Economics**

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The concept of Buddhist Economics was first developed by a German economist known as E.F. Schumacher based on what he experienced while working for the Burmese government in 1955 as an economic consultant. Even though most economists of his time had different perceptions of the economic system, Schumacher was primarily concerned with both the internal and external effects of the economic system, together with its repercussions on the society. Instead of centering only on the percentage of profit and quantities of production, Schumacher was interested in the ethical, emotional and spiritual dimensions of work. The concept of Buddhist Economics applies the divine ideologies and moral purpose to the aspect of wealth. It primarily centers on simplicity and non-violence, as well as the quality of life that people live daily. The modern economist is used to assessing the standard of living by the volume of yearly consumption in which he assumes that one is leading a good life if he consumes an extra amount of resources as compared to the person who consumes less. On the contrary, a Buddhist economist is likely to consider this approach disproportionately irrational. Due to the fact that the consumption is just a way of achieving human well-being, the primary aim should be to accomplish the maximum of health and comfort using the least amount of resources. The Buddhist Economics holds that any work should be meaningful and imaginative, as opposed to being a source of distaste and stress. It also views machines as a means of improving someone's work rather than to substitute it and make it undesirable.

This means that the economic concept is against the process of automation that tends to replace human labor. Furthermore, in a Buddhist economy, recreation should center more on spending quality time with friends and families than in consuming the available resources. This economy is assessed by the wellbeing and creativity of its members as well as the elements it consumes and produces. The goals of non-violence and simplicity outlined in the Buddhist economy usually work together. In a bid to minimize the violence against the earth during the extraction of fossil fuels and

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avoid global conflicts over the limited oil reserves, the Buddhist economist would rather support the use of local and environmentally friendly energy sources. These may include wind, solar, geothermal, and hydroelectric power sources. The Buddhist economy does not utilize what is considered cheapest on the market, but rather what tends to accomplish its objective of simplicity and non-violence in the best way possible postulates that the level of stress in countries with few labor-saving machinery such as kitchen equipment are much lower than in high automated countries such as the United States. The idea of Buddhist Economics is to generate and utilize only what is necessary and leave a significant amount of time for self-improvement and artistic creativity. In his influential book, *Small is Beautiful*, explains the concept of "Right Livelihood," which entails one of the conditions for the noble eightfold path exemplified by the Buddha. As he postulates in his book, the aspect of work is a key principle of Buddhist thinking and is not regarded to be deviant from the divine path. In spite of the spiritual standpoint towards work, Schumacher realized that the Burmese tended to perpetually assume that they had the capacity to design their economic development plans in line with the contemporary economics. On the other hand, studies have shown that the Buddhist economics are a radical substitute to the Western economic mentality. In essence, Western economics exemplifies a maximizing structure and is primarily concerned with taking full advantage of the profit, needs, market, and self-interest. It tends to promote a society in which a high rate of consumption is the most preferred activity. On the contrary, the Buddhist economics epitomizes a minimizing structure in which suffering, human desires, vehemence, instrumental use, and self-centeredness have to be reduced. It emphasizes the need to embrace the concept of "small is beautiful." Additionally, the aspect of less consumption of resources is one of the primary essences of the Buddhist attitude to economic questions. Most economists agree to the fact that the Buddhist economics is a universal concept that can be embraced in every country across the world. By minimizing the desires, this economic concept may serve as a means for decreasing the material metabolism of the society and its corresponding ecological footprint. One does not need to be a Buddhist in order to take a keen interest in the Buddhist economics.

The Buddhist ethical and moral principles, as well as their applications in economic life, may provide a way of helping people to embrace a more sustainable and happier lifestyle while supporting



the reduction of human suffering in the contemporary world. The Kingdom of Bhutan is one of the countries that have entirely embraced the concept of Buddhist economics in its internal economic policies. These developments in economics and contemporary western thinking run parallel to the sentiment in developing countries where many believe that their indigenous culture, rather than been seen as a hindrance to development, in fact has a lot to offer to development in terms of improving the quality of life. Buddhist communities are a case in point, as we can see from Bhutan's call for Gross National Happiness and the movements in Siam and Ladakh.<sup>379</sup> They point us to the need to base development on spiritual values, transmitted through culture, rather than merely material values. It is here that Buddhism, with its extensive research on the human condition, has much to offer. By offering a personal path to achieve lasting material and spiritual happiness, Buddhism can rightly claim that its path surpasses any solution offered to obtain happiness in traditional economic terms, which does not go beyond an optimal level of material consumption, wealth and economic stability. From a Buddhist viewpoint, the contribution of economics and material development is nothing more than providing an external condition allowing people to devote time and energy to embark on the more rewarding path of spiritual development. Mind over matter, so to speak. The ideal of Buddhist communities could be to become an example of how to put this path into reality. Another key example of a Buddhist economic system is the Sarvodaya Movement in Sri Lanka in which thousands of individuals and villages work together to create a "Right livelihood." On the other hand, the Santi Asoke Movement in Thailand is currently carrying out trials with selfsufficient economic models.

The enormously successful eco-efficiency machinery and ideologies in Japan are primarily motivated by the Buddhist principles of "not wasting." Other countries, especially the Western economies can also embrace Buddhist economic principles provided they abolish the self-centered and greed culture. The global economic crisis experienced in 2008 led to severe financial losses in billions of dollars in the form of depreciated value of properties, putrefying debts, and the drop in stock prices. Studies now reveal that this economic disaster might have been mitigated if the Western countries had embraced Buddhist economic principles. At the same time, this economic concept is regarded as a viable means through which future global economic crises can be prevented. There is a strong

correlation between Buddhist economics and Gross National Happiness. Essentially, the GNH denotes a policy structure for realizing the primary principles of Buddhist economics. It can be perceived as the next phase in the development of pointers for sustainable development, going past merely quantifying values that may be expressed in money. The leaders in the Kingdom of Bhutan define Gross National Happiness in terms of four pillars, which include good governance, economic growth, cultural conservancy and protection of the environment/nature. The advantage of this model is that it takes account of the gross domestic product (the lowest level bottom line) while supplementing it with 'higher level' elements. In the Buddhist economic framework, political decisions are usually made based on the trade-offs. For instance, when governments are faced with the option of offering employment opportunities and preserving the environment, most of them are likely to choose the former. The gross national happiness model indicates that these trade-offs must be in the framework of a hierarchy of values. Otherwise, politicians and policymakers will have to give up higher level ideals for lower level values.

According to the Buddhist economic principles, the aspect of specialization can only be beneficial if people do not lose sight of the most fundamental objective of economics. As a specialized study, the field of economics enables one to investigate the causes and factors in economic undertakings. However, it is a grave mistake to hypothesize that any one discipline of learning can solve every challenge. The modern economics is evidently out of touch with the entire stream of causes and circumstances that constitute realism. On the other hand, the Buddhist economics perceives work to be a means through which people can develop their skills, accomplish a strong sense of community, and achieve gratification through meaningful work (Essen 2009, p. 33). This implies that overly specialized or repetitious work is a grave disgrace to humanity. Therefore, labor needs to be a basis for attaining a sense of fulfillment and consummation. According to the Buddhist economics, the process of automation should be valuable to humans through technology applied to enhance the person's capacity, instead of being used to serve solely as the principal element of production. On the other hand, Buddhist economics tends to refine human character through thought-provoking and meaningful work, as opposed to an emphasis on capitalizing on production and depletion of resources. Most Buddhist economics believe that unsustainable consumption is a

threat to the modern cultures. As a substitute, mindfulness should be embraced as it tends to conserve the resources and protect the environment. Therefore, there is a need to adopt moderate, localized economies that can be vital in alleviating the world of the glitches generated by a system with no moral values. Another key aspect of the Buddhist economics is that the impermanence necessitates the acknowledgment that wealth and properties will not last, and excessive attachment to these may only lead to suffering. Furthermore, the causality is rooted in radiation, an aspect that suggests that the ethical actions of individuals may have a positive impact on the contentment and wealth of the larger community. Buddhist economists perceive poverty as an immoral element as it leads to violence and stealing. However, wealth needs to be acquired and maintained in the belief of Right Livelihood and the contemplation of generosity. In essence, generosity causally leads to high volumes of wealth and better social status in the future. On the other hand, competition is allowed in the Buddhist economy as long as it is based on the right intent. Buddhism does not reject matter and wealth as inherently evil, but considers them useful. First, material wealth prevents us from poverty and, second, it allows us to practice generosity; which causes 'merit' and a more happy society.

Thus, "Right livelihood" is one of the eight main requirements of the Buddha's path, which has been defined as follows: "One should abstain from making one's living through a profession that brings harm to others, such as trading in arms and lethal weapons, intoxicating drinks, poisons, killing animals, cheating etc., and one should live by a profession which is honorable, blameless and innocent of harm to others". A true Buddhist person not only seeks wealth lawfully and spends it for the good, but also enjoys spiritual freedom. The Buddhist Pali canon states that such person acts as Cited in Phra Rajavaramuni, "Foundation of Buddhist Social Ethics", in *Ethics, Wealth, and Salvation*, ed. Russell F. Sizemore and Donal K. Swearer (Columbia: University of South Carolina Press, 1990). Gross National Happiness: Towards Buddhist Economics. Available from Seeking wealth lawfully and unarbitrarily. Making oneself happy and cheerful. Sharing with others and doing meritorious deeds 4. Making use of one's wealth without greed and longing, possess of the insight that sustains spiritual freedom. These principles provide the ground for attempts to define Buddhist economics. But Buddha himself made it very clear: real happiness does not come from acquiring or consuming material

things. Happiness is essentially a state of mind, and mind is distinct from matter. Thus, Buddhism considers the path of mental or spiritual development superior to that of material development. What really matters is to psychologically detach oneself from matter, and strive for liberation and enlightenment, which is considered the ultimate state of happiness and fulfillment. This is achieved by the cultivation of values within one's mind, such as insight, compassion, tolerance and detachment. Only this will bring true happiness, both for the individual and society. Overall, the concept of Buddhist Economics applies the deific philosophies and moral purpose to the aspect of wealth. It primarily centers on simplicity and non-violence, as well as the quality of life that people live daily. The Buddhist ethical and moral principles along with their applications in economic life may provide a way of assisting the society to embrace a more sustainable and happier lifestyle while supporting the reduction of human suffering.

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