



**JOURNAL
OF
INDIAN RESEARCH**



Mewar University

Knowledge to Wisdom

Mewar University

Journal of Indian Research

A Quarterly Journal of Multidisciplinary Research

Volume 6 || Number 1 || January-March, 2018 || ISSN : 2321- 4155

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Abstracts and Indexing

<https://nkrc.niscair.res.in>, www.drji.org, www.worldcat.org

www.isid.org, www.scholar.google.com

Cover Illustration : Vinayak Razdan

Cover Design : Manishankar

Publisher : Mewar University, Gangrar, Chittorgarh, Rajasthan

Printer : M.K. Printers, 5459, New Chandrawal, Kamla Nagar, Delhi-110007

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TABLE OF CONTENTS

CHAIRPERSON'S MESSAGE	iv
EDITORIAL : Niraj Kumar	v
ARTICLES	
• Lal Ded and Her Transgressions: Cognitive Economy and New Movements / <i>Niraj Kumar</i>	01
• Maritime Challenges and Geopolitics in the Indian Ocean / <i>Ambesh Kumar Pandey</i>	15
• Outreaching the Financially Excluded: An Overview of Indian Initiatives / <i>Chirodip Majumdar</i>	26
• Carcinogenicity of Benzothiazyl-2 - Cyclohexylsulfenamide and Cycloheximide on Development of <i>Drosophila melanogaster</i> / <i>Sarika Gautam, Ajai Kumar</i>	42
• <i>Achyranthes aspera</i> : A Medicinal Plant of the Himalayas / <i>Aamir Bin Nazir, Aziz Ahmed, Kaushal Kishor Chandrul, Aamir Nabi Peer, Aadil Hussain Tantray</i>	49
• Media and Consumption Behavior of Urban Youth in Dhaka City / <i>Masum Billah, Muhammad Anwar Hossain</i>	57
• Growth and Significance of Advertising: Challenges & Opportunities / <i>Afsana Rashid</i>	70
• An Analytical Study of Online Admission System in IGNOU From Learners' Point of View / <i>Dr. Oum Prakash Sharma, Dr. K. Gowthaman</i>	80
• Book Review / <i>Annavajhula, J.C. Bose</i>	90
• SUBMISSION GUIDELINES	94

CHAIRPERSON'S MESSAGE

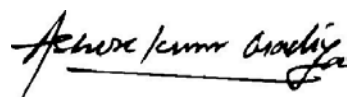
What is an academic research? Is it merely to collate ideas and texts from multiple websites, journals and books? Or is it to express old ideas in a novel way? In recent years, the competitive pressure to upgrade the CV for shrinking job market has taken away the sheen from academic research, particularly in South Asia. The purpose is getting lost in the forest of jugglery of words, phrases and citations.

When we read the history of knowledge, we find how the wisdom stalwarts were also the practitioner of ideas. Socrates died on the altar of his ideas. Famous female mathematician and astronomer Hypatia sacrificed her life for spreading knowledge. Most of the modern scientists and philosophers lived with their ideas. It was the confinements during modern age where most of the modern political philosophies took birth in the minds of the determined prisoners. From Mahatma Gandhi to Antonio Gramsci, from Nelson Mandela to Aung San Suu Kyi, they contemplated and came up with new thinking when they were deprived from the basic amenities in life. Amenities and ideas seldom get together.

But, the postmodern consumer culture has invaded the domain of contemplation. We have plethora of armchair scholars and TV Studio intellectuals. The new generation of scholars brandish the globe-trotting conference schedules and crave for the most exquisite amenities. They are the nodes in their small niches. Each node of these autonomous niches reflects and refers each other. The whole cycle of self-referentiality is squeezing out the sphere of practical and doable ideas. Scholarship cannot be cut off from the real world. The research has to be organic. A researcher of Physics and Chemistry needs to spend more time with machine and chemicals, rather than browsing merely circularity of papers on internet. The social science researchers are required to hone their skill of gathering empirical data, strengthen the statistical tool of analysis and understand the fast changing dynamics of target subject by engaging with them. The research ought to be *Engaged Research*. Only with this motto, we can see the torrents of great scholarship in near future.

I am happy to see several socially relevant papers in the current issue of the Journal of Indian Research. The editorial team deserves accolade for bringing out the first quarterly issue of the sixth volume of the journal.

Bringing out a research journal in print should be made mandatory requirement for the universities. Just as corporate houses have been entrusted with keeping a part of finances for meaningful social work under the Corporate Social Responsibility(CSR), publishing print journal should be made soul of the University's Academic Responsibility(UAG). I wish the field of organic and engaged research grow far and wide and bring positive change in the shrinking innovation space in India!



Dr. Ashok Kumar Gadiya

EDITORIAL

We are happy to come up with the first issue of the sixth volume of the *Journal of Indian Research*. This milestone could not have been achieved without the support of the Chairman of Mewar University who is also the Chairman of the Editorial Board of the Journal. Bringing out an interesting and serious multi-disciplinary journal timely is a humongous task. The team deserves accolades for the perseverance and consistency in effort.

In the current issue, we are carrying papers of scholars from as far as Dhaka and Kolkata to Kashmir and Raebareli. Ambesh Pandey of JNU has contributed a timely paper on “*Maritime Challenges and Geopolitics in the Indian Ocean*”. He argues how a great game has reignited in the Indian Ocean between regional and extra-regional powers. He further proposes that littoral States should launch a concerted plan to maintain peace and avoid any war situation. Establishing an organization of littoral States for maintaining peace in the IOR is a welcome suggestion for the policy makers. Dr. Oum Prakash Sharma and Dr. K. Gowthaman both working as Deputy Director at the Indira Gandhi National Open University have contributed a well-researched paper titled “*An Analytical Study Of Online Admission System In IGNOU From Learners’ Point Of View.*” The authors analyze the responses of the users on various components of the online admission, the technological preference of the students and collate the findings. The result spurs interesting insights into the online admission system in the IGNOU. The paper also offers suggestions for improvement in the Online Admission System (OAS).

I have contributed an essay on interplay of innovation and systemic co-option. I have taken up the case of Lallesvari (1335-1387), popularly known as Lal Ded in Kashmir who has left an imprint on vibrant synthetic Kashmiri culture. She transgressed social norms and yet is followed by people from different religions. Her radical challenge to societal order was co-opted through complex cognitive mechanism. The paper describes the concept of *cognitive matrix* and *cognitive surplus*. Further, the same is deployed vis-a-vis concept of ‘*internal history of mind*’ developed by Jürgen Habermas, the chief proponent of the Frankfurt School.

I examine how internal dialectics between ‘*cognitive surplus*’ and ‘*cognitive matrix*’ diffuse power of novelty both within the producing subject and within the group mind of participants in the movement at large. Even though Lalla subverted the societal norms of her times, the subversion couldn’t transcend the criticality and the challenge was diffused by an internal mechanism, both within individual Lalla and outside by

processes like legend production. Understanding these hidden cognitive mechanisms beneath social movements can help to predict the direction of social movements. The paper opens new vista for studying social change and social movements through cognitive dynamics.

We are grateful to Mr. Vinayak Razdan for allowing us to use the illustration of Lal Ded for the cover of the journal.

We wish the readers a fabulous journey through the scholarly pages of the current issue.

Niraj Kumar
Honorary Editor

LAL DED AND HER TRANSGRESSIONS: COGNITIVE ECONOMY AND NEW MOVEMENTS

Niraj Kumar*

ABSTRACT

Lallesvari (1335-1387), popularly known as Lal Ded, Lala Moj(Mother Lalla), Lalla Diddi was a poetess sage from Kashmir who has left an imprint on vibrant synthetic Kashmiri culture. She transgressed social norms and yet is followed by people from different religions. Her radical challenge to societal order was co-opted through complex cognitive mechanism. This paper describes the concept of cognitive matrix and cognitive surplus. Further, the same is deployed vis-a-vis concept of 'internal history of mind' developed by Jürgen Habermas, the chief proponent of the Frankfurt School.

The paper examines the case of Lalla that reveals the working of an internal dialectics between 'cognitive surplus' and 'cognitive matrix'. This dialectics diffuse power of surplus both within the producing subject and within the group mind in the movement at large. Even though Lalla subverts the social norms of her times, the same couldn't transcend the critical limit and was diffused by such an internal mechanism within individual Lalla and outside by processes like legend production. There are subtle cognitive mechanisms beneath social movements. What kind of cognitive surplus be produced and how much of it, so that newer perspective takes form of wider social movement needs to be further studied and researched for better understanding of social change.

Keywords: Cognitive economy, Jina, internal history of mind, pativrata, Śiva, Sufi, Void.

INTRODUCTION

Lallesvari (1335-1387), popularly known as Lal Ded, Lala Moj(Mother Lalla), Lalla Diddi was a poetess sage who left an imprint on vibrant synthetic Kashmiri culture. She was born about 1335 A.D in a Kashmiri pandit family in the village Pandrenthan(ancient Puranadhithana), seven kilometres south east of Srinagar. She was married at the early age of 12 in a Bhatt family. Her in-laws lived nearby at Padampura(now Pampor), about 13 kms

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from Srinagar. Historians and hagiographers mention how she was improperly treated by her mother-in-law. She appeared to have mystic propensities since her childhood and she patiently bore the suffering. She developed the inner attitude of 'indifference' and attained the state of equanimity of mind. Her detachment towards material world grew stronger. She decided to renounce her home for ever and took to the life of a wandering yogini, renewing herself forever. She met her Guru Sidh Srikanth, who was an adept in Śhaiva mysticism. Such was her ecstatic communion with the Divine that she hardly bothered about her dress and outer appearance. She roamed in the state of mystical ecstasy in semi-nude state. The local population called her "Lal" out of respect as her abdomen ('Lal' in Kashmiri) increased in size and hung loose over her pubic region, thereby covering her private parts. It was indeed a homophonic pun.

During her wanderings, she met saints and fakirs of different denominations. Kashmir was a melting pot of religious ideas by that time. Kashmir had emerged as a major centre of Śhaiva philosophy and practices by the middle of 11th century. While Kashmir valley was the conduit for transmission of Buddhism into Tibet and further into Central Asia and Kashmiris had undertaken massive work of translation of Buddhist classics into Tibetan, the region was also the refuge where the proponents of softer version of Islam took shelter after they were expelled from Persia and Baghdad consequent to persecution on behalf of followers of harsher variant of Islam. Shah Ali Hamadan¹ (Mir Sayyid Ai Hamadan) (1314-1384 A.D.) was one such Persian mystic who had come to Kashmir valley. He was a Sufi of Kobrai Order. He sought refuge in Kashmir from persecution in Hamadan (Persia) and is often credited with exercising great influence in converting Kashmiris to Islam. There are stories about Lal Ded meeting him at Khanpur (near Srinagar). Though, new generation of Kashmiris in the changed political circumstances reject the anecdotal encounter. Legends claim that to cover her body before Hamadani, Lalla plunged into a baker's red-hot oven and emerged thence dressed in silken green saree to have a dialogue with him.

Lal Ded was influenced by the Sufi philosophy through Shah Hamadan. Her sayings reveal that she was well conversant with the ṣaḍanga Yoga system of Vajrayana practices as also concepts like *Sahaj sukha* (innate bliss), *deha* (body), *deha* as temple of god etc. from Sahajayana. She was also conversant with the Natha doctrine of *nada* and *bindu*. She is often seen rejecting the separation of belief systems. She found the basic truth permeating monotheism of Islam and pantheism of Hindu-Buddhist sects. She fused the principle of Kashmir Śhaivism and the doctrine of *vahdat-e vojud* or "the oneness of existence" borrowed from Sufi mystics. This found expression in her poems which came down as her '*Vakhya*' (Sanskrit 'vak'). Though, Vakhyas are difficult to sing, these formed the bulk of old Kashmiri proverbs. These are also imbued with deep philosophical thoughts and put in the language of the idiom of the masses. Philosophical expositions were considered to be transmitted through specialized knowledge to select few. But, Lal Ded grounded the messages of abstract deep transcendental truth unto masses. She is also considered to be one among the oldest authors in Kashmiri language. More than fifty percent of Kashmiri idioms are still derived from Lalla's vakhyas.

Lalla inspired famous Nund-Rishi (1376-1438A.D.) of Charar-e-Sharif, the patron saint of Kashmir. Nund-Rishi sang a verse even:

तस पद्मा न पोरिचि लले॥
 तमि गले अमृत पीवा॥
 स्व साअन्य अवतार ल्वले॥
 त्यु थुय मे वर दित्तो दीवा॥²
 tas padmā na porici lale
 tami gale amṛta pīvā ॥
 sva sāanya avatāra lvle
 tyu thuya me vara ditom dīvā ॥

(**Translation:** That Lalla of Padma, she drank elixir and her throat is filled. She sits with you and you descended unto her. O God, Grant me the same blessing!).

Lalla was a precursor of that cultural and religious fusion which took place in Kashmir as well as in other parts of India between Hinduism and the Sufi tradition of Islam. She realized the unity of all paths and exhorted believers to get rid of the 'bhava-ruz' (the disease of the world pointing to cycle of transmigration). For her, Śhiva, Keshav(Vaishnava), Buddha(Jin) or Natha paths are secondary. She prays:

शिव् वा केशव् जिन वा कमलुज॥
 नाथा नाव् धारिनिय् यी यो॥
 सो मि अबलि कासीतन् भवरुज्
 सो वा सो वा सो वा सो॥³
 Śiva vā keśava jina vā kamaluja ॥
 nāthā nāv dhārinīy yī yo ॥
 so mi abali kāsītan bhavaruj
 so vā so vā so vā so ॥

(**Translation:** Let his name be Śhiva or Keshava(Vishnu), Buddha(Jina) or the Lotus-born(refers to Padmasmbhava who is known as the Lotus-born Guru and the Second Buddha (b.~732 A.D.), or Natha. Let he with any name accept the afflictions of the world from this weak woman. Whether He be he, or he, or he).

Her vaakhs spread the message that there is one God and one should not distinguish between a Muslim and a Hindu. She says:

शिव छुय थलि थलि रोजन।
 मो ज़न बतु टो मुसलमान॥
 त्रुक हय छुख टु पन प्रजणव।
 स्वय छय सहिब सूति ज़न॥⁴
 Śiva chhuy ṭhali ṭhali rozan ।
 mo zan batu ṭo musalamāna ॥
 truk hay chhuk ṭu pan prazṇav
 svaya chaya sahība sūty zan ॥⁴

(**Translation:** Śhiva abides in everything. Why to discriminate between a Hindu(Batu) and a Muslim (Musalman)! If you are wise, know yourself. This is the true knowledge of the Lord).

She was a predecessor of Kabir(1440-1518 A.D.) in emphasizing the need for an internal

discipline. She like Kabir rejected formalism of worship.

यो यी कम्म करमो॥ अर्चय॥
 रसनि उच्चरि तेमै मन्त्र॥
 एह्य॥ लगो देहसा॥ पर्चुय॥
 सोयी परमशिवानो तन्त्र॥⁵
 yo yī kamm karamo॥ arcay॥
 rasani uccari temai mantri॥
 ehy॥ lagom dehasa॥ parcuy॥
 soyī paramaśivāno tantri॥

(**Translation:** Whatever action I performed was as good as worship; whatever my tongue(Rasna) uttered was a mantra. This realization has engrossed my body (Deha).This is the essence of tantras of ParamŚivā.)

तन्त्र गलि ता मन्त्र साती
 मन्त्र गलि ता सुचि शून्या॥
 मूल (शून्य) गलि ता अनामय॥ सुचि
 एह्य उपदेश चित्रा॥⁶
 tantra gali tā mantr sāti
 mantra gali tā suci śūnyā॥
 mūla (śūnya) gali tā anāmay॥ suci
 ehy upadeś citrā॥

(**Translation:** When treatises disappear, what remain are mere mantras. When mantras disappear, what remains is mind. When mind disappears, what remains is Emptiness, the Void. The Void merges with the Void. This is the teachings.)

The message against the conventional rituals that too by a woman during a time of transition was truly revolutionary in spirit. She was quite conversant with the Buddhist thoughts like Śhunya which was vanishing fast from the land of its birth and tried to provide fresh impetus to the old messages in new emergent language of Kashmiri. Her vakhyas also reveal that she not only had realized deeper spiritual insight but she had practiced the Yoga of the Body(Deha) and a keen recorder of the inner experiences. One of her vakhya depicts her clear understanding over the yoga of Kundalini and *Nada-bindu* yoga, a domain of male practitioners: .

ये गुरू परमेसुरा।
 द्वपुम् अन्तुर वित्तो॥
 द्वनवै वोपदान कन्दुपुरा।
 हहू॥ कव तुळरो हाह॥ कव तती॥⁷
 ye gurū paramesurā।
 dvapum antura vitto॥
 dvanavai wopdan kandupurā।
 hṛhū॥ kav tuḷaro hāh॥ kav tatī॥

(**Translation:** O My Guru! My Supreme God, explain to me the inner meaning for it. Two breathings are there, both arising in the bulbous root(kanda),Why then is **huh** in heart cold, and **hah**, hot?)

Huh in heart (hri), probably, indicates the *anahad*(अनहद -unstruck sound) believed to be ensconced in heart. Huh is humkara too, another symbol of the *anahad*. Similarly, hah is the visarga(हः). These are syllabic linguistics of tantric soteriology.

नाभिस्थान्॥ व्ययी प्रवलवन्यी ही
 लोम् तौ व्योयी ईसुर मुथे॥
 मानसमण्डल॥ नद वहवन्यी॥
 द्वह् तव तुळनो हाह॥ गव तोतव॥⁸
 nābhisthān॥ vyiyī pravalavanyī hī
 lom tāṁ vyoyī īsura muthe ॥
 mānasamaṇḍala॥ nada vahavanyī ॥
 dvah tava tuḷano hāh॥ gava totav ॥

(Translation: The region around navel is hot. The vital wind rises to throat. The wind meets the river coming from the Manas-mandala (Brahma-randha) or the crown aperture of brain. **Huh** turns cold and **hah**, hot!)

Working minutely over the subtle energy structure of the body, Lalla sometimes make elliptic expressions. She talks about the secret “bulb” at the navel centre, and she sometimes talks about onion for the same region since onion is bulbous like the secret knot. She clearly experienced the sweet nectar that flows through the secret energy channels. She sings about the ten nadis and the moon’s cool shower after awakening of her Kundalini. Here is another vakhya that reiterates many of the concepts of tantra sadhna:

चित्ता-तुरोग वागी हेथ रोटुम॥
 चेलीथ मिलविथ दशो नाडी वाव
 तवय शेषी काल वेगालिथ वुट्शुम॥
 शुणेष शूनह मिलित गौव॥⁹
 cittā –turoga vāgī hetha roṭuma
 celītha milavitha daśe nādī vāva
 tavaya śeṣī kāla vegāliṭha vuṭṣuma
 śuṇeṣa śūnaha milita gauva

(Translation: With strong control over my wavering thoughts; by intense practice did I bring the ten nadis under control; thence, the digits of the Moon (Śaśi) melted and descend unto me; And a void(Śhunya) became merged within the void).

अभ्यासो सविकास॥ लय् उत्थो चन्द्र
 गगनस्॥ गगुन् मिलो संश्रट्टा॥
 शून्य् गलो ता अनामय। मुतो
 एहुय्॥ उपदेश॥ छ्योयी भट्टा॥¹⁰
 abhyāso savikāsa॥ lay uttho candr
 gaganas॥ gagun milo saṁśraṭṭā॥
 śūny galo tā anāmaya। muto
 ehuy॥ upadeśa॥ chhyoyī bhāṭṭā॥

(Translation: When there is repeated practice, then the Moon arises in the sky. The sky merges with the Void. Void is absorbed in the faultless Void. Nothing remains. This is the

teaching, O! Brahmin).

Unlike other bhakti-poetess, she longed to attain ‘Truth’ not by invoking personal God. She is a rare bhakti-woman-saint who does not cry for attaining unity with the beloved God, but for attaining “*ever present now*”, the dissolved void. She sang:

वाक् मानुस॥ कुलकौल्॥ ना यत्ति॥
 छुपिय् मुद्रा नाति नाति प्रवेश॥
 रजन् दिवस॥ शिवशत्त ना यत्ति॥
 मुतो को॥ ता सोयी उपदेश॥¹¹
 vāk mānusa ॥ kulakaul ॥ nā yatti ॥
 chhupiy mudrā nāti nāti praveśa ॥
 rajan divasa ॥ śivaśatta nā yatti ॥
 muto ko ॥ tā soyī upadeś ॥

(**Translation:** There is no word of mind. There is no kula (lineage) or the kaula(Transcendence). Not by stealth or by any mudra(Yogic gestures), entrance can be granted there. Neither Śhiva nor Śhakti resides there. The unknown remainder is the right teaching)

सेठ नोवुय षंडरम नोवुय।
 जलमय द्यूहुम नवम नोवुय॥
 याणु पेठा लाली मे तन मन नोवुय।
 तन लाल बोह नवम-नोवुय छस॥¹²
 tseth novuy ṣaṁḍram novuya ।
 jalāmaya dyūhuma navama novuya ॥
 yaṇu pethā lālī me tana mana novuya ।
 tana lāla boh navama - novuya chhas ॥

(**Translation:** The soul is ever new, the moon is ever new; so do I see this world submerged in water forever new and new. I, Lalla, entered deeply inside my body and mind. For ever new and new.)

This is the reiteration of the Buddhist momentariness. Unlike other bhaktas, she cries to know the truth and yet she asks people to meditate. She represents thus a transition from the techniques of a Nath Yogis and Vajrayana tantricism towards a bhakta’s devotion.

लल बोह द्रयस लोला रे॥
 छडान लुस्टुम दें क्योह राथा।
 वुचुम पंडित पनाणी गारे॥
 सूय मे रोट्मस नेचत्तुर तू साथ॥¹³
 Lal boh drayasa lolā re॥
 ṣaḍāna luṣṭum deṁ kyoha rāth।
 vucchuma paṇḍith panāṇī gāre॥
 sūy mye roṭmasa necchatura tu sāth॥

(**Translation:** With intense longing in mine eyes, Lalla searched all around day and night. But, the Master was housed within. Since his discovery on that day, I keep the lucky star within as my guide.)

In a simple verse, her genius could reveal the essence of Buddhist *Śhunyata*, Kashmir

Śhaivism, Vedantist advaita , Karma yoga of the Bhagvad Gita and the devotion of a common *sattva* (sentient being).The following vakhya reveals her synthetic genius:

शिव शिव करान्त यमी खोयो॥
 व्ययीसा॥ भयु भद्र॥ ता द्रत॥
 यमी अद्वय॥ मन्॥ सम्पन्नो
 तमी प्रसन्नो मुरगुरूनाथ॥¹⁴
 śiva śiva karānta yamī khoyo॥
 vyayīsa॥ bhayu bhadva॥ tā drata॥
 yamī advaya॥ man॥ sampanno
 tamī prasannoṃ muragurūnāth॥

(Translation: One whoever calls on the name of Śhiva and wears in mind the way of a swan; even if night and day, he remains busy with his mundane affairs; and still keeps his mind as non-dual(advaita), has a mind filled with abundance. Upon him alone the grace of the Supreme Guru descends).

Lal Ded was a ‘devotional mystic’ in the series of luminaries who spurred Bhakti movement. She is also one among those bhakti saints who initiated crystallization of regional languages. She seems to be such a unique figure-a radical voice against rituals, prejudices of caste, class, and gender; and yet she herself has been marginalized in discourses on ‘bhakti’! Is it so, because she broke patriarchal norms, and discourse-producers who are embedded in ‘patriarchal set up’, do not want to highlight her radicality?

Lalla’s Radicality and Cognitive Co-option

What is intriguing is that no serious effort has been made to undertake cognitive mapping of those luminaries who are stated to have created new ideology/counter-hegemonic ideology. Every person including these luminaries interacts in a cultural ecology. Every person imbibes a “cognitive matrix” through socialization and that learning process infuse them with the capacity to innovate. Innovation is a process of transcending the imbibed cognitive matrix. Yet, only few individuals have this capacity to produce cognitive surplus. This ‘cognitive economy’ has its own internal logic where a dialectical mechanism between ‘present cognitive matrix’ and ‘produced cognitive surplus’ gives dynamism to unfold ‘internal history of mind’.¹⁵ Cognitive matrix consists of myth, practical knowledge, norms, legends, ideology. Cognitive surplus in form of idea/ideology cannot be produced without the base of this matrix.

The biography and works of Lal Ded has been taken up to delineate mechanism of co-option of resistance and the methods that social organizations undertake to defuse creation of new movements building around radicality produced by individuals.

Lalla was unlike other ‘*bhakti saint-poetess*’. In fact, she was radical than any other woman-saint. She used to wander about in rags and danced in a half –nude or even nude conditions. Legends mention how when rebuked for such disregard for social norms, she would reply that they only were men who feared God and that there was very few such men. When she saw the Sufi mystic Shah Hamadan, she jumped into the oven and came out fully dressed crying “I have seen a man.”

This incidence can help to map the cognitive matrix, Lalla imbibed. Her roaming in semi-nude state was a challenge to patriarchal symbolic order which considered norm of 'pativratā' as techne for the 'salvation of women'. This norm was a part of cognitive matrix which Lal Ded imbibed. Whole mythic past has fabricated 'salvated women' (e.g Savitri, Anasuya, Sita, Damyanti) as devoted / *pativratā* (पतिव्रता) wife. If only *pativratās* could attain salvation, if only surrender to 'patriarchal order' was a means to salvation; how could the social order allow salvation to a woman who happened to desert her family?

Pativratāship itself is constructed under twin wings of chastity and maintenance of 'body' in closure from the ambit of the gaze economy. A *pativratā* should not be seen 'nude' by the other men. Myth of Anasuya (अनसूया) is a glaring example of perpetuating this norm of '*pativratāship*' in which Sati Anasuya, wife of Sage Atri when requested by the three gods(Brahma, Vishnu, Mahesh) to take off her clothes, did heed to their request only after turning the three powerful gods into breast-feeding babies.

Here, Lal Ded was roaming nudely. She herself sings:

ग्वरन वो 'नु नम कुनुय वचुन।
न्यबरू दो' पनम अंदर अचुन॥
सुय गव ललि म्ये वाख तु वचुन।
तवय ह्यो तमय नंगय नचुन॥¹⁶

gvaran vo 'nu nama kunuy vacuna ।
nyabarū do' panam aṁdar acun ॥
suya gava lali mye vākh tu vacun ।
tavaya hyo tamaya naṁgay nacun ॥

(**Translation:** The Guru gave me but one precept, "From without turn inward", It came to me "Lalla" as God's word. I have started dancing nude.)

She was aware of her nudity and yet she could not deny the cognitive matrix she had imbibed. She said in one of her vakhya:

Think not on the thing that is without;
Fix upon thy inner self thy thought.
So shalt thou be freed from let on doubt?
Percepts these that my preceptor taught. ¹⁷

Dance then, Lalla, clothed but by the air
Sing then, Lalla, clad but in the sky.
Air and sky: what garment is fairer?
'cloth' saith custom. Doth that sanctity? ¹⁸

Here, she is denying her nudity through expression like she is clothed but by the air. This is to conform to the 'imbibed cognitive matrix'. Similarly in another vakhya, she claims that the knowledge is the cloth with which to wrap one's body.

ज्ञान अम्बर पैरीम लल्लि
यीम् पद दपोतोम् हदि अड्क॥
कारुणी प्रोणोकी गरीत्रि लल्लि कीन॥
कामूय॥ मरणत्री शड्क॥¹⁹

jñāna ambara pairīma Lalli
 yīm pada dapotom hadi aḍka ॥
 kāruṇī prṇokī garītri Lalli kīna ॥
 kāmūya ॥ maraṇatrī śaḍka ॥

(Translation: Let sky-like wisdom be the cloth. Sed your heart with the verses that Lalla compose. With the help of pranav(Om), Lalla absorbs herself with the soul light. She has expelled the fear of death.)

Commenting upon her nudity, she says that there is no male in world. The definition of malehood itself is tweaked. For her, male is one who fears God and there are few who does that way. She is engrossed in her ‘cognitive matrix’ and completely under the sway of Anasuya myth (not to be naked before other male, which dilutes *pativratāship*, the only available techne for the salvation of women in a patriarchal grid). It is why when she had a glimpse of Shah Hamadan, she felt ashamed and legend mentions, she pounced into a baker’s red-hot oven and emerged thence dressed in silken green robes to have a discourse with him. She justified this action, legend mention, by saying that ‘*Hamadan was a male*’ and, that, it was her duty to be dressed before him.

Even though Lalla subverted the patriarchal order, she had to legitimize her action by using ‘cognitive matrix’ that she had imbibed. Views that a woman should not roam in nude condition in society was part of the cognitive matrix of a sedentary society. She expressed how she had not transgressed the patriarchal norms as she was dressed by the sky. A woman should not face a male’s gaze in her pure nature; she expresses she has not, for no one is a male (she innovatively links masculinity with the fear of God). This is where her genius lies. This is where she produced cognitive surplus by linking distant idioms and subverts tradition by using the matrix she had imbibed, in a unique logic of its own. This is how any kind of cognitive surplus is produced: discovering new relations between ideas/things to subvert the established order i.e. organizing principle.

Interestingly, group mind discovers new techniques to co-opt non-ignorable radicality. People watch Lalla in a superior-subordinate relation. Her cognitive surplus is co-opted in ‘cognitive matrix’ along with the legend that her abdomen(*Lal*) protruded so much that it covered her pubic region. She was an enlightened soul who knew truth. Truth is linked to power and she had, thus, gained mystic power. She was to be revered by people at large in this capacity. But, her nudity in public was unpalatable to people inheriting that particular ‘matrix’. It is why she was accepted as Mother (Moj). She was yet, a living being unlike “nude” Goddess Kali, Goddess Chhinnamasta or UgraTara and this dilemma is overcome via legend production about her protruding abdomen. She was nude and yet not nude in people’s cognition. Radical break in cognitive matrix of people (i.e. only a ‘*pativratā*’ defined as avoiding public gaze at nudity can transcend *samsara*) is avoided through this legend.

Lal Ded had transgressed the norms of a patriarchal society on the very basis of ‘patriarchal cognitive matrix’. At the same time, her radicality was being diffused into people’s mind through ‘legend-production’. An upheaval in cognitive matrix is avoided even when a capable leader transgresses the norms imbibed via that cognitive matrix.

Every resistance is based on ‘imbibed cognitive matrix’ which is in a dialectical play with ‘cognitive surplus’ produced by resisting subject. Subject’s cognitive matrix itself tries to diffuse power of “cognitive surpluses”. On the other hand, “cognitive surplus” is circulated in society where people’s collective unconscious tries to diffuse its power of altering the present cognitive matrix. Such a dialectic play at cognitive level has an autonomous realm unaffected by economy. There is a critical limit of this cognitive surplus, which when surpassed can create ‘radical alterity’ in imbibed cognitive matrix of people at large.

Historical Lalla become a legend in collective unconscious. This is not the case of Lalla alone. Whole history is webbed along with myth/legend/epics. As there is an internal history of mind with inner feedback loops propelled by the cognitive economy²⁰, to understand any kind of movement presupposes unveiling of internal history and cognitive economy of those few who provides ‘cognitive surplus’ for generating any movement.

The case of Lalla reveals the working of an internal dialectics between ‘cognitive surplus’ and ‘cognitive matrix’ that tries to diffuse power of surplus both within the producing subject and within the group mind at large.²¹ It is why even when Lalla subverts the social norms of her times, she is still revered at large by people because that subversion couldn’t transcend the critical limit and was diffused by an internal mechanism within Lalla (she links this transgression of norms through her spiritual consciousness) and internal mechanism beyond Lalla (legend making about her protruding abdomen, *Lal*).

There are subtle cognitive mechanisms beneath social movements. What kind of cognitive surplus be produced and how much of it, so that newer perspective takes form of movement can be further studied and researched.

‘Kashmir’ is an important theme in present political discourse, but its history/culture is a marginalized discourse in Indian historiography. Uniqueness of Lalla did not burn with her body. It has resurfaced to guide the coming generation who foresee Kashmir as a fertile valley of criss-crossing ideas.

NOTES

1. Shah-e-Hamdan Syed Ali Hamdani was born in 714 AH (1314 A.D.) at Hamadan, Iran. His pedigree runs directly to Prophet Mohammad’s wife through his mother (17th generation). He was initiated into the Kobrai Order from Sheikh Abul Miamin Najam Uddin Muhammad-bin-Mohammad Azani. When Timur attacked Persia, he left Persia along with seven hundred Sayyids and other followers and arrived in Kashmir. Though, some of the Sufi orders got entrenched with the Timurid administration, Shah Hamadan didn’t compromise with his Order’s principles. He never stayed in Kashmir permanently and like a true mystic moved across Central Asia, Ladakh, Kashmir and Persia. He visited Kashmir thrice. His first visit was made during the reign of Sultan Shahab Uddin (regna 1354-73A.D.) in 774 AH(1373A.D.). Kashmir was at war with Firozshah Tughlaq’s army near Attock. He played the role of a peace maker and peace was established. The Sultan of Kashmir was pleased and supported him wholeheartedly to spread his teachings in Kashmir. But, he stayed for only six months and left for Mecca. He again returned to

Kashmir in 781 AH (1379 A.D.) when Qutub Uddin (regna 1373-89 A.D.) was the Sultan and stayed for a year. He returned to Turkistan via Ladakh in 783 AH. There is a mosque in Shey near Leh where he had prayed. His last visit to Kashmir was made in 785AH. He travelled to Ladakh, Baltistan, Skardu and many regions in Trans-Oxiana. He fell ill. He returned from Kashmir. Sultan Muhammad, the ruler of Pakhli, requested him to stay with him. He finally breathed his last at the age of 72. The Sultan of Pakhli wished to bury Shah. But, disciples wanted to carry him to Khatlan in present south Tajikistan for burial. Finally, he was buried at Kolab in Khatlan, Tajikistan. A shrine was erected at the place of his death which now lies in Mansera of Hazara district in North West Frontier Province, Pakistan.

Tajik government have declared him as the National Saint of Tajikistan. Tajikistan and Iran have jointly renovated the shrine of Hamdani and a museum dedicated to the Sufi saint is being constructed. His face has appeared on banknotes of Tajikistan. The 700th anniversary of the birth was jointly celebrated by Iran and Tajikistan in the year 2014-15. He is widely remembered as promoter of the doctrine of *vahdat-e vojud* or “the oneness of existence”. Indian government missed the opportunity to tie up with its northern neighbours to celebrate the legacy of a great saint and promoter of “value of peaceful coexistence.”

2. Kashmiri verse is taken from article by Prof. A.N. Dhar. See Dhar, A.N. (2000). “A Re-Appraisal of Lal Ded” in Toshkhani, S.S.(ed.). *Lal Ded: The Great Kashmiri Saint-Poetess: Proceedings of the National Seminar* Conducted by Kashmir Education, Culture and Science Society. Available online at <http://www.ikashmir.net/lalded2/2.html>. Also, cited in Kaul, J.L.(1978). “Lal Ded” in *Cultural Leaders of India: Devotional Poets & Mystics Part I*, New Delhi: Publication Division, Government of India, p. 79.
3. Cited in Grierson, Sir George and Barnett, Lionel D. (1920). *Lalla-Vakyani* Monograph, Vol. XVII, London: Royal Asiatic Society, p. 30. The verses were collected primarily from one Dharam Dasa Darwesh of village Goosh, near Baramulla in 1920. The book introduced the sayings of Lal Ded to the western world.
4. Bhat, Roop Krishen(2000). “Language of Lal Ded’s Poetry” in Toshkhani, S.S.(ed.). *Lal Ded: The Great Kashmiri Saint-Poetess: Proceedings of the National Seminar* Conducted by Kashmir Education, Culture and Science Society. Available online at <http://www.ikashmir.net/lalded2/6.html>
5. Ibid.,p. 76.
6. Ibid.,p. 33.
7. Ibid.,p. 74.
8. Ibid.
9. Ibid.,p.86.
10. Ibid.,p.23.
11. Ibid.,pp.23-24.
12. Ibid.,p.106.

13. Ibid.,p.25.
14. Ibid.,p.83
15. The concept of 'internal history of mind' was developed by Jürgen Habermas, the chief proponent of the Frankfurt School. He introduced the concept of cognitive factors in his revision of the traditional concept of Marxist Historical Materialism. Marxist concept hinges around two unrelated dimensions: forces of production and relation of production. With the cognitive dimension, Habermas generates a 3-Dimensional complex model of 'evolutionary interconnection and process'. Habermas propounds the following elements:
 - a. The system problem of material production and reproduction, generating the crises that leads to new forms of social integration;
 - b. The developmental logic of social integration or the '*internal history of mind*' ;and
 - c. The contingent circumstances under which 1) New structures are acquired by the individual consciousness and translated into structures of world-views; under which 2) System problem arise and overtax the steering capacity of a society under which 3) The institutional incarnation of new structure of rationality can be tested and stabilized, and under which 4) The wider scope of the utilization of resource can be utilized.

(Jurgen Habermas (1976). *Zur Rekonstruktion des Historischen Materialismus*, pp.37-38, cited in Johann P. Aranson, Review of *Zur Rekonstruktion des Historischen Materialismus* by Jurgen Habermas, *Telos*, 1979, No.39, pp.201-218 and reproduced in J.M. Benstein ed. *Frankfurt School: Critical Assessment*, vol.6, London: Routledge, 1997.))

Habermas argues that the great indigenous thrusts of evolution that led to the rise of ancient civilizations or capitalism in Europe, entailed considerable development of the productive forces not as a condition, but rather as a consequence. Only when a new institutional framework had emerged could the unresolved problems be dealt with through the accumulated cognitive potential. This in turn resulted in an increase in the productive forces. That an indigenous learning mechanism provides for the concentration of a cognitive potential which can be employed to solve an evolutionary crisis.

Haber mas mentions about need of an abstract principle of organization. These principles of organization should comprehend those innovations that would institutionalize a new level of learning for each case. The organizational principle of a society opens the range of options. In particular, it determines the limits within which structural changes in the institutions can occur. It further defines to what degree the available capacities of productive forces can be socially employed, or to what degree the development of new forces of production can be stimulated. Through these determinations it is also able to ascertain how far the complexity of a system's steering capacities can be raised.

(Jürgen Habermas(1975). "Towards a Reconstruction of Historical Materialism", *Theory and Society*, Vol. 2(3):287-300.

By providing primacy to cognitive determinants, Habermas opens a new line of thinking

that goes beyond Marxist interpretation of social change. Habermas states that learning process of the human species takes place through the accumulation of both technical and moral-practical knowledge. Both forces obey a 'logic of growing insight' whose successive stages consist in rules of possible problem-solutions. (Jürgen Habermas (1976). *Zur Rekonstruktion des Historischen Materialismus*, p.36). The technical and moral-practical knowledge can be combined in a synthetic structure-the principle of organization. This organizing principle is at higher level of abstraction than the modes of production. But, as already mentioned, Habermas gives priority to the moral--practical aspect of the 'internal history of mind'. Habermas states that the individual learning processes tend to surpass the limit of institutionalized knowledge, thus producing a 'cognitive surplus' that is deposited in world-views and responsible for evolutionary changes in the structure of interaction."(Johann P. Arnason, *op.cit*, p.171.)

16. Dhar, n.2.
17. Temple, Richard Carnac(1924).*The Word of Lalla The Prophetess: Being the Sayings of Lal Ded or Lal Diddi of Kashmir*, Cambridge: Cambridge University Press. p.173
18. Ibid.
19. n.3, p.90.
20. This can cause an upheaval at 'cognitive level'- a reshuffling in 'cognitive matrix' as this matrix can no longer ignore/co-opt the power of emergent cognitive surplus without radical reshuffling in matrix itself. It is only thereafter that new movements-social, political, cultural, technological-can take off. Whether cognitive surplus is always in a dialectical play with cognitive matrix? Generally, it is cognitive innovations that is in tune with cognitive matrix, and is as much in dialectical play with it as that which is untuned with matrix. Though, this tuning/untuning is a matter of degree alone for both are produced in same 'cognitive economy' with cognitive matrix as the site/resource of production. All innovations are merely a challenge co-opted and all resistances are merely challenges un-co-opted. Thus, any kind of 'movement' is generated only when a 'cognitive surplus' is produced at the site of cognitive matrix. Cognitive economy is linked with internal history of mind. Cognitive economics supplement other form of economies-physical and virtual economy. Though these economies are independent of each other; all such economies themselves are enmeshed under a subtle structure so that each forms feedback loops with all other. Semiotic production of codes, signs and symbols is a subset of the cognitive economics. Thus, whole of metaphysics, epistemology, soteriology, ontology including languages and rationality itself would be subsumed under the concept of cognitive economics.
21. There is a critical amount of cognitive surplus depending upon the critical number of producer-subjects, critical quality of cognitive surplus and its critical radicality; which, if, cannot be diffused/co-opted easily by imbibed 'cognitive matrix' might generate various kinds of movements. I would like to supplement views of some highly informed analysts on bhakti who advocates '*a negation of bhakti as a movement and pleads for its construction in terms of a series of atomized bhaktas and movements.*' Every movement

is a byproduct of upheavals in cognitive matrix due to critical production of cognitive surplus in individual's mind alone. Bhakti was a construction of outpouring of series of atomized bhaktas, but when this construction surpassed a critical limit, it caused upheavals in cognitive matrix of its times so that bhakti as a movement could emerge in tandem, within a very short span of time in distant geographies and across various belief-systems.

REFERENCES

1. Charagi, S.N. (1938). *Wise Sayings of Laleshwari: Vakyani*, Srinagar: Trust Publishing House, Women's Welfare Trust.
2. Grierson, George A and Barnett, Lionel D. (1920). *Lalla Vakyani or The Wise Sayings of Lal Ded*, Royal Asiatic Society Monograph, Vol. **XVI**, London.
3. Jürgen Habermas(1975). "Towards a Reconstruction of Historical Materialism", *Theory and Society*, Vol. **2**(3): 287-300.
4. Habermas, Jürgen (1976). *Zur Rekonstruktion des Historischen Materialismus*, cited in Johann P. Aranson, Review of *Zur Rekonstruktion des Historischen Materialismus* by Jürgen Habermas, *Telos*, 1979, No.**39**,pp.201-218.
5. Kak ,Jayashree (2007). *Mystical Verses of Lallā: A Journey of Self Realization*, New Delhi: MLBD.
6. Kaul, Jayalal(1973). *Lal Ded*, New Delhi: Sahitya Akadami.
7. Koul ,Anand(1933). "Life Sketch of Laleshwari and LallaVakyani", *The Indian Antiquary*, Vols. **L** (1921), **LIX** (1930), **LX** (1931), **LXI** (1932), **LXII** (1933).
8. Temple, Richard Carnac(1924). *The Word of Lalla the Prophetess*, Cambridge: Cambridge University Press.
9. Toshkhani, S.S.(ed.)(2000). *Lal Ded: The Great Kashmiri Saint-Poetess: Proceedings of the National Seminar*, conducted by Kashmir Education, Culture and Science Society, Delhi.

MARITIME CHALLENGES AND GEOPOLITICS IN THE INDIAN OCEAN

*Ambesh Kumar Pandey**

ABSTRACT

Maritime trade has been the cheapest mode of trading throughout the human history and continues to be so. This makes the Sea Lanes of Communication (SLOCs) very critical for the world economy. The SLOCs are the channels for maritime trade, therefore very prominent and any hindrance to it can create a situation of energy crisis globally as it was seen during Yom-Kippur War (1973). The Indian Ocean being a connecting geography of several oil producing and exporting states is recently in several debate because of the ongoing instability around littoral states, mainly western states of Indian Ocean Region (IOR) like Somalia and Yemen. This research paper focuses on the SLOCs of Indian Ocean and their importance in the international system, and disruptive impacts caused by piracy and maritime terrorism. The excessive militarisation and competing interests of great powers have made it a Zone of Conflict that might someday result into a maritime war. Rising powers like India and China are very active, playing diplomatically to establish their influence for their long term goals. The efforts must be made to maintain this region as “Zone of Peace” which seems unlikely under new circumstances. Maximum security of SLOCs needs to be ensured.

Keywords: Indian Ocean Region, Maritime trade, Maritime terrorism, Oil Politics, Sea Lanes of Communication.

INTRODUCTION

The Indian Ocean is broadly divided into the Arabian Sea and the Bay of Bengal, but it includes many important seas, i.e. the Andaman Sea, Great Australian Bight, Gulf of Mannar, Laccadive Sea, Mozambique Channel, Persian Gulf, Red Sea and the Gulf of Oman. Apart from these, there are many water tributaries that connect it to the internal landmasses. The significant littoral states of the region contain one-third of the world’s population, 25 percent of its landmass and about 40 percent of the world oil and gas reserves. Being locus of the

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important Sea Lanes of Communication (SLOCs), the region is home to a major part of world's population and rising powers like China and India etc. The international interest today is concentrated mainly in the north-western area of the Indian Ocean between Egypt, the Horn of Africa, Persia and the west coast of India.

In the history of seafaring, Portuguese were the first European explorers of the Indian Ocean, its islands, and coastal states. But they were not strong enough to rule the Ocean; they only occupied some significant trading points and coastal zones. Arabian Muslims were showing strong opposition around the African Coast. Sultan of Sumatra, a Muslim ruler, threatened Portuguese at Strait of Malacca. They were driven out of Malacca in 1641 by the Dutch, who were interested to control the spice islands. Dieter Brown writes in his book, "*The Indian Ocean: Region of Conflict or Zone of Peace*", how Dutch established themselves at various places firmly like in Cape of Good Hope, Mauritius, on the coast of India and Ceylon but they were not in a position to gain strategic control over the Indian Ocean, nor evidently they were interested in doing so. In the seventeenth century, the competition was sown between France and England which continued upto the middle of the eighteenth century. Both powers centred focus towards the southern part of India. England (the East India Company) quickly succeeded in penetrating important areas of Indian Subcontinent and protected its positions mostly by treaties with native rulers (Brown, 1983: 5). French showed most of their interest in the western Indian Ocean and controlled Mauritius after taking it over from Dutch. This was an era of colonialism and the maritime politics was running parallel to the geopolitics of territorial capture. Historians write "after the middle of the eighteenth century British and French were the dominating powers that colonized many of the littoral states in IOR, but British influence was the strongest".

Treaty of Paris (1815) somewhere divided the areas of interest; for Dutch, it was Indonesia, for French it was Reunion and England was awarded Ceylon, Mauritius, and the Cape Province. The British journey didn't stop here; they colonised Singapore to take hold over Malacca Strait. After this, they captured Burma and the protectorate of Malaya Peninsula. The opening of Suez in 1869 was taken as an opportunity by the Englishmen, and their foothold increased significantly after its opening. British possession of Aden, a part of western Indian Ocean happened in 1839 before the opening of Suez Canal that was at the southern entrance to the Red Sea. Another important event during this period was the discovery of oil in the Persian Gulf (1890). The notion of geopolitics in the region changed from here, and momentum of geopolitics shifted over "oil resource geopolitics". The attention of a larger number of States shifted over the Gulf region for the fulfilment of their energy requirements. The pace of development in Britain and Russia was high; they were highly influential, needed fuel to run machines, industries and ships. They increased their activities in the region. Armed conflict seemed inevitable in the region due to the intensity of the situation. Russia got defeated by an Asian power, Japan in 1905 that limited its role, but England further tried to strengthen its position.

European powers dominated for long in the IOR, and the IOR has always been affected by the presence of external powers. Indicating British dominance, Dieter Brown writes in "*The Indian Ocean: Region of Conflict or Zone of Peace*",

“Thus, by 1900 Britain had turned the Indian Ocean into a British lake and had military control over all the important approaches and exits. Of the littoral states that time, only Ethiopia and Siam (Thailand) remained formally independent, while the others found themselves in varying degrees of (mostly direct) dependence on one or other of the European powers.” (Brown, 1983:6).

EXTERNAL INTERVENTION IN THE INDIAN OCEAN

Everything was going smoothly in European favour, but the emergence of Japan as Asian power showed British that they were no longer safe in the Indian Ocean. Anti-colonial movements in India and other colonies weakened the British strength, but later that was overcome by the USA. After the two world wars, USA strongly showed its presence in the IOR as a force. It increased its political, economic and military capacity to make its presence felt in the region. During the period of Cold War, both USA and Soviet Union struggled and the effect was observed in the Indian Ocean Region (IOR). The intervention of Soviet Union in the newly independent states of Africa and Asia increased based on ideologies and bilateral cooperation. But the fragmentation of Soviet Union into 15 nations has comparatively decreased its influence in the international system. The USA has been the only superpower in the region and outside, but the emergence of China is a cause of disquiet to its power structure. Political thinkers from various parts of the world perceives China's rise as a serious threat to US hegemony.

Whole scenario has subsequently changed. The power of colonial hegemons concentrated because of the freedom of many colonised nation-states. Many of these were the countries attached to the Indian Ocean such as India, Pakistan, Bangladesh, Australia, Indonesia and many more South Asian, South-East Asian and African nations. Most of the littoral states of Indian Ocean have been liberated from the shackles of slavery officially, but ideologically many are still in the bondage of colonial powers.

Why did Europeans foray eastward into the IOR? *Lebensraum* (living space) and resources were the prime factors that attracted Europeans eastward. Simultaneously industrial revolution began in Europe around 1850s. Invention of new machines and sophisticated technology boosted their dominance. They resorted to resource capture, that made them to look eastward. Development of naval ships and arms was one of the consequences of the industrial revolution that strengthened navy and soldiers. With mobile and lighter cannons that could be mounted on boats and steamer, it was easy for them to capture sea routes. They could colonize most part of the world. Most of the IOR States also got colonised.

Each country requires resources to develop itself. Its naval and defence system provide the capability to influence the direction of trade and resource transfer. Sea transportation is still the cheapest, and navies are involved in protecting sea lanes specifically for transportation. Therefore, the situation is delicate in the seas and ocean. Today the IOR is fragmented in the same way as it was before colonialism. The complex nature of regional and extra-regional powers is dynamic; the great game is going on for economic and strategic advantage among major emerging powers of the region. Now, the reasons for conflict is not ideological like communism or capitalism as happened in the past; but religion and resource. The two “R”s are

very decisive for the fate of IOR. None of the States want to compromise their self-interest. They hope for peace for actualizing the dream of shared prosperity.

The main actors in the Indian Ocean are India, China, EU and its member countries, the US, Australia and Japan. They have occupied various strategic positions and now increasing military presence and arm capabilities in the region. Apart from larger actors, various small naval powers are also expanding their naval powers such as Singapore, Malaysia, Pakistan and South Korea. The absence of a comprehensive multilateral agreement on maritime security in the Indian Ocean makes this force projection dynamics highly problematic (Putten *et al.* 2014). Political instability inside the countries of the region has given pace to many security challenges such as piracy, human trafficking, drug trafficking and maritime terrorism. The Horn of Africa is particularly in focus since violent insurgencies are very common and threaten the stability of the entire region.

PROMINENT SLOCS AND THE GEOPOLITICAL MAYHEM

The situation has changed a lot after the economies opened and the civilisation moved towards globalisation. Sea Lanes of Communication and chokepoints are a critical part of global energy supply and security because of the large volume of fuel that passes through their narrow straits. Chokepoints are narrow channels along widely used global sea routes, some so narrow that restrictions are placed on the size of vessels that can navigate through them. Such world oil transit chokepoints are a critical part of global energy security. About half of the world's oil production moves on maritime routes. The whole history of IOR has been full of disputes to capture places around the linking points for a better geostrategy by various powers, internal or external. Increasing effects of external forces are not easy to reduce because most of the powers that had moved out of their waters are potent enough to challenge anyone who opposes it.

Indian Oceanic chokepoints such as Strait of Hormuz, Bob-al-Mandeb, and Strait of Malacca are keys to transportation and any blockage, even for shorter duration can hamper energy supply in a way that can cause collapse of the whole commercial transaction leading to substantial increase in total energy costs. Arab world transports millions of barrels of oil per day to outside world through these strategic points. Oceanic chokepoints leave oil tankers vulnerable to theft from pirates. Sometimes planned terrorist attacks make condition very critical near chokepoints that might break the supply chain and cause rapid price boom. Years 2014 and 2015 are treated as the “*Years of Tragedy*” in the international system due to emergence and spread of extremist organizations like ISIS and Boko Haram. Their rise and spread consequently caused migration of millions of people from the Middle East to Europe and within Africa.

Political unrest in the form of war and hostilities including shipping accidents leads to disastrous oil spills. A large collision occurred between cargo and tanker in the eastern Indian Ocean that spilled around 1.4 million gallons of crude oil in August 2006. A separate oil spill happened in same month 312 miles southeast of Manila, near Guimaras Island when a tanker sunk in rough seas. Officials claimed leakage of about 528,000 gallons of fuel due to the accident. Cited as worst oil spill by the officials and authorities, a “State of Calamity” was

declared by a Central Philippine island province (Chisaki Watanabe, 2006).

However, linkages that are far can never be neglected in international politics. Suez Canal is not a part of Indian Ocean directly, but its connection to the Indian Ocean is a boon to the Indian Ocean. The value of Indian Ocean sea trade is directly proportional to movement through the Suez Canal. This momentum to world trade was given by Egypt after digging a canal across its land with a unique geographical and strategic location through the branches of Nile. The Senusert III, Pharaoh of Egypt (1874 B.C.) was the person considered as the one who planned to dig it first. To fulfil the long-term objectives of navigation, it could finally be opened on November 17, 1869, and thereafter it was nationalized on July 26, 1956, by Egyptian government. The Convention of Constantinople (1888) provided access to all the nations to use the canal for vessels without discrimination, in the condition of war and peace. Nevertheless, Britishers perceived the canal a boon to maintain maritime supremacy. They used it for their hegemonic interests, and for attaining colonial goals. Britain maintained a defensive force all along the Suez Canal Zone through the provisions of a treaty in 1936, *Anglo-Egyptian Treaty*. Later, in 1954 a seven-year agreement was signed by both states that superseded the 1936 treaty. Repeated demands of Egyptian nationalists to evacuate the Suez Canal Zone resulted in the gradual withdrawal of almost all the British troops from the Canal Zone.

The Suez Canal Authority (SCA) was established by the Egyptian government. The SCA works as proprietor and operator. All the toll tax generated through use of the canal by parties is collected by the SCA, and it fixes the necessary rules for navigation, other related matters along with the safety of the traffic. The method used to monitor the traffic is completely computerized, supported by radar, and having about 14 pilot stations and their pilots. Maritime Training and Simulation Centre is getting operated by SCA since 1996.

The canal is like a dividing line between Africa and Asia. Segregating both continents it runs between Port Said Harbour and Gulf of Suez. Canal is extensively useful for modern ships and cargoes. SUMED (Suez-Mediterranean) oil pipeline provides accession to the Mediterranean, and it is co-owned by state companies from neighbouring States such as Saudi Arabia, Egypt, the United Arab Emirates and Qatar. SUMED pipeline helps in transit of oil between Red and Mediterranean Sea. Its geopolitical significance is felt worldwide, and it is being protected by the multiple States for proper transit of oil.

THE NEW SUEZ CANAL

The route from Suez Canal is not sufficient for the cargos, containers, vessels and ships passing every day. The problems of traffic jams are very frequent because of its narrowness and it being the only route between the Atlantic Ocean and the Arabian Sea. To get rid of such issues, the Egyptian government has decided to construct a New Suez Canal for the coming generation. The proposed mega project is designed to increase the revenue-boosting capacity of the site. Previously daily average of transiting vessels was 49 ships, but the New Suez Canal will increase the transiting capacity from 49 ships to 97 ships by 2023. The total length of the project is 72 km which is parallel to existing canal; and is expected to maximise the profits and will reduce the waiting time of ships that wastes fuel as well as consume time. It will

also help in boosting up the world trade through attracting more and more ships. The official website mention how it would reduce waiting time for vessels by about 3 hours, down from current 11 hours. Along with creating lots of job opportunities, it will also increase revenues from Suez Canal Area. Presently the annual revenue is 5.3 billion dollar, but it is anticipated to reach 13 billion dollars, a hopping 259 percent increase. Undoubtedly, this would contribute to national income of the littoral State. Therefore, SLOCs create possibilities and opportunities for neighbouring areas.

SLOCs OF THE INDIAN OCEAN

The Persian Gulf with Strait of Hormuz Strait is very prominent on world map. The significance of Hormuz strait can be seen from the statistics that make it the most strategic transit chokepoints. Approximately 35 percent of all the sea-borne traded oil passes through the strait every day, which is 20 percent of the oil traded worldwide. In 2012, UAE, Iran, and the group of other Persian Gulf countries such as Saudi Arabia, Qatar, Kuwait, Bahrain and Iraq produced about 30 percent of world's total oil. Report of the Energy Information Administration (EIA) of the USA shows Persian Gulf countries control more than half of the total oil reserves of the world. The region is not confined only up to reserves but exports a more significant quantity to Organization for Economic Co-operation and Development (OECD) that includes major importers of oil. According to a report of 2003, 11.6 million barrels of oil per day were exported to OECD countries through the pass or Hormuz Strait.

The narrow channel between Indonesian Sumatra and Malaysia that connects the South China Sea with the Andaman Sea is known as Strait of Malacca. It stretches about 805 km between Indonesia and Malaysia. It's a sea route and strategic choke point that allow many ships to transport energy materials to China, Japan and Australia. In a way, it is a connecting link between Indian and the Pacific Ocean. It is one of the busiest shipping lanes in the world that ends with a port at Singapore, where ships are fueled while travelling. This port was highly affected by the colonial powers and consecutively controlled by extra-regional power for a longer period such as Arabs, Portuguese, Dutch and Britishers. Eastern coast of Sumatra is full of potential for energy resources; excavations are continuing for the last century. To exploit the present oil resource, many petroleum companies have invested in establishing new oil wells near the eastern coast of Sumatra, attached to Sunda shelf region. A large part of oil and energy trade is being carried through the Strait. Not only ships but giant oil tankers to Japan and other ports transfer oil from Middle-Eastern oil fields. Whole South East Asia and East Asia are like a hub of geopolitics because of the discovery of new resource bases and presence of several major economic powers.

Bab-el-Mandeb is an Arabic word that means "Gate of Tears" which is a passage connecting Aden Gulf with the Red Sea. The Suez Canal and Bab-al-Mandeb are two keys to the Mediterranean. The distance between two nearest points called Ras Siyan (Djibouti) and Ras Manheli in Yemen is about 30 km (20 miles). More or less it's about 30 to 40 km wide and very strategic for the world economy and energy supply. There are few smaller islands present in the Strait which are called "*Seven Brothers*". The fact-sheet on global oil chokepoints issued by the US Energy Information Administration's (EIA) provides data that explain Bab-al-Mandeb as world's fourth busiest chokepoint that allows 3.8 million barrels of oil and refined

petroleum products to pass through it daily, that goes to various parts of the world such as Asia, Europe, US, and some other parts (Armin Rosen, 2015). Explanations of EIA fact sheet about Bab-al-Mandeb emphasise its value; it says transit time and cost both would increase in case of closure of the Strait. It would be difficult for the tankers in the Persian Gulf to pass through Mediterranean and Suez, and the last option would be the southern tip of Africa that would certainly be very costly for transportation. Sunda Strait and Lombok Strait are other important SLOCs that are located around Indo-Pacific area. Lombok Strait is almost parallel to the Sunda Strait, and it also connects the Java Sea with the Indian Ocean. There are number of passages between Indo-Pacific Islands but all the passages are not necessarily sea routes. The smaller islands around Lombok Strait are known for spices and many other tropical products, but these are not prominent for sea trade. All the sea lanes and choke points transfer a larger amount of crude oil, cargoes, merchandise and precious resources like coal and iron which are required heavily to run industries. The Sea lanes are not only transit routes, but they are “keys to urbanisation.” If they are blocked, chances are that the pace of industrialisation and urbanisation would be stalled.

THE REALIST GREAT GAME IN THE INDIAN OCEAN

Several prominent scholars consider this region as an arena of cooperation and conflict, conflict for interest and cooperation for interest. Actually, it has evolved as an “Interest Zone” for regional and extra-regional powers. Among the Indian Ocean littorals countries, with over 140 vessels, the Indian Navy is the most powerful. Its order of battle includes aircraft carriers, submarines, expeditionary platforms, long-range maritime surveillance aircraft, and these are supported by a sophisticated network-centric capability including a dedicated military satellite (Sakhuja, 2014). The other regional power includes Australia, Iran and Pakistan which are highly augmenting their capability in the Indian Ocean. Naval forces of Pakistan are active as a powerful force with the surface, sub-surface and air capabilities. Iran is focussed on Arabian Gulf for its purpose, but now it is engaged highly in Indian Ocean manoeuvres. Its military capability is very effective in Arabian Gulf, and that is acknowledged highly. It has a large fleet of underwater submarines. Australia is one of the strongest maritime player which has embarked upon building war capabilities with the inclusion of new submarines, fighter jets, air defence destroyers and aircraft for patrolling on maritime routes and oceans.

However, scholars mostly debate about competing interest of US, India, China and Japan in the IOR. In this competition of attaining strategic space in the Indian Ocean Region, every State has an eagle’s eye view. India and China are the main competitors for strategic space, but Japan wants its routes to be obstacle-free for fuel supplies. Japan obtains 90 percent of its oil import through the Indian Ocean and the South China Sea. Because of conflict over Senkaku/Diaoyu Islands with China and declaration of Chinese AIDZ (Air Defence Identification Zone) has turned China as a potential threat to Japanese interest. China’s People Liberation Army Navy has conducted regular drills, mostly in the western Indian Ocean near the Gulf of Aden. Perhaps those exercises were meant to demonstrate the growing reach of the country’s maritime reach and power. (T. Singh, 2014: 5). But the other pole is not silent in this game of increasing naval assertiveness. The Malabar exercise is a big step to counterbalance the game, which is conducted with the Indian, US and Japanese efforts. Teshu Singh(2014) quotes

a statement of former Indian Prime Minister Manmohan Singh over India-Japan partnership “Such exercises are essential for peace, prosperity and stability in the Asian, Pacific and the Indian Ocean regions.” Such exercises help to maintain the regional security of the region, increase understanding between sailors, but this can’t reduce the growing chaos in the IOR. Such steps merely provide exposure to navies including Indian navy but fail to maintain the region as a peace zone.

Unjhwala (2018) writes about the group diplomacy in Indian Ocean citing China as a powerful factor and an aggressive pole. Japan is highly concerned about its oceanic connections with the West Asia, South Asia and Europe, increasing Chinese influence in South China Sea and nearby waters. It is worried, that can be observed through its efforts in Indo-Pacific Region. In 2007, when Japanese Prime Minister Shinjo Abe came to India he tried to draw a strategic link between Indian and Pacific Oceans and spoke of the “confluence of the two seas” (Saha, 2018). Abe talked about the shared responsibility of India and Japan for the peace and prosperity of the region, as these two maritime nations are located West and north of Indo-Pacific region. But is QUAD (Quardilateral Security Dialogue) an effective measure to establish peace in this zone? This is perceived by China as Asian NATO that is designed to contain it. Though, active members of QUAD-Japan, India, US and Australia disagree with this and explain QUAD’s goal to keep the SLOC free and open for inclusive and prosperous region. India is engaging with the alliance with a vision of promoting its Act East Policy in the Indo-Pacific region. Presence of the three nearby countries is not a big deal for China, but their association with US is pinching China after the ASEAN and East Asia Summit 2017, Manila where the QUAD States talked to revive quadrilateral cooperation after a decade. The suggestions to revive the group to “Quad-Plus” that would include countries of the South East Asia has caused anxiety in China. However, if it remains an organisation based on economic cooperation, it would benefit India and other nearby states. But if extra military is deployed by QUAD group, China would retaliate, directly or indirectly. After that, establishing peace would remain a dream only.

The ongoing great game of balancing power is making the IOR more unstable. Now it appears, a blame game has ensued where one party is blaming the other as the threat for stability. The solution itself is a problem. A study entitled “*Geopolitics and Maritime Security in the Indian Ocean*” explains two major sources of insecurity in the IOR, first instability in some of the littoral States and hinterland States around the Indian Ocean (Potgieter, 2012). The second source of insecurity in the ocean is attributed to the rise of new naval powers and concomitant rivalry of superpowers. Increasing presence of China in the Eastern and Western Indian Ocean has been a threat to Indian security and welfare of other South Asian littoral States. The popular statement that China through its “String of Pearls” policy is trying to encircle India, making its foothold visible in the Indian Ocean is significantly gaining ground in India. Great powers rivalry might further instigate terrorism and piracy thereby making it more insecure and unstable. That could hinder sea lanes, fuel supplies and raise war in the Ocean. Sea lanes of the IOR are the backbone of world trade and transport, any hindrance on these routes can result in an all-out war. That might convert this into a battleground; a sight with possibilities of third world war if the thirst for resource capture continues and rivalry goes the same way. Tensions between India and

China have existed since the 1959 exile of Dalai Lama to India, and the 1962 Sino-Indian border war. Moreover, China is a close security partner of Pakistan, which traditionally has a troubled relationship with India (Putten *et al.*, 2014: 3).

Since with missions against Somali piracy in 2009, China has so far maintained a regular naval presence in the western Indian Ocean. It is moving steadily through diplomatic and economic ties with most of the littoral States in South- East Asia, South Asia, Middle East and East Africa. Gwadar (Pakistan), Hambantota (Sri Lanka), Chittagong (Bangladesh), Sittwe (Myanmar) are emerging as main Chinese ports and refuelling stations in IOR. It is often reported that China is selling arms to these nations. Chinese Communist Party (CCP) is active in establishing new international trade networks under its own control. New Silk Road comprising of maritime component is a part of such effort that connects China with IOR States. "Maritime Silk Road" intends to gain control or create influence over major maritime choke points (Joshua Philipp, 2015). China is trying to follow *Pax Americana*, a plan of U.S. military power for supporting global peace and securing free trade by placing military assets near all SLOCs. Experts have termed this audacious attempt of China to emulate *Pax Americana* as "*Pax Sinica*."

USA has established a naval base in Diego Garcia, which is a British Indian Ocean Territory (BIOT) and provided on lease to the USA. The USA uses this to keep watch on the activities of Indian Ocean. India-US jointly organized Malabar exercises in the Indian Ocean is now a regular bilateral naval field training exercise in the IOR and includes fighter combat operations from aircraft carriers, through the Maritime Interdiction Operations Exercise. Though it was suspended for a short duration in 1998 after India's nuclear test but resumed after the attack on World Trade Centre in 2001 (Teshu Singh, 2014: 5). Recently Indian navy has been trying to make presence felt in Seychelles, Mauritius, and Madagascar under umbrella of regional cooperation and security. Strategists believe that India is having a master plan for the Indian Ocean. In March 2015, while visiting Seychelles and Mauritius islands, PM Narendra Modi focused on a new framework that overturned the influential political approach that India has been pursuing since the time of Nehru. A new initiative for littoral States called Indian Ocean Naval Symposium (IONS) was launched by the government. This includes all the chiefs of navies for professional exchanges and engagement to promote maritime security (Raja Mohan, 2015). Raja Mohan writes about Modi's visit to Mauritius and Seychelles and put littoral states of IOR on the top of Delhi's policy priorities. In Seychelles, Indian PM announced to provide Dornier Aircraft for monitoring the oceanic activities. An agreement was signed to conduct hydrographical surveys and along with it, a coastal surveillance radar project was launched (Raja Mohan 2015).

During PM's Visit in 2015, Seychelles promised India to provide Assumption Island on lease to develop naval base. Recently amidst resistance from opposition the Seychelles government has delayed the project. Experts on the region call it a temporary setback for India in southern IOR. No doubt, competition for influence is growing in the region through backchannel negotiations and if the militarisation continues, the States would suffer in near future. Contemporary geopolitics of China is based on "debt trap diplomacy" through which acquisition in the form of infrastructure investment is going well not only in the IOR region but also on Asian landmass. After acquiring Hambantota and Gwadar port on lease basis, recently China inaugurated its first overseas military base in Djibouti, in 2017 (Singh, 2018). Chinese projects of developing roads,

power station, bridges and building ports across Asia is operational and countries are showing growing concern about such infrastructure investment projects.

India is the only state having such an extended coastal boundary in the IO. If it does not act smart, China is ever eager to spread their feet. India is enhancing its maritime and defence capability and strengthening itself to get a foothold on critical locations in IOR. All the States which are concerned about growing Chinese influence over Asian land and Indian Ocean waters are trying to come together on a common platform. India, because of its strong defence capabilities and central location in IOR, the only power that can resist against expansionist policy of China, has a greater role in establishing peace in the region but the great powers know that Sino-Indian disputes on land somewhere impact their vision in oceans. QUAD, Malabar exercise and IONS etc are measures to counterbalance China and India calculates this as an opportunity. The competition is never going to reduce but the nature of international politics is unpredictable.

CONCLUSION

A great game has reignited in the Indian Ocean between regional and extra-regional powers. India, China USA and Japan are actively trying to make foothold through their military capabilities. Security of SLOCs is their primary goal. The region is excessively getting militarized and conflicts are sporadic in littoral States. Littoral States should launch a concerted plan to maintain peace and avoid any war situation. India, being one of the largest boundary sharing State in IOR may lead the concert and make its diplomatic relation strong with smaller littoral and hinterland States. Establishing an organization of Littoral states for maintaining peace might reduce the ongoing tension and militarisation. Recent setback to Indian efforts in Seychelles, Maldives and grounding of QUAD Initiative makes the formation of such an organization albeit, more necessary.

REFERENCES

1. Agrawal, Amita. (2008). *Indo-US Relations and Peace Prospects in South West Indian Ocean*, New Delhi: Kaveri Books.
2. Al-Saud, Faisal bin Salman (2003). *Iran, Saudi Arabia and the Gulf: Power Politics in Transition*, New York: I B Tauris & Co. Limited.
3. Andersen, Walter K. (1989). "Emerging Security Issues in the Indian Ocean: An American Perspective" in Selig N. Harrison and K. Subrahmanyam (eds.) *Superpower Rivalry in the Indian Ocean: Indian and American Perspective*, New York: Oxford University Press.
4. Bradford, J. F.(2011). "The Maritime Strategy of the United States: Implications for Indo-Pacific Sea Lanes", *Contemporary Southeast Asia*, **33**(2): 183–208.
5. Burns, Rupert Herbert. (2012). "Naval Power in the Indian Ocean: Evolving Roles, Missions, and Capabilities", in David Michel and Russell Sticklor (eds.) *Indian Ocean Rising: Maritime Security and Policy Challenges*, Washington: Stimson Press.
6. Braun, Dieter. (1983). *The Indian Ocean: Region of Conflict or 'Peace Zone'?*, London: C. Hurst & Company.

7. Fridman, T.(2007). *Geopolitics, Security and New War of Indian Ocean*, London: Oxford University Press.
8. Mohan, C. Raja (2015). “Revealed India’s Master Plan for the Indian Ocean”, *The National Interest*, 26 June,2015, [Online web] Accessed on 10 November, 2016. URL: <http://nationalinterest.org/blog/the-buzz/revealed-indias-master-plan-the-indian-ocean-13198> .
9. Philipp, Joshua (2015). “China to Extend Military Control to the Indian Ocean”, *Epoch Times*, 26 October 2015 [Online web] Accessed on 28 November, 2015. URL:<http://www.theepochtimes.com/n3/1878296-china-to-extend-military-control-to-indian-ocean/>.
10. Pecastaing, Camille (2011). *Jihad in the Arabian Sea*, Stanford: Hoover Institution Press.
11. Putten, Frans- Paul van Der *et al.* (2014). “*Geopolitics and Maritime Security in the Indian Ocean*”, Hague: Hague Institute for Global Justice and Clingendael Netherland Institute of International Relations, pp.1-10.
12. Risso, Patricia (2001). “Cross-Cultural Perceptions of Piracy: Maritime Violence in the Western Indian Ocean and Persian Gulf Region during a Long Eighteenth Century”, *Journal of World History*, **12**(2): 293–319.
13. Rosen, Armin (2015). “War in Yemen could threaten one of the world’s most important oil chokepoints”, *Bussiness Insider India*, 26 March 2015. [Online web] Accessed on 21 November, 2015. URL:<http://www.businessinsider.in/War-in-Yemen-could-threaten-one-of-the-worlds-most-important-oil-chokepoints/articleshow/46706036.cms>.
14. Saha, Premansha(2018). Quad in Indo Pacific: Why ASEAN Remains Cautious, *Observer Research Foundation*, February 2018, Issue No. 229.
15. Sakhuja, Vijay (2001). Japanese Navy in Arabian Sea, Military and Defence Article, *Institute of Peace and Conflict Studies*, 31 December, 2001.
16. Sakhuja, Vijay (2001). “The Indian Ocean in 2015”, *Institute of Peace and Conflict Studies*, January, 2015.
17. Sanati, Cyrus (2015). “The New Suez Canal: A great step for a new Egypt”, *Fortune’s Daily Newsletter*, 7 August 2015. [Online Web]Accessed on 25 October 2015, URL: <http://fortune.com/2015/08/07/suez-canal-egypt/>
18. Singh, Prakash (2018). “As India to Grow its Influence in the Indian Ocean, China Poses Stiff Competition.” *Scroll.in*. 5 May 2018. URL: <https://scroll.in/article/877851/as-india-tries-to-grow-its-influence-in-the-indian-ocean-china-poses-stiff-competition>
19. Singh, Teshu (2014). “The Malabar Exercise: India, Japan and the US, in The Maritime Great Game India, China, US & the Indian Ocean”, *IPCS Special Focus*, p5.
20. Unjhwala, Yusuf T.(2018). Quad Needs both Economic and Military Plan for Indo-Pacific, *The Economic Times*,India, 23 February 2018.
21. Varma, Ravindra (1967). “Strategic Importance of Indian Ocean”, *The Indian Journal of Political Science*, **28**(1/2):51–61.
22. Zafar, Nagmana (2013). “Issues of maritime security in Arabian Sea”, *The Dawn*, Karachi, 29 May.

OUTREACHING THE FINANCIALLY EXCLUDED: AN OVERVIEW OF INDIAN INITIATIVES

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ABSTRACT

Financial inclusion implies access to formal financial services for everyone. Major steps have been taken by the Reserve Bank of India (RBI) in recent years to achieve the objective. Such steps started with a directive from the RBI in November 2005 allowing bank branches to open No Frills accounts. The present paper is an attempt to examine initiatives taken in India to achieve the goal of 100% financial inclusion. It is observed that, though some progress towards the goal has been made, much remains to be done to achieve the target. The paper concludes that strengthening of the cooperative movement, extension and revamping of the postal system, subsidising the financially excluded, imposition of stricter corporate social responsibility norms could facilitate and accelerate the process.

Keywords: Empowerment, Financial Inclusion, No Frills Accounts, Poverty, Reserve Bank of India.

INTRODUCTION

Poverty and lack of entitlement is a common characterising feature of countries situated in South Asia. India is not at all an exception. The failure to tackle chronic poverty can be attributed to institutional bottlenecks. One of such bottlenecks is the lack of participation of all sections of people in formal banking activity. Accessibility to finance is necessary for empowerment of the poor and the vulnerable and to tackle poverty. Increase in accessibility to financial services for the underprivileged can increase income generating capacities and unshackle the poorest of the poor from the clutches of the moneylenders. Thus financial inclusion affects the overall quality of life and creates an enabling environment. The entitlement, received through inclusion, has a great impact on the wellbeing of the included people.

The recent initiative on financial inclusion has been reflected in the Reserve Bank of India's (RBI) policy statement of 2005-06. A plan to target 100 percent financial inclusion

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was formulated. Several measures to target 100 percent financial inclusion followed the initial directive. The RBI allowed bank branches to open No Frills accounts i.e. accounts that require no or minimum balance (RBI, 2006). General Credit Card (GCC) was introduced to make credit easily accessible. The continued thrust on financial inclusion got manifested in the Finance Minister's budget speech of 2011-12. The Finance Minister advised banks to provide banking facilities to all habitations having a population of over 2000 by March 2012. Financial inclusion is treated as a matter of self-pride and a campaign 'Swabhiman' was launched to inform and motivate people to open bank accounts. The Finance Minister announced in his budget speech of 2012-13 that seventy thousand habitations among seventy three thousand identified habitations had been provided with banking facilities under the 'Swabhiman' scheme. By June 2013, almost all identified unbanked villages having more than 2000 population were covered by a banking outlet. The emphasis regarding opening of banking outlets, whatever may be the mode of operation, later shifted to unbanked villages having population of less than 2000. Funds were also created to support Business Correspondents (BC's), promotional support to institutions such as self-help groups, local level institutions, farmers club, and technological institutions etc. A United Nations Development Programme (UNDP) took a venture to design pro-poor financial products and doorstep delivery of financial services. A shift in policies where more emphasis is given on doorstep delivery of financial services is observed recently.

Prime Minister, Shri Narendra Modi announced the Pradhan Mantri Jan Dhan Yojana (PMJDY), one of the biggest financial inclusion initiatives in the world on 15th August 2014. The programme was launched on 28th August. PMJDY is now a National Mission for Financial Inclusion to ensure access to financial services, namely, banking accounts, remittance, credit, insurance, pension in an affordable manner. As per the scheme guidelines, accounts can be opened in any bank branch or Business Correspondent (Bank Mitra) outlet. Accounts opened under PMJDY are being opened with zero balance. Such accounts offer accidental insurance cover, life cover in case of death, overdraft facility along with other common benefits. The number of account holders under the scheme has increased to 31.45 crore as on April 11, 2018 and deposits have crossed Rs 78,494 crore. Even the World Bank has praised the success of the scheme in its annual report titled *Global Findex Report, 2017*.

The present paper is an attempt to report initiatives taken in India to achieve the goal of 100 percent financial inclusion. Section 2 of the paper defines financial inclusion and explains why financial inclusion is necessary. Sections 3 and 4 describe some initiatives taken in foreign countries and the measures taken in India respectively to achieve financial inclusion. In this connection, a comparison of India with other countries in terms of availability of banking services is made. Section 5 analyses the success/failure of initiatives taken in recent years. Special emphasis is given on No Frills accounts and GCC while investigating the initiatives. The last section concludes with necessary policy implications.

WHAT IS FINANCIAL INCLUSION?

Financial inclusion implies access to formal financial services for all sections of population. In a broad sense, it implies inclusion of all adult population under the ambit of banking and financial services, loan facility, insurance options, etc. or one who is able to choose to use the services. In a narrow sense, financial inclusion implies inclusion of at least one member of

a household in formal banking services through a deposit account. This definition, though narrow, is not inappropriate. More focus on credit availability as an indicator of financial inclusion may result in inefficient allocation of scarce resources and worsen credit burden of financial institutions. It is to be noted that merely having a banking account should not be taken as a good indicator of inclusion. An ideal definition of financially excluded means all those people who are eager to access financial services but are denied to do that. This definition applies especially in case of credit as often a demander of credit is denied to have the facility.

The benefit of being financially included varies from developed to underdeveloped countries. In underdeveloped countries, the participation of all sections of population in formal sector banking activity ensures release of them from clutches of informal sector moneylenders. Flow of formal sector credit and channelisation for productive activities can be an efficient tool to uplift the poor. A banking account facilitates savings, government receipts. Now a day, a banking account is a precondition for receiving wage payment in National Rural Employment Guarantee Scheme in India. While in developed countries, financial inclusion enables the included to manage their money on a daily basis and to meet future financial adversaries; a state of exclusion is often a barrier for employment. Being included is intensive compatible, as transaction through a cheque is free and paying utility bills get a discount.

There are many reasons behind some households not seeking financial services. One of the reasons is that the services offered do not match their demand. Personal and cultural characteristics of potential customers, poor accessibility to service providers, lack of knowledge about the services are other important causes. Sometimes, lack of faith on service providers limit customers from use of financial services. Many potential customers do not have proper identity cards that can be used as a proof of identity while opening an account. Another troubling cause behind financial exclusion is the attitude of service providers. These excluded people, generally being poor and from underprivileged community, are not thought as profitable customers by the service providers. As loan seekers, these groups of customers are not thought as credit worthy. The transaction cost of serving the poor is high. It is seen that the operation of market forces fails to tap the un-banked customers. Information asymmetry and externality are also barriers of entry into the financial system. The cost of the market failure is borne by individuals and the society as a whole. Financial inclusion can be substantially increased by supply side interventions. But it is equally important that demand side factors such as increase in entitlement, productivity and minimising risk are also taken care of.

FINANCIAL INCLUSION: THE WORLD EXPERIENCE

As the extent and nature of the problem of financial exclusion differs from a country to the other, the prescriptions also differ. In many developed countries, advanced technologies are used to target financial inclusion. Use of mobiles, incentives for electronic transfers, subsidising potential customers are methods used to attract the excluded. Steps to motivate people through local self-government or non-government organisations (NGO's) are thought as useful tools of inclusion in underdeveloped countries. Table 1 summarises the initiatives taken in some countries to achieve financial inclusion.

Table 1: Country-Specific Initiatives Towards Financial Inclusion

Country	Initiatives
United States	Passing of Community Reinvestment Act in 1977 to recognise that financial abandonment damages local community. The Act was formulated in response to concerns about bank closures in low income areas. The Act prohibits banks to discriminate against low and moderate income neighbourhoods.
	Passing of Community Development and Financial Institutions Act in 1993 to support community development financial institutions.
	States like New York has made it obligatory for banking sector to provide basic banking facilities.
	Provision of basic bank accounts at the lowest possible cost.
Canada	Formulation of legislation titled 'Access to Basic Banking Services Regulations' to ensure personal bank accounts in 2003.
	Legislations compelling banks to provide bank account at low cost.
United Kingdom	Introduction of basic bank account under the Social Exclusion Unit's Policy Action Term 14 in 1998.
	Creation of Financial Inclusion Fund in 2004.
	Launching of Child Trust Fund in 2005 to provide universal savings account for children born on or after 01.09.2002.
	Launching of 'Now Let's Talk Money' campaign in 2007 to incorporate intermediaries to facilitate financial inclusion.
	Financial support from banks to introduce Post Office Card Account for people not having a bank account. Many banks also make their basic bank account accessible at post office.
	Matching grant from government for low income households to encourage banking habit.
Germany	Steps to ensure 'Current Account for Everyone' taken in 1995.
France	Bank account made a legal right in 1984.
Sweden	Under Section 2 of the Banking Business Act of 1987, banks cannot refuse to open an account.
Belgium	'Call Deposit Account' was opened to provide minimum banking facilities at an affordable cost.
Mexico	Establishment of a State controlled development bank in 2001.
	Introduction of microfinance programme for the poor.
South Africa	'MZANSI', a low cost national bank account was introduced in 2004.
Philippines	Major telecom operators, Globe and Smart, are used to offer mobile banking services.

Indonesia	Use of microfinance institutions under 'Unit Desa' network to transform government owned credit system to a microfinance based credit system.
Malaysia	Central Bank of Malaysia Act, 2009 sets financial inclusion as an objective of the Central Bank. The Act was complemented by provision of diverse range of financial services, basic banking products at nominal cost, expansion of branch network, etc.
Sri Lanka	Provision of No Frills banking or to entertain minimum balance and to reduce banking charges for a new account.
	Use of post offices to provide banking services.
	Setting up of a Credit and Debt Management Council.
	10 percent mandatory credit for agricultural sector.
	Use of agency banking.
Pakistan	Microfinance Regulatory Act by Central Bank of Sri Lanka.
	Development of Islamic banks.
	Tax holidays for newly established micro-finance institutions.
	Credit schemes for agricultural finance.
Bangladesh	Nationalisation of banks in 1971.
	Micro-finance led inclusion specially under the supervision of 'Grammen Bank' and other NGOs. Collaboration with insurance companies to offer micro-insurance to the poor.
	Provision of mutually owned co-operative credit societies.

[Source: HM Treasury (2007), Leyshon and Thrift (1995), Rangarajan (2008)]

The effects are also different in different countries. Whereas advanced developed countries have almost achieved the goal of 100 percent financial inclusion, performance in countries such as Cambodia, Yemen, Niger is utterly dismal. Kunt & Klapper (2013) analysed the Global Financial Inclusion database that covered 148 countries and surveyed more than 1.5 lakh randomly selected adults in 2011. It is observed that 50 percent of adults worldwide report having an individual or joint account. As expected, the usage of financial services in developing countries is less. Adults worldwide, remaining within higher income bracket, are greater user of financial services even after controlling for other individual level characteristics and country fixed effects. The most common reasons for not getting included in the financial stream are non-availability of fund, maintenance of accounts felt expensive and distant place of operation of a bank. 36 percent of respondents worldwide reported to have saved in last 12 months and 9 percent of respondents reported to have taken a new loan from a financial institution in last 12 months. The Global Financial Inclusion database shows that (as shown in Table 2) the achievement of India on financial inclusion front was not favourably comparable with achievements made by some other Asian countries.

Table 2: Performance of India vis-a-vis other Asian countries as per Global Financial Inclusion Database

Indicators	Bangla- desh	Bhutan	India	Nepal	Pakistan	Sri Lanka	Thailand	China	Japan
% of adults aged above 15 having an account	31	34	53	34	13	83	78	79	97
% of adults aged above 15 saving at a financial institution in last year	7	23	14	16	3	31	41	41	60
% of adults aged above 15 borrowing at a financial institution in last year	10	4	4	12	2	18	15	10	8

[Source: The World Bank Financial Inclusion Data available at [www. datatopics.worldbank. org/financialinclusion](http://www.datatopics.worldbank.org/financialinclusion)(accessed on September 20, 2017)]

AN OVERVIEW OF FINANCIAL INCLUSION INITIATIVES IN INDIA

The census estimate of 2001 found that only 30.1 percent of rural households and 49.5 percent of urban households in India have a deposit account. RBI estimated that 139 districts in India suffer from severe financial exclusion. Adult population per branch in these districts is above 20000 and only 3 percent of them access formal credit. National Sample Survey Organisation (NSSO) data found that 51.4 percent of farmer households in the country do not access credit from any sources. Only 17 percent of total farm households access formal credit (RBI, 2008). The extent of exclusion in terms of bank account or access to credit is severe in poor regions especially in North Eastern states. Marginal farmer households and scheduled tribe farmer households are the most excluded. As per RBI estimate on March 31, 2010; only 99 persons out of every 1000 persons had a credit account and 600 had a deposit account (RBI, 2011).

There is a long history towards achieving financial inclusion in India. Introduction of cooperative banks for financing agricultural credit in late 1950's, branch licensing policy and use of commercial banks in priority sector lending after nationalisation of banks in 1969, induction of regional rural banks in 1975, reduction in cash reserve ratio and statutory liquidity ratio to release more loanable funds in the post-liberalisation phase, initiation of microfinance by National Bank for Agricultural and Rural Development (NABARD) in 1992 linking self help groups with banks, introduction of Kisan Credit Card (KCC) scheme in 1998 were measures that targeted financial inclusion (Subba Rao, 2007). But it is observed that such steps were not able to reach the expected goals. The objective of financial inclusion in India was forcefully targeted in recent years at the midst of this miserable backdrop as described earlier. To overcome the problem of financial exclusion and to use inclusion as an engine of participation and poverty alleviation, several steps were taken by Government of India (GoI) in recent years that culminated in all-out programme for financial inclusion under PMJDY.

The term financial inclusion was used by the RBI for the first time in their annual policy statement of 2005-06. Several measures have been taken since then to achieve the target. The measures are listed in Table 3.

Table 3: Recent Initiatives Towards Financial Inclusion in India

Year	Initiatives
2005	Commercial banks were advised by RBI to open 'No Frills Accounts' with low or zero minimum balance.
	Relaxation of know your customer norms to simplify opening of accounts with balances not exceeding Rs. 50000 and a credit limit of Rs. 1 lakh per annum.
	Introduction of GCC Card facility at rural and semi-urban branches to make credit accessible at a reasonable interest rate. The ceiling of the credit limit was fixed at Rs. 25000. The GCC to take the form of a card or a passbook.
	Introduction of BC /facilitator to serve the unbanked.
	Promotion of financial literacy through campaign about the products and services available. School children were targeted to make them financially literate.
	Adoption of newer and advanced technologies suitable to reach the excluded.
2006	RBI directed banks to use the service of NGOs and other civil society organisations to achieve financial inclusion.
	Identification of at least one district in a state for 100 percent financial inclusion.
2007	RBI's website made multilingual in 13 languages.
2008	Banks were allowed to provide small overdrafts against No Frills Accounts so that the accounts remain operative.
2009	RBI advised banks to provide a banking service centre at the vicinity of the No Frills Accounts holders.
	RBI advised banks to set up Financial Literacy and Credit Counselling Centres to provide free financial literacy, education and credit counselling.
	Declaration of creation of a lump sum grant-in-aid of Rs. 100 crore to reach each un-banked blocks in the country by providing at least one centre or point of sales.
	Inclusion of telephone operators, etc. as BCs.
	Establishment of credit counselling cell in each district of the country.
2010	RBI allowed banks to engage profit making institutions other than non banking financial companies to work as BCs.
	Creation of 'Financial Inclusion Fund' to meet the cost of developmental and promotional issues of financial inclusion and 'UNDP-NABARD Financial Inclusion Fund' to provide easy access to financial services and products.
	Scheduled commercial banks adopted self-set targets for financial inclusion for a period of 3 years.

2011	Job card issued under NREGS can be used to fulfil KYC requirements for opening bank accounts.
	Banks are directed to open at least 25 percent of new branches during a year in unbanked rural areas.
	Scheduled commercial banks other than regional rural banks are permitted to open branches in areas with population in between 50000 – 99999 as per census 2001 without prior permission from RBI, subject to <i>ex-post</i> reporting.
	All scheduled commercial banks are asked to ensure opening of Aadhar-card enabled bank accounts even in villages with less than 2000 population.
2012	Dialogue with different education boards for including financial literacy in their curriculum.
	Introduction of revised KCC scheme.
	RBI instructed State Level Bankers Committee to prepare plans to cover all unbanked villages of population less than 2000.
2013	Union Budget announced establishment of India's first women's bank to address gender related aspects of empowerment and financial inclusion.
	Bharatiya Mahila Bank Limited given license by RBI.
	Swarnajayanti Gram Swarozgar Yojana restructured as National Rural Livelihood Mission to tackle the issue of financial inclusion from both the supply and demand side.
2014	Launching of PMJDY that offers accidental and life insurance cover and an overdraft facility on some accounts.
2015	Separate targets for small and marginal farmers in provision of agricultural credit. The targets will be applicable for foreign banks also from 2017.
2016	The scheme of Priority Sector Lending Certificate was operationalised. These certificates are tradable i.e. can be brought and sold by financial institutions.
2017	Observation of Financial Literacy Week during June 5-9.
	Instruction to open Core Banking System enabled banking outlets in unbanked villages with population over 5000 by December 31,2017.

[Source: Derived from Annual Reports of Reserve Bank of India]

Two committees on financial inclusion, one the Rangarajan (2008) committee under the chairmanship of C. Rangarajan and the other under the chairmanship of R.G. Rajan (Planning Commission 2009) have proposed steps to make the objective successful. Rangarajan (2008) recommended launching of National Rural Financial Inclusion Fund. The target of the plan was to include at least 50 percent of the financially excluded by 2012. The committee also proposed creation of Financial Inclusion Promotion and Development Fund and Financial Inclusion Technology Fund to achieve the goal. The role of Regional Rural Banks, self help

groups, micro finance institutions, cooperatives were stressed in the report. Improvement in credit delivery system, exemption of stamp duty on loans for small and marginal farmers, introduction of savings products that meet the demand of the poor, incentives to bank staff especially in rural areas to motivate them to include the financially excluded, introduction of e-kiosks in villages, products that satisfies remittance needs of the poor, insurance cover for crop and livestock are some of the measures recommended to achieve 100 percent financial inclusion. The Rajan committee report stressed the importance of ‘vulnerability reducing instruments’ for the poor. Apart from savings, these include paying attention to remittance, insurance and pension needs, etc. The report primarily focused on meeting such needs of poor and then to provide credit to them. The report acknowledges that until the banks take serving poor as their business opportunity, the situation will not improve. A comparison of the two reports is available in Dasgupta (2009).

To include more and more people under the umbrella of financial services, a constant effort has been exerted to outreach customers by opening new bank branches. The supply side improvement is seen in terms of increase in bank branches. State Bank of India (SBI) and its associate banks is the largest group of public sector banks in India. The increase in public sector banks over time is mainly due to increase in number of branches of SBI and its associates. Private sector banks and foreign banks are also increasing at a reasonable pace. Though the role of private and foreign banks in financial inclusion is debated, data on bank branches as shown in Table 4 clearly reveals that the banking network has expanded at a reasonable rate during the first five years of the initiative.

Table 4: Number of Bank Branches in Different Years

Bank Group	Number of Bank Branches				
	2005-06	2006-07	2007-08	2008-09	2009-10
Public Sector Banks	50168	52104	55080	57732	61301
Private Sector Banks	6835	7424	8322	9236	10387
Foreign Banks	259	272	279	295	310
All Scheduled Commercial banks	57262	59800	63681	67263	71998

[Source: A Profile of Banks 2009-10; Available from www.rbi.org.in (Accessed 15 April 2016)]

Note: This data excludes information about regional rural banks.

The expansion of branch network has led to decrease in population served per branch over time. Figure 1 depicts that population served per branch has decreased over time during the initial phase of financial inclusion in both rural and urban areas.

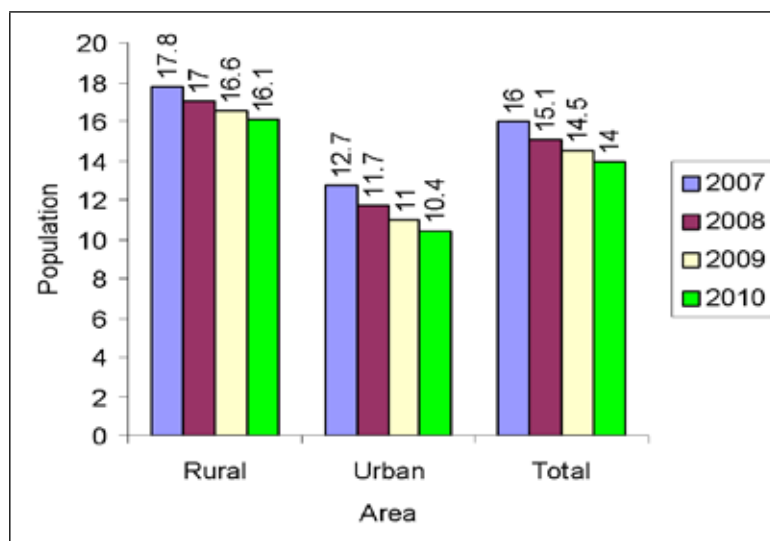


Figure 1: Population (in '000) per Bank in Different Years

(Source: RBI ,2010)

Not only the number of branches per one lakh of people served rose, deposit and loan accounts per 1000 people increased during 2005-2008 (See Table 5). Population per bank branch reduced from 14000 in 2009-10 to 13466 in 2010-11. Similarly population per automatic teller machine (ATM) decreased from 19700 to 16243 during the same reference period (RBI 2011). The BC mode of doorstep service delivery gained momentum after 2010. During 2010-13, banking outlets in 74414 unbanked villages with more than 2000 population were brought under banking purview by 69589 outlets through BC's. During 2013-16, 490298 unbanked villages having population less than 2000 were identified and upto June 30, 2016, BC's provided service in 416636 villages. Operation through BC's in urban locations increased from 447 in March 2010 to 91039 in September 2016 (RBI 2016).

Table 5: Progress of Banking Facilities Over Time In India

Criteria	2005	2006	2007	2008
Branches per 1 Lakh Population	6.33	6.37	6.35	6.6
ATM's per 1 Lakh Population	1.63	1.93	2.4	3.28
Deposit Account per 1000 People	432.1	443.1	459.5	467.4
Loan Account per 1000 People	71.42	78	83.59	89.03
Branches per 1000 sq.km	22.99	23.5	24.13	25.49
ATM per 1000 sq.km	5.93	7.11	9.11	12.68

[Source: Address Delivered by Dr. K. C. Chakraborty, Deputy Governor, RBI at the National Finance Conclave 2010 Organised by KIIT University, Bhubaneswar Available at *The RBI Bulletin* December, Vol LXIV, No 12.]

Along with supply side interventions, demand side policies have been pursued in recent years. Banks have set up several Rural Self Employment Training Institutes at the district level. The institutes offer short term training and provide assistance to trainees so that they can obtain suitable credit. The Direct Benefit Transfer has also played an important role to improve entitlement of poor and is expected to catalyse the saving behaviour of customers. More thrust is also given to facilitate credit delivery mechanism. As per provisional estimate of 2016-17, the targeted agricultural credit of Rs. 9000 billion was overachieved and Rs. 10658 billion was disbursed as agricultural credit. The number of small farm sector credit accounts and nonfarm sector credit accounts rose from 24.3 million and 1.4 million respectively on March 31, 2010 to 47.31 million and 11.3 million on March 31, 2016. The PMJDY scheme which primarily targeted the underprivileged has grown upto 220 million accounts by June 1, 2016 (RBI 2017). As per the real time data reflected on PMJDY portal, the number of beneficiaries has grown above 31 crores in 2018 (Table 6).

Table 6: Status of Pradhan Mantri Jan - Dhan Yojana

Bank Name / Type	Number of Beneficiaries at Rural/ Semiurban Centre Bank Branches	Number of Beneficiaries at Urban Metro Centre Bank Branches	Number of Total Beneficiaries	Deposits in Accounts (in Lac)	Number of Rupay Debit Cards Issued to Beneficiaries
Public Sector Banks	136690128	117492446	254182574	6302187.35	190615766
Regional Rural Banks	42508133	7844862	50352995	1329632.41	36722513
Private Sector Banks	5997845	3905715	9903560	217579.48	9196730
Grand Total	185196106	129243023	314439129	7849399.24	236535009

[Source: Data available at <https://pmjdy.gov.in> (Accessed on 31st March 2018)]

Note: The estimates are as on 28.03.2018

But international comparison, as shown in Table 7, is indicative that there is further scope of supply side improvement in provision of banking services in India. Not only the products, but supply of bank branches or ATMs in India is less than that available in many countries.

Table 7: Availability of Bank Branches and ATMs in Different Countries

Country	Number of Branches Per 0.1 Million Adult Population	Number of ATMs per 0.1 Million Adult Population
India	10.64	8.90
Korea	18.80	-
Brazil	46.15	119.63
France	41.58	109.80
Australia	29.61	166.92
US	35.43	-

(Source: RBI, 2012)

Note: Estimate in 2011

The (un) Successful Story of Financial Inclusion Initiatives in India

Efforts by GoI and RBI have resulted in some attainments in financial inclusion front. The target of 100 percent financial inclusion has been achieved in 204 districts in 18 States and 6 Union Territories. All districts of Haryana, Himachal Pradesh, Karnataka, Kerala, Uttarakhand, Goa, Chandigarh, Puducherry, Daman and Diu, Dadra and Nagar Haveli and Lakshadweep have achieved 100 percent financial inclusion. By March 2012, 99 percent of villages having population above 2000 have been provided with banking outlets. All targeted villages in north-eastern states have been provided with a banking outlet. Opening of no frills accounts has facilitated the attainment of the target. There is a chance that no frills accounts created become inactive after some period of time. To overcome the difficulty, small overdrafts were made available against these accounts and a number of accounts received overdrafts. Later existing no frills accounts were converted to Basic Savings Bank Deposit Accounts (BSBDA). Table 8 reports the cumulative number of no frills accounts opened to achieve financial inclusion during 2006-2008.

Table 8: Number of No Frills Accounts Opened to Achieve Financial Inclusion

Banking Sector	As on 31.03.2006	As on 31.03.2007	As on 31.03.2008
Public	332878	5865419	13925674
Private	156388	860997	1879073
Foreign	231	5919	33115
Total	489497	6732335	15837862

(Source: RBI, 2009)

Progress in opening of banking outlets in remote villages was observed during 3 year financial inclusion plan for the period April 2010 to March 2013. Banking outlets in villages have increased from 67694 outlets in March 2010 to 268000 in March 2013. Progress towards opening banking outlets in unbanked villages having less than 2000 population have also got momentum during the 3 year financial inclusion plan for the period 2013-2016. By March 2015, 390387 villages among identified 490000 villages were covered. The recent progress in financial inclusion plans are listed in Table 9.

Table 9: Recent Progress in Financial Inclusion Plans

Indicators	Upto the month of March of every year							
	2010	2011	2012	2013	2014	2015	2016	2017
Total Banking Outlets in Villages	67694	116208	181753	268454	383804	553713	586307	598093
Total BSBDA (in Millions)	73.45	104.76	138.50	182.06	243.0	398.1	469	533
Number of BSBDA Receiving Overdraft (in Millions)	0.18	0.61	2.71	3.95	5.9	7.6	9	9
Number of KCC (in Millions)	24.31	27.11	30.24	33.79	39.9	42.5	47	46
Number of GCC (in Millions)	1.39	1.70	2.11	3.63	7.4	9.2	11	13

(Source: RBI , 2012a ; RBI,2015 ; RBI, 2017)

The non-attainment in financial inclusion especially for the poor is found in several studies. Deb & Rajeev (2007) observed that traders are becoming a significant source of credit for marginal farmers in the district of Hooghly, West Bengal at the midst of poor credit delivery from formal institutions. Chavan (2007) analysed data obtained from NSSO and RBI sources and found that bank credit is not accessible for dalit households and they have to resort to informal sources. Srinivasan (2007) observed that only two out of five households had accessed loan from a commercial bank in 2005. Kamath, Mukherjee & Sandstrom (2010) analysed banking data and data on debt and found a mismatch between demand and supply of institutional finance across Indian states. A study by Bhatia & Chatterjee (2010) in some slums

in Mumbai found that only one third of the respondents had a bank account. The role of private banks in financial inclusion is completely absent as none of the poor respondents reported to have an account with a private bank. The World Bank study of 3518 households during April-June 2011(RBI 2012a) found that India lags behind developing countries in opening bank accounts. Majumdar & Gupta (2013) investigated financial inclusion scenario in Hooghly, West Bengal and found that only 51.23 percent of surveyed 20753 households reported to have at least one bank or post office deposit account in their household. It was found that the poor, people of backward community and caste, and those with lower education level are the most excluded. An analysis of no frills account holders revealed that the scheme could not financially include the above mentioned excluded categories of people by a large extent. They concluded that the higher strata of the society have benefited from introduction of no frills accounts. It was revealed that these people have maintained a higher balance in their no frills accounts. This might have induced financial institutions to provide no frills accounts to these people. Majumdar (2013) further analysed the data to obtain that the penetration of institutional credit in the district is minimal and non-institutional credit sources such as moneylenders play an important role in providing credit. Both institutional and non-institutional credit meets the demand of low income households but the underprivileged have taken greater proportion of credit from non-institutional sources in comparison to institutional sources.

CONCLUSIONS

Ever since nationalisation of banks in India, one of the major thrusts of Indian banking system was to reach all sections of populace. It is of no doubt that though some attainments have been made, a lot is yet to be done. This paper stresses the recent initiatives taken in India to attain 100 percent financial inclusion. Public sector banks have played an active role to attain the objective and they have to continue to play the role. The role of agricultural cooperative societies in financial inclusion is also important. Though confined to some pockets, there appears to be a strong agricultural cooperative movement in many parts of India. These agricultural cooperative societies often rely on peer monitoring to ensure repayment of loans. These societies can act as a source of institutional strength and an instrument of change. Steps should be taken to strengthen the movement to achieve financial inclusion. Micro-finance institutions in India, in recent years, is growing rapidly and providing loans to the people who are not targeted by the formal financial institutions. Loan repayment rate in these institutions is also very high. These institutions will have to play their role if the target is to be achieved within a reasonable span of time.

The postal system has a wide network in India. Postal branches act as the most important source of deposit collection in many remote parts of India. Along with the banking system, the postal system is to be used to achieve the targeted goal. The role of postal system in financial inclusion is to be recognised, the potential properly utilised and necessary steps to revamp the postal system is to be taken. The BCs can also play an important role in outreaching the financially excluded. They should be given proper training and financial incentives. Along with increase in number of BC's, the manpower in existing banks should be increased. With increase in outlets, the decreasing staff strength will not be able to service the growing customers whatever may be the level of automation.

It is seen that poor people often feel that the service provided by the formal financial institutions does not match their specific needs. A rethinking about the services provided should be taken into consideration. A banking account that facilitates remittance needs may encourage the poor to open an account. Poor households often have to make a significant unusual expenditure to buy medical facilities. A bank account coupled with health insurance can also motivate poor households to open an account.

It is a common knowledge that people belonging to minority communities, underprivileged castes, marginal workers, low education level and people lying below the poverty line are the most excluded. There is a chance that people with lower educational status do not feel the importance of having a bank account. Marginal workers generally do not have surplus funds to save. Some sort of incentive is to be provided to create a habit of savings among them. A starting point can be households of all newborn girl children below poverty line. A no frills account for them where the government makes matching payment equal to the amount saved by the household may be a proper incentive.

REFERENCES

1. Bhatia, N., & Chatterjee, A. (2010). "Financial Inclusion in the Slums of Mumbai", *Economic and Political Weekly*, Vol. **45** (42): 23-26.
2. Chavan, P. (2007). "Access to Bank Credit: Implications for Dalit Rural Households", *Economic and Political Weekly*, Vol. **42**(31): 3219-3224.
3. Dasgupta, R. (2009). "Two Approaches to Financial Inclusion", *Economic and Political Weekly*, Vol. **44**(26 and 27): 41-44.
4. Deb, S., & Rajeev, M. (2007). "Banking on Baniyas for Credit", *Economic and Political Weekly*, Vol. **42**(4): 280-283.
5. HM Treasury. (2007). *Financial Inclusion: An Action Plan for 2008-2011*. Available from www.hm-treasury.gov.uk [Accessed 15 January 2016].
6. Kamath, R., Mukherjee, A., & Sandstrom, M. (2010). "Accessing Institutional Finance: A Demand Side Story for Rural India", *Economic and Political Weekly*, Vol. **45**(37): 56-62.
7. Kunt, A.D., & Klapper, L. (2013). *Measuring Financial Inclusion: Explaining Variation in use of Financial Services across and within Countries*. Brookings Papers on Economic Activity, Spring, 279-321.
8. Leyshon, A., & Thrift, N. (1995). "Geographies of Financial Exclusion: Financial Abandonment in Britain and the United States", *Transactions of the Institute of British Geographers*, Vol. **20**(3): 312-341.
9. Majumdar, C. (2013). "Institutional and Non institutional Credit Delivery in Hooghly, West Bengal: Who are the Recipients?", *Journal of Land and Rural Studies*, Vol. **1**(2): 199-211.
10. Majumdar, C., & Gupta, G. (2013). "Financial Inclusion in Hooghly", *Economic and*

Political Weekly, Vol.48(21): 55-60.

11. Planning Commission (2009). *Broadening Access to Finance: A Hundred Small Steps*. Report of the Committee on Financial Sector Reforms, Chapter III, New Delhi: Sage.
12. Rangarajan, C. (2008). *Report of the Committee on Financial Inclusion*. Ministry of Finance: GOI. Available from www.nabard.org.
13. RBI. (2006). *Annual Report 2005-06*. Mumbai: Reserve Bank of India.
14. RBI. (2008). *Annual Report 2007-08*. Mumbai: Reserve Bank of India.
15. RBI. (2009). *Annual Report 2008-09*. Mumbai: Reserve Bank of India.
16. RBI. (2010). *Report on Trend and Progress of Banking in India 2009-10*. Mumbai: Reserve Bank of India.
17. RBI. (2011). *Report on Trend and Progress of Banking in India 2010-11*. Mumbai :Reserve Bank of India.
18. RBI. (2012). *Report on Trend and Progress of Banking in India 2011-12*. Mumbai :Reserve Bank of India.
19. RBI. (2012a). *Annual Report 2011-12*. Mumbai: Reserve Bank of India.
20. RBI.(2015). *Annual Report 2014-15*. Mumbai: Reserve Bank of India.
21. RBI. (2016). *Report on Trend and Progress of Banking in India 2015-16*. Mumbai: Reserve Bank of India.
22. RBI (2017). *Annual Report 2016-17*. Mumbai: Reserve Bank of India.
23. Srinivasan, N. (2007). "Policy Issues and Role of Banking System in Financial Inclusion", *Economic and Political Weekly*, Vol. 42(30): 3091-95.
24. Subba Rao, K. G. K. (2007). "Financial Inclusion: Introspection", *Economic and Political Weekly*, Vol. 42 (5): 355-360.

CARCINOGENICITY OF BENZOTHIAZYL-2 - CYCLOHEXYLSULFENAMIDE AND CYCLOHEXIMIDE ON DEVELOPMENT OF *Drosophila melanogaster*

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Ajai Kumar**

ABSTRACT

Amides are used as industrial chemicals, including in the manufacture of synthetic fibers and nylon. Amides are also used as pesticides and drugs. Different living animal models are being used for bio-monitoring of many toxic chemicals including mammals. The fruit fly, Drosophila melanogaster, has been extensively studied for over a century as a model organism.

In the present study, both genotoxic and non-genotoxic mode of action on two amide group of chemical was conducted by investigating extensively with three different parameters of developmental, morphological and chromosomal changes. This has been undertaken for the first time using Drosophila melanogaster as living biological model for its carcinogenic potentialities.

Keywords: Amides, *Drosophila melanogaster*, fecundity, fertility, hatchability percentage.

INTRODUCTION

Cancer is one of the most awful diseases of human which is a major cause of death all over the world. Presently in India it is a major cause of morbidity and mortality (Acton Q, 2012). The exact cause of cancer is not perfectly known. Most cancer cases results from permanent damage to genes or from mutation which occur either due to external or internal factors such as hormones, immune conditions, metabolism and the digestion of nutrients within cells or by exposure to environmental or external factors(M.A.Hayat,2008). A chemical or other

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environmental agent that produces cancer is known as carcinogen.

Carcinogens are classified into genotoxic and non-genotoxic carcinogen. The term “genotoxic carcinogen” indicates a chemical capable of producing cancer by directly altering the genetic material of target cells i.e. DNA damage & mutation while “non-genotoxic carcinogen” represents a chemical capable of producing cancer by some secondary mechanism not related to direct gene damage (M.ouchi and T.ouchi, 2014). Different living animal models are being used for bio-monitoring of many toxic chemicals including mammals. But *Drosophila melanogaster* is quite affordable to detect various classes of mutagens and evaluation of its effect in producing carcinogenic effects. *Drosophila melanogaster* share molecular level and many similar features and pathways with humans. Approximately 60% genes associated with human cancers and other genetic disease are found in *Drosophila* (Robert E. Kohler, 1994; Jeffrey R. Powell, 1997; Pamela M. Carroll, Kerin Fitzgenxald, 2004; Frederic A Lints, M. Hani Soliman, 2013; Josh Dubnau, 2014).

Many chemicals used in daily life, when exposed to humans may cause mutagenic changes leading to tumor and malignant cancer. Amide group of chemicals are one of these chemical which have carcinogenic properties (Francisco, 2013; Michael *et al.*, 2016). Nitrite or its salts, when present in combination with amines or amides in acidic condition, may react with amine or amide to form nitrosated compound. Amines can react to form nitrosamines, whereas amide reacts to form nitrosamide. This was based on the finding by International Agency for Research on Cancer (IARC) in 2010.

People in every phase of food production, from the farm to the fork, pharmaceutical, cosmetics have contact with chemicals, chronic disease and hypersensitivity also caused by chemical (William J. *et al.*, 2017).

Use of amides in pesticides and drugs (Stanley A, Greene, 2013) and as rodenticide is frequently done. Amides are also used in industry, fuels and fuel additives. They are also used in biomedical research to inhibit protein synthesis in eukaryotic cells studied *in vitro*. It has been used as a fungicide in agriculture.

The present study reveals teratogenicity & carcinogenesis on *Drosophila melanogaster* by introducing two chemical, Benzothiazyl-2-cyclohexyl sulfonamide and cycloheximide at different parameters. We have studied the development changes occurring in *Drosophila melanogaster* after application of these amides.

MATERIAL AND METHOD

Drosophila melanogaster is species of fly (the taxonomic order *Diptera* and Family *Drosophitiidae*). The species is known as common fruit fly or vinegar fly. The *Drosophila* were collected by Trap-bait method. Banana, guava, orange, pineapple etc were used as baits. Several morphological features like orbitals, thorax, abdominal bands, foreleg, wings and genital structure were considered for sorting these flies and identifying the species. The descriptions of species are derived entirely from adult morphology.

After identification of *Drosophila melanogaster* species of *Drosophila*, flies were transferred to a fresh vials and kept on corn-sugar-agar mix food medium in B.O.D. incubator

at $24 \pm 1^\circ\text{C}$. The amide group of chemical like Benzothiazyl-2-cyclohexylsulfenamide and cycloheximide mixed with food and vials scored 50% mortality, in triplicate LC_{50} . Value were calculated by probit graph and antilog value methods prescribed by Bliss 1935 and Finney 1989 was undertaken. The data obtained from the pattern of impact on flies in different chemicals was evaluated according to the method formulated by Gayathri and Krishnamurthy (1981).

Determination of LC_{50}

The lower concentration of Benzothiazyl-2-Cyclohexylsulfenamide and cycloheximide didn't produce any apparent signs in their morphological and physiological features. Whereas, LC_{50} concentration of test chemical was observed at 1ml of 2.5 ppm concentration after 48 hours and remaining half population of larvae were observed to be sluggish and physiologically inactive (Table 1). LC_{50} concentration of cycloheximide was observed at 4ml dose of 50 ppm concentration after 48h and remaining half-population become lethargic and idle. (Table 2)

Table 1: Determination of LC_{50} of *Drosophila melanogaster* at different concentration of Benzothiazyl-2-cyclohexyl Sulfenamide

Con/Dose	No. of larvae taken	0.5ml	0.75ml	1ml	2ml	3ml	4ml
2.5 ppm	100	89	72	47	35	30	24
10 ppm	100	34	20	17	10	3	0
20 ppm	100	10	0	0	0	0	0
30 ppm	10	0	5	0	0	0	0
40 ppm	100	5	0	0	0	0	0
50 ppm	100	0	0	0	0	0	0

Table 2: Determination of LC_{50} of *Drosophila melanogaster* at different concentration of Cycloheximide

Con/Dose	No. of larvae taken	0.5ml	0.75ml	1ml	2ml	3ml	4ml	5ml
2.5 ppm	100	100	100	100	89	100	100	100
10 ppm	100	100	100	100	100	100	100	100
20 ppm	100	95	100	100	100	100	100	100
30 ppm	100	99	98	95	97	99	96	95
40 ppm	100	87	84	80	79	75	67	43
50 ppm	100	78	71	65	61	57	49	33

Hatchability of Eggs

The percentage of hatchability was observed. There was marked reduction caused by both the chemicals i.e. Benzothiazyl-2-cyclohexylsulfenamide and cycloheximide with increasing concentration in treated condition compared to control medium (Table 3 & 4)

Table 3: Determination of hatchability of *Drosophila melanogaster*'s eggs at different concentration of Benzothiazyl-2-cyclohexyl Sulfenamide

Concentration	Total eggs taken	No. of eggs hatched	% Hatchability
Control	500	472	94.4%
2.5ppm	500	271	54.2%
50ppm	500	22	4.4%

Table 4: Determination of hatchability of *Drosophila melanogaster*'s eggs at different concentration of cycloheximide

Concentrations	Total eggs taken	No. of eggs hatched	% hatchability
Control	500	459	91.8%
2.5ppm	500	422	84.4%
50ppm	500	209	41.8%

Emergence of Flies

The number of flies that emerged for different dose of 2.5ppm concentration of Benzothiazyl-2-cyclohexylsulfenamide was observed to vary considerably. Emergence occurred on day 5th and continued till 13th days for 1 ml dose and the maximum number of emerging flies was recorded on 6th day for almost 2.5ppm concentration.

Further, the number of flies that emerged for different dose of 50ppm concentration of cycloheximide was observed daily. Emergence occurred on 4th day and continued till the 13th day for 3ml, 4ml and 5ml dose and maximum number of flies that emerged was recorded on day 5th day for almost all doses of 50ppm concentration. But in control condition, emergence started from 6th day to 9th day and maximum emergence was observed on the 7th day.

Survivorship of Adult Flies

Effect of Benzothiazyl-2-cyclohexylsulfenamide on adult longevity was examined within its life span results under controlled condition. The survivorship was found to be longest (till 39 days) and in treated condition the survivorship decreased with increase in dose of 2.5 ppm concentration and was recorded lowest for 2ml.

In case of cycloheximide effect seen was quite different on adult longevity within life span of *Drosophila melanogaster*. In controlled condition, the survivorship was found longest (till

39th day); but in treated condition the survivorship decreased with increase in dose of 50ppm concentration and was recorded lowest for 5ml dose.

Fecundity, Fertility and Reproductive Performance of Flies

In application of both the chemicals, to calculate the fecundity, fertility and reproductive performance of flies, virgin male and female flies emerging from the control and treated food were separated. They were paired and mated. Vials had normal food for *Drosophila*. Ten pairs of flies were included per group and observed for 10 days. Eggs laid during this period were scored. The total fecundity and mean daily egg production were recorded.

In Benzothiazyl-2-cyclohexylsulfenamide mixed vial, the total fecundity and hatchability percentage was observed to decrease with increase of dose of 2.5ppm concentration compared to control media. Same decrease was shown in mean daily eggs production per female with the increase in dose of 2.5 ppm concentration of the test chemical. The fertility exhibited sharp decline with increase in dose of 2.5ppm and similar observation were examined for reproductive performance. (Table 5)

Table 5: Effect of Different concentration of 2.5 ppm Benzothiazyl-2-Cyclohexyl Sulfenamide on Reproductive Performance.

Concentration	Total Fecundity	Mean daily egg production/female \pm S.E.	Egg Hatchability	Fertility	Reproductive /Performance
Control	3951	39.51 \pm 36.66	95.74%	93.47%	369.2
0.75ml	1813	18.13 \pm 10.62	84.05%	34.80%	63.092
1ml	1616	16.16 \pm 14.35	82.17%	31.18%	50.38
2ml	1433	14.33 \pm 12.90	71.66%	28.96%	41.49

In the test chemical cycloheximide, the total fecundity, hatchability percentage, fertility and reproductive performance exhibited sharp decline with the increase in dose of 50ppm concentration of test chemical compared to control media. (Table 6)

Table 6: Effect of different concentrations of 50ppm cycloheximide Reproductive Performance

Concentration	Total Fecundity	Mean daily egg production/ Female \pm S.E.	Egg Hatchability	Fertility	Reproductive performance
Control	3951	39.51 \pm 36.66	95.74%	93.47%	369.2
3ml	3187	31.87 \pm 30.75	87.88%	68.87%	219.48
4ml	2632	26.32 \pm 25.21	75.30%	59.80%	157.39
5ml	2631	21.36 \pm 18.49	61.21%	54.86%	124.47

DISCUSSION

Amides are a class of organic compounds but amides have wide variety of chemical structure which reflect in the diversity of their effects on biological organism. Benzothiazyl-2-cyclohexyl Sulfenamide are widely used in industry. Cycloheximide is a highly effective antibiotic with activity against mold, yeast and phytopathogenic fungi with lower activity against bacteria.

The present study reveals that both the test chemical of amide group shows causing sharp decline on the developmental stage of *Drosophila melanogaster*. Their mean daily egg production per female population declined which affects the fecundity, fertility as well as reproductive performance. Both the chemical cause chromosomal changes also, which indicates that above chemicals are not only toxic but can change the chromosomal structure, DNA damage, teratogenesis, reproductive effect, embryotoxic. *Drosophila melanogaster* is well studied and highly tractable genetic model organism for understanding molecular mechanisms of human diseases. Over 60% of *Drosophila melanogaster* genes are also found associated with human cancer and other diseases.

The judicious use of test chemical is quite important as their higher use might enhance incidences of carcinogenicity among humans.

REFERENCES

1. Acton Q, Ashton (2012). *Cervical cancer: New Insights for the Healthcare Professional*. Atlanta, Georgia: Scholarly Editions.
2. Bliss C.L. (1935). "The calculation of the doses mortality curve". *A. Appl Biol* **22**: 134-167.
3. Finney, D.J. (1989). *Probit Analysis*, 3rd Edition. Cambridge; Cambridge University Press.
4. Fishbein, L. (2012). *Chemical Mutagens Environmental Effect on Biological System*. New York and London: Elsevier.
5. Feo, Francisco and Pani, Paolo (2013). *Chemical Carcinogenesis. Models and Mechanisms*. Springer Science & Business Media.
6. Lints, Fredric A. and Soliman, M Hani (2013). *Drosophila as a Model Organism for Ageing Studies*. New York. Tertiary Press.
7. Gayatri, M.V. and Krishnamurthy, N.B. (1981). "Preliminary Studies on the Effect of a Mercurial Fungicide Ceresin on Fecundity in *Drosophila melanogaster*", *Dros. Inf. Serv.* **55**: 148-149.
8. Jeffrey, R. Powell (1997). *Progress and Prospects in Evolutionary Biology: The Drosophila Model*. New York: Oxford University Press.
9. Dubnau, Josh (2014). *Behavioral Genetics of the Fly (Drosophila melanogaster)*. Cambridge University Press.
10. Ouchi, M. and Ouchi, T. (2014). "Distinct DNA damage determines differential phosphorylation of Chk2", *Cancer Bio Ther.* **15**:1700-1704.

11. Hayat, M.A. (2008). *Methods of Cancer Diagnosis, Therapy and Prognosis: Gastrointestinal Cancer*. Vol.3. USA Springer Science & Business Media.
12. Larranaga, Michael D. *et al.* (2016). *Hawleys Condensed Chemical Dictionary*. John Wiley & Sons.
13. Carroll, Pamela M. and Fitzgerald, Kevin (2004). *Model Organisms in Drug Discovery*. John Wiley & Sons.
14. Kohler, Robert E. (1994). *Lords of the Fly: Drosophila Genetics and the Experimental Life*. London. University of Chicago Press.
15. Greene, Stanley A.(2013). *Sittig's Hand book of Pesticides and Agricultural Chemicals*. William Andrew Norwich.
16. Rea, William J and Patel, Kalpana D (2017). *Reversibility of Chronic Disease and Fly per Sensitivity Vol-4: The Environmental Aspects of Chemical Sensitivity*. CRC press.

Achyranthes aspera: A MEDICINAL PLANT OF THE HIMALAYAS

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ABSTRACT

Achyranthes aspera is known as *Apamarga* in Sanskrit. Other common regional names are *Apang* (Bengali), *Kalakar* (Malayalam), *Agadha* (Marathi), *Apamarga* (Sanskrit), *Chirchita* (Hindi), *Aghedi* (Gujarati), *Nayurivi* (Tamil). It contains precious medicinal properties and is used traditionally for the treatment of high blood pressure (Hypertension), high glucose level (Diabetes), dysentery, cough, rheumatism etc. *Apamarga* herb is found as a weed all over India. This paper gives the literary information regarding the different uses of *Apamarga* in Vedic *Vaangmaya* and *Samhita* Granths in India. Its pharmacological properties have been described along with dosage in broad range of curative applications.

Keywords: *Achyranthes aspera*, macroscopic characteristics, Medicinal uses, Pharmacological activity, Photochemistry.

INTRODUCTION

Dental caries is a disease that attacks the gum and bone and around the teeth (periodontal diseases). This medical condition has historically been deliberated in different medical systems. Different chemicals and manmade drugs have been found to be efficacious in the treatment of

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these diseases, but these drugs have also marked side reactions. In present times there has been a pointed shift towards herbal healing because of the pronounced progressive and irreversible effects of recent drugs.

Achyranthes aspera Linn. is a species of plant having family *Amaranthaceae*, frequently called as *Apamarga* or *Aghedi* and *Chirchita* in Gujarati and Hindi, respectively. It is a popular medicinal plant which is found to be used as herbal remedies all over the tropical African and Asian countries. It grows throughout the humid world and is normally found as a weed all over India. In *Atharva Veda* it is said to be *Kshetriya roga nasak* and *Yatudhan Krimi nasak*. In *Yajur Veda* it is said to be used for *havan* motive due its *Rakshoghna* property.

There is no other plant which has got greater water withdrawing property than *Apamarga*. It has also got property similar to *Paaproganashak*, *Duhs wapnanasana*, *Kushthaghna*. *Apamarga* is considered as god of all plants in view of the fact that it possess many properties and removes multiple syndromes. In many Ayurvedic texts it is specified for treatment of following diseases: *Hikka-Swaas*, *Vish chikitsa*, *Unmada*, *Apasmara*, *Ashmari*, *Arsha*, *Kushtha* etc. Commonly each and every part of the plant is used in various diseases like stomatitis, asthma, piles, dysentery etc. It is also used as anti-inflammatory agent, anti-diabetic agent, and abortifacient.

The herb is having many pharmacological actions such as antipyretic, analgesic, and anti-inflammatory activities. This herb is used in the treatment of various problems such as pyrexia (increased body temperature), psoriasis (itching), dysentery, cough, paralysis (numbness), spleen enlargement, control of fertility, and postpartum haemorrhage.

Many studies report that the aqueous solution of *A. aspera* shows antibacterial activity opposed to *Bacillus typhosus*, *Streptococcus heamolyticus*, and *Staphylococcus aureus* while aqueous and alcoholic extract of its leaves holds antibacterial activity against *E.coli* and *S.aureus*. Some studies have been conducted on the antibacterial effect of extracts of *Achyranthes aspera* against pathogens. This study is to estimate the *in vitro* antibacterial activity of *Achyranthes aspera* extracts opposed to the verbal pathogens and *Streptococcus mutans* [1].

Table 1: Scientific Taxonomic Classification

Kingdom	Plantae
Super Division	Spermatophyta
Division	Magnoliopsida
Subclass	Caryophyllidae
Order	Caryophyllades
Family	Amaranthaceae
Genus	Achyranthes
Species	Aspera

Table 2: Synonyms

Latin	<i>Achyranthes aspera</i>
Hindi	Chirchira, Latjira
Gujarati	Safed Aghedi
Tamil	Shiru-Kadaladi
Sanskrit	Agheda
Ayurvedic	Apamarga, Shikari, Chirchita
Unani	Chirchita[2]
Persian	Khare-Vazhun
Punjabi	Kutri
Spanish	Mosotillo, Rabo de raton
Marathi	Aghada, Pandhara-aghada
Philippines (Tagalog)	Hangod
Sinhala	Karalheba
Telugu	Uttaraene, Antisha

MACROSCOPIC INFORMATION

(1) **Height:** 0.2-2.0m high. The base is ribbed, angular or woody, branched, simple. The nodes of *Achyranthine aspera* are bulged, often pigmented with pink color.

(2) **Root:** Roots of *Achyranthes aspera* are cylindrical, 0.1-1.0 cm in thickness. Secondary and tertiary roots are present.

(3) **Stem:** Yellowish-brown, branched, cylindrical, square, erect and hollow when dry.

(4) **Leaf:** Simple, adhering close to the surface, leaf tapering to the point, kind of stomata are irregular celled.

(5) **Flower:** 8-30cm long, 3-7mm wide, bracteate with two bracteoles, single stoma, 5 stamens, single ovule, and the flowers of *Achyranthes aspera* become visible during summer.

(5) **Fruit:** An indehiscent (not splitting open to release the seeds when ripe), dry, utricle enclosed with bracteoles, tenacious, perigone.

(6) **Seed:** Seeds of *Achyranthes aspera* are spherical at the base, barrel-shaped, abbreviated at the apex, endospermic, brown coloured [3].



Figure1: *Achyranthes aspera*

PHOTOCHEMISTRY

Achyranthes aspera plant contains triterpenoid saponins having oleanolic acid as aglycone, viz A, B, C and D as the main chemical constituents. The other constituents of *Achyranthes aspera* plant are Vitamin C, ecdysterone, long chain alcohol containing 27-cyclohexyl heptaheptaecosan-7-ol, 36, 47-dihydroxy hen-pentacontan-4one, 16-hydroxyl 26-methyl heptacosan-2one and 17-penta triacontanol. It also contains water soluble base, betaine, Achyranthine, N-methyl pyrrolidine-3 carboxylic acid, Inokosterone ecdysterone in callus and tissue culture. *Achyranthes aspera* plant also contains Fe, Ca, phosphorus, protein and oleanic acid is obtained from seeds of *Achyranthes aspera* [4].

PHARMACOLOGICAL ACTIVITY

Blood pressure:

Aqueous and alcoholic extracts of roots of *Achyranthes aspera* reduce the blood pressure but the extract of the chloroform increase the blood pressure in dogs [5].

Anti-cancer activity:

Methanol extraction of leaves of *Achyranthes aspera* plant was found to have hindering activity against human pancreatic cancer cells showing its anti-cancer and anti-proliferative properties [6].

Antibacterial and Antioxidant activity:

Antioxidant and antibacterial activity of *Apamarga* plant extract in remarkable organic solvents was studied. By Agar well cut diffusion method, the antibacterial activity of *Achyranthes aspera* against *E.coli*, a gram-negative bacterium and *Staphylococcus aureus*, a gram-positive bacteria is found.

Antimicrobial activity:

Chloroform and methanol extract of root and shoot of *Achyranthes aspera* exhibit high quality of antibacterial activity against *Klebsiella sp* [7].

Spermicidal and anti-parasitic activity:

Many extracts from the roots of *Achyranthes aspera* were investigated for spermicidal activity in rat and human sperm. Other extracts such as chloroform, n-hexane and hydroethanolic extracts were found to be more productive for sperm excitability, sperm immobilization, acrosome status. Extraction of *Achyranthes aspera* with ethyl acetate shows anti-parasitic activity [8].

Anti-inflammatory and anti-arthritis activity:

Alcoholic extraction of *Achyranthes aspera* manifests the anti-inflammatory activity. It has been also declared that the ethanolic extraction of *Achyranthes aspera*, in the doses of 100-200mg/kg influences anti-inflammatory and anti-arthritis activity [9].

Analgesic activity:

The root and ethanol leaf extract of *Achyranthes aspera* released important analgesic activity.

Anti-diabetic activity:

Achyranthes aspera gave a special dose-related hypoglycaemic effect in normal glycaemia and alloxan-induced diabetic model of rat on oral administration of 250 and 500mg [10].

Hepato-protective activity:

Achyranthes aspera after being studied in rat models with paracetamol-induced hepatotoxicity showed hepato-protective activity.

Anti-fungal activity:

Achyranthes aspera reports against Spermatophyta such as *Microsporium canis* and *Trichophyton rubrum* showed anti-fungal activity and results were found to be important when contrasted to standard drug Ketoconazole [11].

Other pharmacological activities of *Achyranthes aspera* are anti-asthmatic, antithrombotic, diuretic, immune enhancing, carminative, astringent, lithontriptic, tonic, cardio suppressant,[12] purgative, laxative, anti-allergic [13].

MEDICINAL USES

The leaves of *Achyranthes aspera* are used for the treatment of ophthalmic and other eye infections. Roots or their many extracts are used as astringents to wounds, menstrual disorders, and stomach pain. Chloroform and ethanol extract of seeds of *Apamarga* gives mild to moderate antibiotic activity against *B.subtilis*, *Paeruginosa*, and *E.coli*. Fruits and flowers of *Apamarga* are used for the treatment of respiratory disease, snake and reptile bites, menstruation[14]. *Achyranthes aspera* are also laxative, carminative, useful in vomiting, bronchitis, vata, piles, dyspepsia, ascites, heart disease[15]. *Achyranthes aspera* is also demulcent, sudorific, expectorant, haematinic in indigenous medicine[16]. The plant is pectoral, also used in skin eruption, the extract of the plant is useful in pneumonia, leaves are used in the prevention of gonorrhoea. Seeds are also said to be emetic, and are used in hydrophobia[17]. It is also used in ear diseases, urinary obstruction, loss of taste in food[18]. The plant is also having abortifacient and contraceptive properties[19].

CONCLUSION

It is very important to have a real documentation of medicinal plants and to know their potential for the improvement of health and hygiene through an eco-friendly system. After reviewing scientific papers, it is concluded that *Apamarga* species have significant medicinal value. The powder of plant extract when subjected to solvent extraction indicates the presence of alkaloids, saponins, glycosides, flavonoids, aminoacids, proteins. Review reveals that the herb Chirchira is used in treating various ailments. Researchers need to carry out the work for developing its various formulations, which can ultimately be beneficial for the human beings as well as for the animals

REFERENCES

1. Yadav, Roma; Yadav, Radhika and Himani(2016). "Evaluation of antibacterial activity of *Achyranthes aspera* extract against *Streptococcus mutans*: An in vitro study", *Journal of Advanced Pharmaceutical Technology and Research*. Vol.7(4): 149-152.
2. Verma, Sunita(2016). "A review study on *Achyranthes aspera*(Amaranthaceae)- A valuable medicinal herb", *Journal of Medicinal Plants Studies*, Vol.4(3): 149-152 . ISSN 2320-3862.
3. Sharma, Veena and Chaudhary, Urmila (2015). An overview on Indigenous knowledge of *Achyranthes aspera*", *Journal of Critical Reviews*, Vol 2(1):7-19. ISSN-2394-5125.

4. Dwivedi, Sumeet; Dubey, Raghvendra and Mehta, Kushagra(2008). "Achyranthes aspera Linn. (Chirchira): A Magic Herb in Folk Medicine," *Ethnobotanical Leaflets*, Vol. **12**: 670-676. 12 September 2008.
5. Varuna, K.M.; Khan, M.U. and Sharma, P.K.(2010). "Review on *Achyranthes aspera*," *Journal of Pharmacy Research*, Vol. **3**(4): 714-717. ISSN: 0974-6934.
6. Dey, Abhijit(2013). "*Achyranthes aspera* L: Phytochemical and Pharmacological Aspects," *International Journal of Pharmaceutical Sciences Review and Research*, Volume **9**(2):72-82.ISSN 0976-044X.
7. Tripathy, Subhashish; Seth, Pragya and Kushtwar, Raveendra Singh(2017). "*Achyranthes aspera* one of important Medicinal Plant of Indian Flora", *Innovat International Journal of Medical and Pharmaceutical Sciences*, Vol. **2**(3):22-26. ISSN- 2456-8694.
8. Srivastav, Saurabh; Singh, Pradeep *et al.* (2011). "*Achyranthes aspera*-An important medicinal plant: A Review," *J. Nat. Prod. Plant Resour.*, Vol. **1**(1): 1-14.
9. Gupta V, Krishna CM *et al.* (2010). "Phytochemistry and Pharmacological Potential of *Achyranthes aspera*- A Review," *International Journal of Ayurvedic Medicine*, Vol **1**(1): 1-11, ISSN:0976-5921.
10. Sureshkumar, S.; Devagnana, J. *et al.*(2015). "Pharmacognosy of *Achyranthes aspera* Linn: A Review," *Advanced Research Journal of Life Sciences*, Vol. **1**(1):1-5. ISSN 2455-3530.
11. Mukherjee, Tanmoy; Debnath, Monojit and Biswas, Moulisha(2016). "A Review on the Ethnopharmacological, Phytochemical and Pharmacological Aspects of *Achyranthes aspera*(L.)," *Indian Journal of Ethnophytopharmaceuticals*, Vol. **2**(1): 37-42. ISSN: 2455-5533.
12. Snigdha, Mishra; Satish Kumar, Sharma *et al.* (2013). "An Overview on Herbal Medicines as Diuretics with Scientific Evidence," *Sch. J. App, Med.Sci.*, Vol. **1**(3):209-214. ISSN 2320-6691.
13. Bhatt, Deepika; Joshi, G.C. *et al.* (2016). "*Achyranthes aspera* L.: Multiple therapeutic uses among various Tribes of Kumaun, Uttarakhand," *International Journal of Advanced Research (IJAR)*, Vol**4**(6): 2151-2156. ISSN 2320-5407.
14. Srivastava, Praveen Kumar(2014). "*Achyranthes aspera*: A Potent Immunostimulating plant for Traditional Medicine," *International Journal of Pharmaceutical Sciences and Research*, Vol.**55**:1601-11. ISSN (Online): 0975-8232, ISSN (Print): 2320-5148.
15. Dhale, D.A. and Bhoi, Sonai(2013). "Pharmacognostic Characterization and Phytochemical Screening of *Achyranthes aspera* Linn." *Current Agriculture Research Journal*, Vol.**1**(1): 51-57.ISSN: 2347-4688, Online ISSN: 2321-9971.
16. Sharma, Dilip Kumar; Sharma, Nandini *et al.* (2014). "Bioactive Compounds of *Achyranthes* (Amaranthaceae) and their Pharmacological and Phytochemical uses" *International Journal of Pharmaceutical, Chemical and Biological Sciences*, **4**(1): 167-172, ISSN: 2249-9504.

17. Saini, Sonia (2016). "Review on *Achyranthes aspera* L." *International Education and Research Journal*, Vol. **2**(2): 84-86. e-ISSN No: 2454-9916.
18. Prasad, P.V.V. and Subhaktha, P.K.J.P.(2001). "*Apamarga (Achyranthes aspera* Linn.) A Medico-Historical Review", *Bull.Ind.Hist.Med.* Vol.**31**: 11 -24.
19. Shukla, A., Bukhariya, V. *et al.*(2011). "*Achyranthes aspera* Linn.(Chirchira): A magic herb in Folk medicine," *International Journal of Biomedical and Advance Research*, Vol. **2**(6):228-240.

MEDIA AND CONSUMPTION BEHAVIOR OF URBAN YOUTH IN DHAKA CITY

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ABSTRACT

The overall objective of the study is to correlate media exposure of urban youths with patterns of consumption behavior in Dhaka. The study argues that globalization especially media exposure has reshaped consumption behavior of youth and injector a global homogeneous culture. A total of 387 youths were interviewed through a predesigned structured questionnaire. Watching TV, using internet and social media were found significantly correlated with consumption of Fast Food, wearing branded dress and western dress. Further researches might explore the changing behavior of consumption pattern among urban youths because the future impact of this transformation in digital penetration could be enormous.

Keywords: Consumption, Culture and Youth, Globalization, Media.

INTRODUCTION

Consumption behavior changes dramatically across culture and population groups. Youths, often called a game changer group, are getting exposed to media and consequent changing consumption patterns in urban Bangladesh. Consumption behavior of youth changes rapidly due to variety of changes at both the micro and macro levels (Karwala, 2005). “Changes in consumer tastes and income at the micro level, and structural shifts in the overall environment at the macro level, affect consumer behavior, lifestyle, values, and needs, which implicate changes in consumption patterns” (Hossain, 2010). Increased purchasing power, education, the flow of information, and the availability of consumer goods and services promote changing consumption patterns. Growing technological innovation, socio-cultural transformation, and advertisement also influence consumption patterns of the population. Globalization promote persuasive role in changing consumption patterns of youths around the world.

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Real world consumption expenditures have increased at an unprecedented rate during the last few decades. People concentrate a lot for standard living like better food intake and quality housing facility than ever before (UNDP, 1998). Recent advances in human development level have demonstrated a substantial progress in the overall lifestyles of people in Bangladesh (World Bank, 2007). Being a powerful mechanism, mass media triggers diffusing messages about improved life styles of modern family and social life (Thornton, 2001).

Widespread mass media and global consumption behavior have been approached as the key factors for addressing the changing lifestyles of youths. In this global period, youth have access to a range of multi-media choices than ever before. Some of different media are traditional, satellite and cable TV channels; radio stations; newspapers and magazines; the internet and computer and video games. In addition, many are exposed to the same programs, the same characters and the same marketed spin-off products. Nowadays, there is greater availability of foreign programming and media, and less official censorship and control in many parts of the world. Information, email and images flow around the world faster and more freely than ever. Indeed, mass media are making the world smaller, and culture and media are increasingly inextricable, especially for young people (Fourth World Summit, April 2014).

Food consumption in the general context is recognized as a collection of contextual and evolving social practices, where food no longer merely serves as sustenance but also a way to relate to other people in social, cultural and political terms (Oosterveer, 2006). Changes in food habit demanded an enormous flow in comparison with that of changes in the lifestyle of youths in urban society. Fast Food culture has been astoundingly received by a range of youths over times. At present, Fast Food restaurant industry has gained a highly growing sector in Bangladesh (Islam & Ullah, 2010). Preferably, originated at USA in 1916, Fast Food restaurants are now dominating the world (Bareham, 1995). Most of the urban youth (82.4 %) buy their lunch and dinner at KFC and any other Fast Food restaurants. These are cultural decisions involving a system of meaning. Though western branded food items have quite replaced many traditional food items, Bengali food patterns remain popular. Food choice research found that exposure to certain foods tends to increase preference for those foods, as familiarity increases with repeated exposure (Birch *et al.* ,1987; Pliner, 1982).

OBJECTIVES OF THE STUDY

The major objective of this paper is to explore how media exposure has transformed the consumption behavior of youths in urban Bangladesh, specifically the emergence of “Youth Culture” that mimics western values and lifestyles. The specific objectives of the study are to explore the nature of media exposure and consumption patterns among the urban youths in Dhaka city. This study also examines the impact of media exposure on consumer behavior of urban youth in Dhaka city.

GLOBALIZATION, MEDIA IMPACT AND CONSUMPTION PATTERNS

Globalization is predominantly driven by information superhighway and latest communication technologies. New transnational or global cultural patterns are the direct consequences of mass media. The current study approached the homogenization theories of globalization. Homogenization places importance on homogeneity or sameness and reduction

in cultural variety around the world (Ritzer, 2007). Cultural theories of globalization argued that the rapid growth of the mass media greatly contributed resultant global cultural flows and images as well as global nature of consumption in recent decades (Ritzer, 2007).

For Anthony Giddens, the conceptual essence of globalization is 'time-space distancing'. He defines time-space distancing as 'the intensification of worldwide social relations'. Social relations are 'lifted out' from local contexts of interaction and restructured across time and space (Giddens, 1990). David Harvey argued that globalization represents a new burst of 'time-space compression'. Manuel Castells characterized this society as 'network society'. He gives a 'technologicistic' approach to globalization and argued that technological change is seen as causal determinant of global cultural pattern and practices. He argued that 'network society' is an informational society. Castells sees close linkage between information and communication technology and the development of global culture. In addition, communication certainly shapes culture (Castells, 1996). Ritzer (1993, 2002) coined the term 'McDonaldization' to describe the socio-cultural processes by which the principles of the Fast Food restaurant came to dominate more and more sectors of US and later world society. This underlying process is related to the practices of consumer culture. McDonaldization spreads throughout the institutions of global society and undermines cultural diversity. Westernized cultural uniformity has been approached throughout the world. Ritzer recognized the power of capitalist enterprises to impose their cultural objects on the local scale.

Globalization is coined and framed as the standpoint for accelerated exchanges beyond regional geographies. Walters sums up the final phase of globalization as transaction of symbolic goods. He writes, 'Material exchanges localize, political exchanges internationalize; and symbolic exchanges globalize' (Waters, 1995). Consumer culture is located at the center of globalization. Leslie Sklair (1991) labels transnational practices into three levels: the economic level represented by the transnational corporation; the political level represented by a transnational capitalist class and information-communication technology creates the culture-ideology of consumerism. It is consumerism that is 'the nuts and bolts and the glue that hold the system together' (Sklair, 1991). The culture-ideology of consumerism is characterized by a belief that 'the meaning of life is to be found in the things that we possess. To get remain alive, we must continuously consume' (Sklair, 1998). Within this culture, people see themselves and others primarily as consumers rather than as citizens. These theories of globalization highlight global cultural convergence and the rise of uniform consumption patterns and cosmopolitanism. It is easy to see a homogenized global culture of standardized tastes, desires and practices.

CONSEQUENCES OF GLOBALIZATION AND INSTITUTIONAL MODERNITY: CULTURAL IDENTITY DEBATES

Culture, often referred to be as an unending process, seems to be a changing and continuous discourse. Being an individually constructed issue, both people and culture have been analyzed as an integrated platform (Tomlinson, 1999). Persons having creativity and freedom can perfectly contribute to bring changes and shifts in the development of a cultural identity. Instead of objective analysis of cultural influences, subjective interpretation has received a special attention for understanding the cultural connection in the framework of globalization impacts and institutional modernity. Youth of the current society can integrate or reject a range

of cultural issues or influences after sifting through it. People are not mere objects of cultural influences, but subjects who can sift various influences and reject or integrate them. Moreover, people’s subjective analysis of culture is sometimes overlooked by the champions of anti-globalization discourse.

In relation with the critical analysis of cultural imagination, Manuel Castells (1997) sketched the information age and addressed the conflicting trends of globalization and identity reshaped and influenced by our world and our lives. In the view of Castells, “globalization has been challenged by the widespread and powerful expressions of collective identity . . . on behalf of cultural singularity and people’s control over their lives and environment”. Being a complicated issue, cultural identity concept is not likely to be the easy target of globalization. Though identity is not a fragile communal-psychic attachment, it can be considered as a dimension of institutionalized social life in modernity.

CONCEPTUAL FRAMEWORK OF THE STUDY

Globalization is closely associated with media. It is being shaped and driven by technological change. Information communication technologies connect us and create cultural ideology of consumerism as well as determine our consumption behavior. Moreover, connectivity defines our use of communications technologies – television, mobile phones, computers, e-mail, the Internet. These forms of media increasingly influence the way of our living, the styles of food we eat. The music, cinema and television also form our entertainment, and our experience of mobility and travel. Media create cultural ideology of consumerism as well as consumption behavior of youth in Bangladesh. Cultural and behavioral inclusion is an inevitable consequence of market-led globalization and media exposure. Consumption is not simply economic but it has cultural and symbolic meanings and expression. However, consumption behavior of youths determined by his/her media exposure is revealed in the following figure.

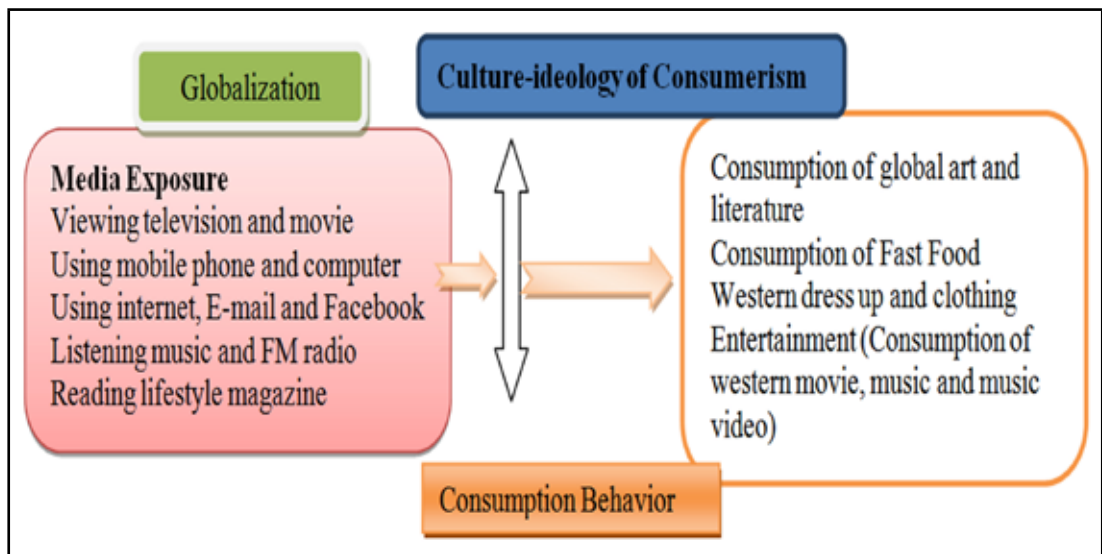


Figure 1: Globalization, Media and Consumption of Urban Youth

METHODS AND MATERIALS

Selection of the Study Units

The target group of this study consisted of urban youth who studied in the private universities of Dhaka, the most populous capital and central city of Bangladesh. Youth are the most potential resources of today's modern society who have an easy and affordable access to global media and culture. Being a malleable target, satellite media sources have placed a profound impact on youth living in urban Bangladesh. Urban youth's tastes and life styles are completely guided and controlled by different ways of media exposure. This study was conducted in two leading private universities in Dhaka city. Purposively, Independent University Bangladesh (IUB) and North South University (NSU) were selected as the study sites for collecting survey data from the concerned youth. Belonging to middle class and upwardly mobile, students from these private universities were chosen as the study units in the current survey.

Study Techniques and Instruments

The study used a quantitative tactic of data collection. Survey was applied for collecting quantitative data keeping in view the overall objectives of the study. A pre-design structured questionnaire was utilized to understand the relationship between media exposure and consumption behavior of urban youth in Dhaka city. The language of questionnaire was kept in English as students' medium of instruction remained English in tertiary level of education. A consent letter was attached with the questionnaire informing all the respondents that their personal details and other information will be used for only academic purposes. Anonymity and confidentiality will be strongly maintained as the issue deals with very personal and sensitive choices of an individual in the study.

Sampling

Firstly, the present study approached a purposive sampling of non-probability sampling types for selecting private universities in Dhaka, Bangladesh. Secondly, multistage random sampling design was applied to identify the respondents from NSU and IUB respectively. A total of 387 respondents were considered as the study people in the current survey. List of the departments was collected from these two universities, out of which 16 departments were randomly picked up following the lottery method. The attendance sheets of the students from the selected departments were used as sampling frame for the study.

Data Management and Analysis

The duration of field survey took a snapshot of two months, April-May, 2014. Instead of interview schedule, a self-administered questionnaire was utilized for collecting survey data as the respondents had personal choices about different confidential issues. Data from the questionnaire were analyzed using the Statistical Package for the Social Sciences (SPSS) software (Version 17). Descriptive and cross-tabs were used for analyzing the data. To test the pre-formulated hypothesis, the current study conducted statistical tests for measuring significance level between variables. The statistical test of Chi square was used to measure the relationships between media exposure and consumption behavior of urban youths in Dhaka city.

RESULTS

Socio-demographic Profile of Urban Youths

Youths were the main units of analysis in the present study. Socio-demographic variables of youths are important for understanding their consumption behavior. Table 1 shows that out of 387 respondents, 82.7% of the study people were female whereas 17.3% of the respondents were male. Furthermore, 93.8% of the study people belonged to undergraduate level whereas 6.2% were graduates. In the current survey, it was found that 95.3% of the study participants were Muslim while 3.6% were Hindu.

Table 1: Socio-demographic information of the respondents

Characteristics	Frequency	Percent (%)
Sex		
Male	320	82.7
Female	67	17.3
Educational attainment		
Undergraduate	363	93.8
Graduate	24	6.2
Religion		
Muslim	369	95.3
Hindu	14	3.6
Buddhist	2	0.5
Christian	2	0.5
N	387	100.0

Table 2 shows statistics regarding income level of the respondents at family scale in the study. It was clearly found that 51.4% of the survey participants belonged to an income range BDT 10000-99999 while 26.1% belonged to income category ranging from BDT 100000-199999. Furthermore, 22.5% of the study people had an income level of BDT 200000-400000. Most of the youths are from solvent family and the upper section of the society.

Table 2: Family Income of the Respondents (in Bangladesh Taka)

Family income (monthly)	Frequency	Percent (%)
10000-99999	199	51.4
100000-199999	101	26.1
200000-400000	87	22.5
N	387	100.0

Media Exposure of Urban Youths

Table 3 sums up information regarding media exposure of the respondents focused in the current survey. Out of 387 respondents, it was noted that 96.9% and 92.5% of the study participants regarded listening music and using internet, respectively as the indicators of media exposure. Further, the study findings also revealed that 89.7%, 85.0%, 91.0% and 87.6% of the survey participants considered using facebook, watching movie, viewing music video and watching TV in relation with measuring media exposure of the study participants. It was noted clearly that watching TV had been gradually replaced by the presence of other sources of media like internet, Facebook and music video.

Table 3: Exposure to Media of Urban Youths

Media exposure	Percentage (%)		N
	Yes	No	
Reading newspaper daily	78.3	21.7	387
Reading lifestyle magazine	58.4	41.6	387
Listening to radio	66.4	33.6	387
Listening music	96.9	3.1	387
Using mobile for lifestyle related information	46.5	53.5	387
Viewing music video	91.0	9.0	387
Watching TV	87.6	12.4	387
Watching movie	85.0	15.0	387
Using internet	92.5	7.5	387
Using Facebook	89.7	10.3	387
Looked for romantic relationship online	22.5	77.5	387
Using online dating services	17.6	82.4	387

Table 4 gives information about spending duration for exposure with media. It was noted that the average time of watching movie was recorded to be 53.72 hours with a standard deviation of 37.10 hours in a month in the study. Consequently, the mean hour of watching TV and viewing music video was considered to be 33.00 hours with a standard deviation of 28.72 focused in the study. Furthermore, the average time of using internet, facebook and other social networking sites were reported to be 27.97 hours with a standard deviation of 33.95 in a week.

Table 4: Media Exposure Time

Media exposure	Hours	
	Mean	Std. deviation
Media exposure in a month		
Watching movie	53.72	37.10
Watching TV/Music Video	33.00	28.72
Media exposure in a week		
Reading lifestyle magazine	2.06	2.04
Using internet, Facebook and Other social networking site	27.97	33.95
Daily media exposure		
Reading Newspaper	.92	.52
Listen to music/radio	1.54	2.24

Food and Dress Consumptions Pattern

In Table 5, it was shown that 93.7% of the study people reported non-digital media whereas 92.0% of the study participants talked about internet about promoting global cultural pattern among the youths. Further, it was also noted that a large section of the study youths (70.5%) ate Fast Food while 29.5% of the respondents dissociated them from the same standpoint. Moreover, 55.9 % of the youth consumers felt comfortable to have Fast Food whereas 19.9% of the study respondents opposed the standpoint. In respect of selecting dresses, it was found that 68.3% of the youth participants preferred branded dress. Again, it was seen that 39.3% of the youth participants chose special foreign brand for selecting food. It was worth noting that 53.8% of the study people did not consider western dress as the symbol of modernity.

Table 5: Consumption behavior of Urban Youth

Consumption behavior of Youth	Percentage (%)	
	Yes	No
Eating Fast food	70.5	29.5
Prefer special foreign brand for selecting food	39.3	60.7
Prefer Fast Food	55.9	44.1
Prefer branded dress	68.3	31.5
Prefer western dresses	52.5	47.5
Western dress as the symbol of modernity	46.2	53.8
Media promote global cultural pattern among the youth	93.7	06.3
Internet promote a global cultural pattern among the youth	92.0	08.0

Fast Food Consumption Behavior of Urban Youth

Out of 387 youths, 61% of the respondents had Fast Food sometimes while 18.6% of the youths had Fast Food on a regular basis as shown in Table 6. Moreover, 11.9% of the survey participants rarely consumed Fast Food items. In respect of food consumption, Bengali food (37.2%) items dominated the field in comparison with the Chinese food (33.1%) items. Out of 387 respondents, 12.9%, 7.8% and 3.9% of the young consumer people liked American food, European food and Thai food, respectively. Moreover, it was also found that a large section of the respondents (69.3%) showed interest for foreign brand for selecting food items. Whereas 37.2% of the study people liked KFC for having food, 16.3% of the young consumer showed interest in Pizza Hut. BFC (7.2%) and American Burger (6.5%) also were listed by the participants.

Table 6: Fast Food Consumption Behavior of Bangladeshi Youth

Characters	Percent (%)
Frequency of fast food consumption (N=387)	
Regularly	18.6
Sometimes	40.1
Rarely	11.9
Never	29.4
Types of food items liked by youths most (N=387)	
Chinese food	33.1
Thai food	7.8
European food	3.9
American food	12.9
Bengali food	37.2
Italian	1.3
Street food	3.9
Names of Brand (N=153)	
KFC	37.2
BFC	7.2
American Burger	6.5
Pizza Hut	16.3
Moven Pick	2.1

Table 7 picks up information about the relationship between media exposure and consumption behavior of urban youth in Dhaka city. Overall, it was noted that approximately 75% of the urban youths exposed to media consumed Fast Food while the rest of the respondents, who are not exposed to media were not persistent consumer of Fast Food. With regard to wearing branded dresses, over 70% of the urban youths having exposure with media preferred

wearing branded dresses while nearly 30% of the respondents, who are not involved with media, remained disinterested about branded dresses. For explaining the consumer of modern western dresses, more than 50% of the respondents were exposed with different sources of media and showed interest in wearing modern western dresses in the study. Conversely, around 45% of the urban youths having no exposure to media sources disagree at the use of modern western dresses. To clarify the data, urban youth having exposed with media concentrated more on consuming fast-food and wearing branded dress rather than using modern western dresses focused in the study.

Table 7: Media Exposure and Consumption Behavior of Urban Youths

Media Exposure and Consumption Behavior of Urban Youth					
Consumption Behavior of Urban Youth		Media Exposure of Urban Youth			
		Watching TV	Viewing movie	Using internet	Using Facebook
Consumer of Fast-food	Consumer	75.2%	76.0%	73.5%	74.9%
	Non-consumer	24.8%	24.0%	26.5%	25.1%
N		339	329	358	347
Wearing Branded Dress	Consumer	71.1%	72.3%	70.1%	70.9%
	Non-Consumer	28.9%	27.7%	29.9%	29.1%
N		339	329	358	347
Consumer of Modern Western Dress	Consumer	55.2%	55.3%	53.9%	54.5%
	Non-consumer	44.8%	44.7%	46.1%	45.5%
N		339	329	358	347

In Table 7, it was found that consumer of Fast Food; modern western dress patterns and branded dress of urban youth have found significant direct relationship with the media exposure variables like watching TV, viewing movie, using internet and facebook, in the current study. To summarize, media exposure of urban youth has a significant impact on consumption behavior found in the statistical test. Media exposure greatly affects the transformation of youth culture in urban Bangladesh

Table 8: Summery Table of χ^2 value on variables of Media Exposure and Consumption Behavior of Urban Youth

Consumption behavior of youth	Media exposure of Urban Youth			
	Watching TV	Viewing movie	Using internet	Using Facebook
Consumer of Fast Food	$\chi^2=28.791^{***}$	$\chi^2=31.323^{***}$	$\chi^2=19.617^{***}$	$\chi^2=31.070^{***}$
Wearing Branded Dress	$\chi^2=8.665^{***}$	$\chi^2=15.191^{***}$	$\chi^2=5.926^{**}$	$\chi^2=9.092^{***}$
Consumer of Modern Western Dress	$\chi^2=8.033^{***}$	$\chi^2=7.222^{***}$	$\chi^2=4.060^{***}$	$\chi^2=5.450^{***}$

[Source: Field Survey, 2014; df=1, *** p = 0.001; ** p = 0.01; * p = 0.05]

DISCUSSION

Media Exposure and Consumption Behavior of Urban Youth in Dhaka City

Dress patterns considerably vary among urban youths. Despite having interest for newfound culture of glamour, foreign brand and celebrity, traditional dresses have been preferred mostly instead of western ones. The study findings reveal that youth in today's society prefer western dress codes more than that of local ones. Meanwhile, youth do not consider western dress styles as the symbol of modernity. That's why it becomes apparent that most of the youth remain still connected with their traditional dress codes. Exposure to facebook, life style magazine and extrinsic culture has shaped the image of western styles of dress and lifestyles among youth in urban landscape. A portion of youth looked for romantic relationship online and used online dating services, the study has found.

As people got used to exposure to mass media rapidly, tastes and variations had become conspicuous in the existing life patterns. Economic development has literally been associated with expanded opportunities for work, education, and information acquisition related to non-familial employment, schools, and mass media sources that penetrate into peripheral region. These changes bring with them new ideas that idealize urban and western lifestyles (Caldwell 1982, Goode 1963). Mass media represents a significant source of urban or western ideas, practices, and lifestyles that contrast sharply with rural vernacular culture. For instance, movies and television programs glamorize consumerism and positively portray characters (Johnson, 2000, 2001) that experience social mobility and new cultural achievement.

Using internet has expanded radically among youth over time. Listening music, watching music video and using social network have become an intrinsic part of mainstream cultural changes in the days. Around the world, young users are increasingly turning to the internet as a source of information, communication, socializing and entertainment. At the same time, web access is the source of the greatest divide (Fourth World Summit, April 2014) both between countries (internet use in industrialized countries far outpaces use in the developing world), and within countries (internet use concentrated among wealthier and better educated urban youth).

Media exposure of urban youth has found a positive correlation with consumption behavior. Youth who are exposed to media, concentrate more on Fast Food, western dresses and branded dresses. Exposure to media has placed a close relation with living standard choices for urban youth in Bangladesh. Globalization, progress in communication technology, American and western consumer behavior and mobility to capital city have impacted substantially the taste and styles of youths living in urban centres in low resource setting. Different lifestyle shows and consumer TV commercials broadcast through satellite channels trigger youth's choices towards global consumer culture instead of traditional consumption patterns in Bangladesh.

In urban Bangladesh, especially among youth, we can see that there is a homogenization of global culture. But it is a peculiar homogenization among them. There is the spread of American and western culture. Urban youths are the main consumer of a Coca-Cola like soft drink and KFC like Fast Food etc. This is the symbol of the western consumer culture. Forces of globalization especially media play key role in the reproduction of dominant cultural

objects. We can find very little intra- and inter-social differences among urban youth. Identity and difference are being channeled into the field of consumer practices. Although cultural difference becomes a resource for consumer culture, but this is used to integrate youth into flows of global culture.

CONCLUSION

The consumption behavior of urban youths reflects fundamental transformation in the age of globalization. Globalization and media are the key factors of promoting contemporary generation. Market integration and media are the sole determinants of globalization and consumption. Besides, media works for the interests of Multi-national Corporations (MNCs) and Transnational Corporations (TNCs). Media uphold and foster global culture and create certain reality. Eventually, most of the urban youths show positive interest to accept this reality. Media is the main representative of capitalism and sponsors consumerism.

In the present study, we can see an emergent homogenized global culture of standardized tastes, desires and practices among urban youths. Youths are not isolated from globalization rather they are within globalization. Throughout the world, we are observing a uniform consumption patterns and cosmopolitanism among youth. In urban Bangladesh; consumerism has expanded a lot among youth during the past decades. Youth from urban Bangladesh have substantially preferred a new lifestyle of consumerism spawned by rapid economic growth, the global expansion of consumerism and exposure to media. Transformation of urban youth culture has challenged age-old traditions of Bangladesh. These changes among urban youth in Bangladesh reshape the relations amongst members of society as well as family. It is argued that this transformation in the urban youth culture in Bangladesh holds opportunities to improve living conditions and unmake the constraints of tradition and everyday experience. The study suggests that the future impact of this transformation of youth culture on social realities could be enormous.

REFERENCES

1. Bareham, J. (1995). *Consumer Behavior in the Food Industry: A European Perspective*. Oxford: Butterworth-Heinemann.
2. Birch, L L; McPhee, L; Shoba, B C; Pirok, E & Steinberg L (1987). "What Kind of Exposure Reduces Children's Food Neophobia". *Appetite* 9(3): 171-178.
3. Caldwell J C. (1982). *Theory of Fertility Decline*. London: Academic Press.
4. Castells, M. (1996). *The Rise of the Network Society. The Information Age: Economy, Society, Culture*, Vol. I. Oxford: Blackwell.
5. Castells, M. (1997). *The Power of Identity: The Information Age- Economy, Society and Culture*, Vol. II. Oxford: Blackwell.
6. Giddens. A. (1990). *The Consequences of Modernity*. Cambridge: Polity Press.
7. Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*. California: Stanford University Press.

8. Gigli, S. (2014). *Children, Youth and Media Around the World: An Overview of Trends and Issues*. InterMedia Survey Institute, UNICEF, Fourth World Summit, April.
9. Goode, W. (1963). *World Revolution and Family Patterns*. New York, NY: The Free Press.
10. Islam, N. & Ullah, SGM (2010). "Factors Affecting Consumers: Preferences On Fast Food Items In Bangladesh". *The Journal of Applied Business Research* **26**(4).
11. Johnson, K. (2000). *Television and Social Change in Rural India*. Thousand Oaks, CA: Sage.
12. Johnson, K. (2001). "Media and Social Change: The Modernizing Influences of Television in Rural India". *Media, Culture and Society*. **23** (2):147–169.
13. Karwala, S. (2005). *Changing Consumption Patterns*. Available at: http://mentoring.com.pl/Changing_consumption_patterns.pdf (accessed 10 June 2015).
14. Osterveer, P. (2006). "Globalization and Sustainable Consumption of Shrimp: Consumers and Governance in the Global Space of Flows". *International Journal of Consumer Studies* **30**(5): 465-476.
15. Pliner, P. (1982). "The Effects of Mere Exposure on Liking for Edible Substances." *Appetite* **2**: 283-290.
16. Ritzer, G. (1993). *The McDonaldization of Society*. London: Sage.
17. Ritzer, G. (2004). *The Globalization of Nothing*. Thousand Oaks, CA: Pine Forge.
18. Ritzer, G (ed.) (2002). *McDonaldization: The Reader*. Thousand Oaks, CA: Pine Forge.
19. Ritzer G (ed.) (2007). *The Blackwell Companion to Globalization*. Oxford: Blackwell Publishing Ltd.
20. Sklair L (1991). *Sociology of the Global System*. Baltimore, MD: The Johns Hopkins University Press.
21. Sklair L (1998). "Social movements and Global Capitalism". In: F Jameson and M Miyoshi (eds). *The Cultures of Globalization*. Durham, NC: Duke University Press, pp. 291–311.
22. Thornton A (2001). "The Development Paradigm, Reading History Sideways, and Family Change". *Demography* **38**(4):449–465.
23. Tomlinson, J. (1999). *Globalization and Culture*. Chicago, IL: University of Chicago Press.
24. United Nations Development Program (1998). "Overview: Changing Today's Consumption". Available at: http://hdr.undp.org/en/media/hdr_1998_en_overview.pdf (accessed 8 March 2018).
25. Waters M (1995). *Globalization*. New York: Routledge.
26. World Bank (2007). *Bangladesh: Strategy for Sustained Growth*. Bangladesh Development Series Paper No. **18**. Dhaka, Available at: <http://www.gbv.de/dms/zbw/560334621.pdf> (accessed 19 March 2018).

GROWTH AND SIGNIFICANCE OF ADVERTISING: CHALLENGES & OPPORTUNITIES

*Afsana Rashid**

ABSTRACT

Advertising plays a key role in the contemporary society wherein it has become a necessity and a part of daily life that is often driven by markets, competition and other competitive challenges. Advertising has become a crucial marketing tool especially with the emergence of new and convergent media. Apart from performing various functions like promotion of sales, introduction of new product/service, creation of good public image, educating people; advertising encourages competition and develops standard of living. Sometimes it misleads and misrepresents facts and cheats its customers putting customer satisfaction and customer service on margins. This is where need for regulating advertisements arises to uphold customer service and satisfaction.

Advertising is an old profession. Its history dates back to ancient Greece and Rome where signs were used to carry information for advertising goods and services. These signs consisted of illustrations of symbols of the products advertised. Afterwards printing signs were replaced by written words and advertising began appearing in print and broadcast media. Nowadays, advertising has assumed a central stage in almost every human activity and crores of rupees are spent on this creative activity. Though multiple laws are available in Indian context to support customers but in the absence of specific and well-spelt out regulatory framework or legislation, problems get multiplied. Consequently, need for uniform legislation regulating advertising industry across the country has been immensely felt. The paper deliberates upon the manifold facets of the world of advertising.

Keywords: Advertising, ASCI code, Business strategy, Consumers.

INTRODUCTION

Advertisements play a significant role in building up any business. Its aim is not only to make profits but enhance the visibility of products and services among the consumers.

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An advertisement helps a company to build an image in the minds of the people and at the same time informs and educates potential consumers about products, services, ideas, goods etc. Companies spend huge amount of resources on advertising and promotional strategies. The Institute of Practitioners in Advertising (IPA) defines advertising as, “The means of providing the most persuasive possible selling message to the right prospects at the lowest possible cost”. Advertising, as such, is accepted as an important part of any social system that depends absolutely on its power to communicate and to persuade.

Though advertising is the dissemination of information concerning an idea, service or product to compel action in accordance with the interest of the advertiser, but it has been variously defined as: “Truth Well Told” by McCann Erickson and “a business force, which through printed words, sells or helps sale, build reputation and fosters goodwill,” by Seldon. “Advertising like salesmanship is an attempt to influence the thoughts and action of people,” John V.W. stated. Canor and Wichart explained that advertising included “those visual or oral messages in magazines, newspapers, movies and letters, over radio and television and on transportation vehicles and outdoor signs which are paid by their sponsors and directed to consumers for purpose of influencing their purchases and attitudes”. Frank Jefkin in his book *‘Advertising Today’* defined advertising as the “dissemination of information concerning an idea, service or product to compel action in accordance with the interest of the advertiser.”

At the beginning of the twentieth century, Albert Lasker, who is regarded as the father of modern advertising, owned a prominent advertising agency, Lord & Thomas. He defined advertising as “salesmanship in print, driven by a reason why” but that was long before the advent of radio, television or the internet when the nature and scope of business world and advertising were quite limited. American Marketing Association (1948) defined advertising as any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor. William J. Stanton defined advertising as consisting of all the activities involved in presenting to an audience a non-personal, sponsor-identified, paid-for message about a product or organization.

Advertising is a business strategy which is in fact a powerful tool for enhancing, maintaining and developing brand equity. Advertising not only helps in introducing a new product, service or idea in the market but it enhances sales and goodwill, educates consumers, fights competition, expand and strengthens markets, provides more employment opportunities and improves standard and quality of life. The benefits derived from advertising are manifold and it is a powerful communication force and vital marketing tool that facilitates in selling goods, services, images and ideas through channels of information and persuasion.

Advance in internet technology has evolved the business world in number of ways including taking advertising techniques to a new level. Marketers as such use the power and potential of the internet to reach their target markets in a more innovative, creative and personal manner. Advertising on internet is more cost-effective as it can be viewed by millions of people worldwide.

Advertising is the best way to communicate to the customers. It is a very artistic way of communicating with them. Communication skills and convincing power are vital for achieving

the objectives of advertising. It informs the customers about the availability of brands in the market and the variety of products useful to them. Advertising is for everybody and is done using various media types with different methods and techniques.

Advertising helps in promotion of sales as it promotes the sale of goods and services by informing and persuading the people to buy them. It also helps in introduction of new product by highlighting its features and usage. Without the help of advertising, a new business venture cannot make an impact on the prospective customers. Advertising helps in quick publicity of the product/service in the market. It educates people about new products and their uses and helps people in adopting new ways of life and enhances their standard of living. It also enables a company to communicate its achievements to the customers in an effort to satisfy their needs and helps in creating a good corporate and public image.

The main purpose of advertising is to persuade the audience to take some action, which is usually buying the product. One of the ways by which advertising does this is by creating a feeling that there is some special value in a product/service that prompts the consumer for action. Advertising usually constitutes a part of the marketing efforts of an organization. It is undertaken by the organization to attract the attention of people towards its products/services. The basic purpose of advertising is to create awareness among the people about the availability of products and services and influence them to purchase the products and services and enhance the sales. Thus, advertising complements and supplements the company's selling efforts. The various purposes of advertising as follow;

- Advertising plays a significant role in updating consumers about new innovations and inventions, new goods and services that enter the market. Thus, consumers are provided information about new products and services through advertising;
- Advertising seeks to create and sustain demand for a product or service after arousing interest of the people, attracting their attention and consequently, expanding the market;
- Advertisements provide adequate knowledge to the people about the usage and utility of several products and services, which in turn, educates consumers in making wise purchase decisions. Thus, advertising helps in creating an image both for products as well as for the organization;
- Advertisements provide consumers a chance to get better quality, enhanced services and improved facilities.

The History of Advertising

Global scenario: The origin of advertising dates back to thousands of years. One of the first known methods of advertising was an outdoor display, usually an eye-catching sign painted on the wall of a building. Archaeologists have uncovered many such signs, notably in the ruins of ancient Rome and Pompeii. Almost three thousand years ago, papyrus sheets were used in Egypt for announcing the reward for return of runaway slaves. A simple but effective form of advertising was very popular during the medieval times. Merchants employed 'town criers' who shouted the praises of merchants' wares and the arrival of trade-ships. With invention of printing press by Johannes Gutenberg in 1445 A.D., printed advertising came into being.

Advertisements however, were passive and limited in scope. A new era of advertising began in 1880s as new methods of manufacturing led to greatly increased outputs and decreased costs for the producers of consumer goods. Later, the telegraph network came into existence and a network of rail-roads necessitated the growth of advertising agencies and dictated their activities. The patent medicines had been the most widely advertised consumer products at that time.

Broadly speaking the history of advertising has been divided into six periods:

- a. Pre-printing period (prior to the 15th century)
- b. Early printing period (from the 15th century to about 1840 A.D.)
- c. Period of Expansion (1840 A.D. to 1900 A.D.)
- d. Period of Consolidation (1900 A.D. to 1925 A.D.)
- e. Period of Scientific Development (1925 A.D. to 1945 A.D.)
- f. Period of Business and Social Integration (1945 A.D. to the present)

Pre-printing period: The 'Town crier' was the first means of supplementing sign advertising during the pre-printing period. The 'criers' had charters from the government and were often organized in a sort of union. Their numbers were usually restricted. In the province of Berry in France, in the year 1141 A.D., twelve 'criers' organized a company and obtained a charter from Louis VII giving them the exclusive privileges of town crying in the province. The Power of commercial criers grew until they were able in some instances to obtain an edict from the ruler of the land forcing shopkeepers to employ a 'crier'.

Early Printing period: The invention of the printing press and the revival of learning led to the production of advertisements in large quantities for wide distribution. The first printed English advertisement was a 'handbill' or 'poster' announcement written by William Caxton in 1472 A.D. The growth of advertising during this period paralleled the increase in population and in the number of periodicals and newspapers in circulation in both Europe and the United States. However, in 1712 A.D., England levied tax on newspapers and advertising, which had a great setback on the growth of newspapers and the advertisements in newspapers. In England, the taxes on both newspapers and advertisements were abolished in 1853 A.D. The circulation of newspapers in the United States, where no tax was imposed, was much greater than in England during that period. Consequently, more advertisements emerged in the United States as compared to England. Printed advertising was generally in use till the end of the 18th century.

Period of Expansion: This period roughly stretches to 60 years between 1840 A.D. and 1900 A.D. It was during these six decades that great changes were witnessed in the business of advertising in the United States. By 1840 A.D., railroads in the United States were recognized as an efficient means of transportation that led to broadening of markets and resulted in an increase in number of advertisements in magazines. The growth in the numbers and the circulation of magazines were mainly due to development of rapid and long distance transportation and the increased revenue from the sale of advertising space. Advertisements during that period were

mostly trade advertisements announcing the arrival of shipments of coffee, tea, silk cloth etc. Advertisements were mostly handled by printers and publishers of newspapers, who used to sell advertisement space to procure necessary finances for their survival and growth. Many of the advertisements during this period were of the classified variety. Emergence of consumer market during mid-19th century gave rise to the modern marketing system that led to the emergence of consumer advertisements. The development of chromo-lithography, especially in Germany, enabled the use of colour picture that made advertisements more appealing and eye-catching. The late 19th and early 20th century also witnessed the appearance of consumer product advertisements such as tooth pastes, shampoos, ready-made dresses, etc. in magazines.

Period of Consolidation: This period stretched over a period of 25 years from 1900 A.D. to 1925 A.D. Printers Ink Inc., the Curtis Publishing Company and other organizations led the fight to reduce or eliminate the use of gross exaggeration, false testimonials and other forms of misleading and untruthful advertising. The Associated Advertising Clubs of America helped in launching a campaign to promote truthful and ethical advertising. Consequently, several codes for truth in advertising were devised. The establishment of Audit Bureau of Circulations in 1914 was a step in this direction. Later, several advertising organizations such as Advertising Federation of America, American Association of Advertising Agencies, Association of National Advertisers, Direct Mail Advertising Association, Outdoor Advertising Association and others were formed. These groups tended to give a semi-professional character to the advertising business. The advent of Radio in 1920 marked a remarkable development in the advertising world as it could directly convey advertisers' message to the consumers.

Period of Scientific Development: This period saw the application of scientific methods to make advertising more creative and effective. Many agencies and organizations paid serious attention towards media-planning and copy-writing.

Period of Business and Social Integration: This period is characterized by prosperity in advertising. In the 1950s came Television and its growing popularity as an important media of mass communication and recreation contributed greatly to the advertising business. This led to a host of American companies to start sponsoring Television programmes wherein the advertisers could demonstrate use of their products and services and present figures in support of their products and services. As time passed by, advertising assumed a vital position as a means of mass communication in industrial societies. It not only generated greater sales but also played an active role in boosting the images of companies. Today, advertising trends may vary from country-to-country but it is widespread all over the world. Market research and readership surveys have led to further professionalization of the advertising industry. Television Rating Points, popularly known as TRPs, provided advertising agencies with statistical data on consumer/viewer likes and dislikes and helped them create effective media plans and ad campaigns.

Indian context: Literally the Indian advertising started with the hawkers calling out their wares right from the days when cities and markets first began. Advertising was not taken for business purposes till the advent of British rule in India. The first printing press was brought in India by Portuguese in 1556 A.D. In 1780 A.D., the first Indian newspaper '*Bengal Gazette*' was started in Calcutta and by 1786 A.D., there were four weekly newspapers and a few

monthlies published from Calcutta. All government advertisements during that period were published in the 'Bengal Journal'.

The origin of commercial advertising in India is relatively recent. B. Dattaram and Co. was the first advertising agency promoted in the country in 1905 A.D. Only a few companies were engaged in the business of advertising on an unprofessional basis and had remained almost confined to the media buying services with very little creative work. Until the outbreak of World War 1 (1914-1918 A.D.), most of the advertising was planned and placed by the foreign manufacturers. During the post-war period Indian market was flooded with foreign goods that gave a lot of spurt to newspaper advertising. In 1918 A.D. the first professionally managed modern advertising agency, 'Tats Publicity' was started by Lastromach, a British army officer in Bombay, followed by D. Jekey More's operation in 1929. The pre-independence advertisements were mostly about ladies' goods, gents' clothes, travelling, restaurants and hotels and entertainments for the British people in India. In 1945 A.D., the Association of Advertising Agencies of India (AAAI) was formed to raise the standard of advertising and regulation of advertising practices through a code of conduct. In 1948 A.D., Audit Bureau of Circulations of India was started on the lines of ABC of America. In 1952 A.D., the Indian Society of Advertisers was formed to promote the interests of advertisers so as to raise the standard of Indian advertising. After independence, the Five Year Plans were implemented and several factories and large-scale projects emerged that increased production and transportation facilities, which marked the beginning of the 'Golden Age' of advertising in India.

The Indian advertising industry has evolved from a small-scale business to a full-fledged industry. The advertising industry is projected to be the second fastest growing advertising market in Asia after China. It was estimated that by 2018 A.D., the share of ad spend in India's Gross Domestic Product (GDP) will be around 0.45 percent. By 2017 A.D., Indian advertising industry was estimated to be Rs 63,000 crore (US\$10 billion) with both print and Television having a share of 38-40 percent each.

Keeping in view, the role and significance of advertising and its position in the current scenario, several issues are involved in advertising. Some of them are:

Deceptive Advertising: As advertisements aim to influence or persuade customers into buying products, many a times they use false statements and misrepresentations about their products, which is in violation to customers' right to know exactly what they are purchasing.

Misleading Prices: Companies often hide or fudge prices of products/services advertised in order to attract a larger customer base. The prices they advertise often do not disclose additional charges and the overall cost to the customer. Such advertisements are commonly found in the airlines, mobile telephony industry and memberships for clubs.

Failure to maintain standards: At times, companies/service-providers cleverly bypass established standards applicable to the products by adopting a different standard which provides a sense of enhanced efficacy of the goods/services in the mind of the customer so as to get an edge over its competitors.

Labeling issues: Labeling on products can also be misleading. They may, at times, mis-

represent the actual weight of the packets or adopt a different standard of measurement contrary to the generally accepted standards. The packaging of products may also use exotic high sounding words such as “organic”, “eco-friendly”, “natural” etc. At times such terms are used for the products that have nothing to do with such concepts.

Surrogate Advertisements: In case of restricted or banned items like tobacco or liquor, the manufacturers tend to launch new products with similar brand names so as to reinforce or sustain the banned products/advertisements.

Keeping in view the importance and significance of advertising, it is vital for companies to ensure that advertisements are in line with the applicable laws. Though there is no full-fledged law in the country to regulate advertisements in any media, but a series of legislations and regulations relate to advertisements.

ADVERTISING LAWS IN INDIA: AN OVERVIEW

Regulating advertising is all the more important. The Government of India has not set up a regulatory body to regulate advertisements, though numerous legislations deal with various provisions of advertisement. Depending on the nature of grievances and complaints on account of consumers, the power to regulate advertisements may be exercised by a vast variety of authorities, including the courts, Central and State Governments, tribunals etc.

There are several laws in India that relate to advertising. Some of which are:

Consumer Protection Act, 1986: False advertisements, misrepresentations of facts or false allurements can be dealt under the provisions of this Act. Section 6 of the Act grants consumers the right to be informed about the quality, quantity, potency, purity, standard and price of goods or services, as the case may be so as to protect the consumer against unfair trade practices.

The Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 and the Cigarettes (Regulation of Production, Supply and Distribution) Act, 1975 states that no person shall advertise for the distribution, sale or supply of cigarettes, and also shall not take part in the publication of such advertisement, unless the specified warning is included in such advertisement

Cable Television Networks (Regulations) Act, 1995 and Cable Television Networks (Amendment) Rules, 2006: Section 6 of the Cable Television Networks (Regulations) Act, 1995 provides that no person shall transmit or re-transmit through a cable service any advertisement unless such advertisement is in conformity with the advertisement code prescribed under the Cable Television Networks (Amendment) Rules, 2006. Rule 7 of the Cable Television Networks (Amendment) Rules, 2006 lays down the ‘Advertising Code’ for cable services to ensure that advertisements do not offend morality, decency and religious susceptibilities of the subscribers.

Doordarshan/ All India Radio (AIR) Advertisement Code: Doordarshan and AIR, both under the control of Prasar Bharati (a statutory autonomous body established under the Prasar Bharati Act), follow a comprehensive code for commercial advertisements that control the content and nature of advertisements that can be relayed over the agencies.

The Drugs and Magic Remedies (Objectionable Advertisement) Act, 1954 controls the advertisement of such drugs which is said to provide magical remedies and to deal with other matters relating to it.

The Drugs and Cosmetics Act, 1940: Section 29 of the Act imposes penalty upon whoever uses any report of a test or analysis made by the Central Drugs Laboratory or by a Government Analyst, or any extract from such report, for the purpose of advertising any drug.

The Emblems and Names (Prevention of Improper Use) Act, 1950 was enacted to prevent the improper use of certain emblems and names, for professional and commercial purposes.

Food Safety and Standards Act, 2006: Section 53 of the Act provides a penalty of up to Rs. 10 lakhs for false and misleading advertisements relating to the description, nature, substance or quality of any food.

Indecent Representation of Women (Prohibition) Act, 1986: Section 3 and 4 of the Act is aimed at prohibiting indecent representation of women through advertisements or in publications, writings, paintings, figures or in any other manner and for matters connected therewith or incidental thereto.

The Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994: Advertisement in any manner regarding facilities of pre-natal determination of sex available at any genetic counseling centre, laboratory, clinic or any other place is prohibited under the Act and has been made a punishable offence under the Act.

The Young Persons (Harmful Publications) Act, 1956: Section 3 of the Act imposes penalty for advertising or making known by any means whatsoever that any harmful publication can be procured from or through any person.

The Representation of People Act, 1951: The display to the public of any election matter by means of cinematograph, television or other similar apparatus in any polling area during the period of 48 hours ending with the time fixed for the conclusion of the poll for any election in the polling area is prohibited under the Act.

The Transplantation of Human Organs Act, 1994 provides for the regulation of removal, storage and transplantation of human organs for therapeutic purposes and for prevention of commercial dealings in human organs and for matters relating to it and provisions are there for the punishment for commercial dealings in human organs.

The Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992 as amended in 2003 regulates the production, supply and distribution of infant milk substitutes, feeding bottles and infant foods with a view for protecting and promoting breastfeeding and for matters relating to it including advertisement of the same.

The other rules, regulations and legislations include Information Technology Act, 2000; the Lotteries (Regulation) Act, 1998; the Competition Act, 2002; the Civil Defense Act, 1968 etc. Despite the availability of these laws, there is need for full-fledged and exclusive law/guidelines to regulate the functioning of advertising business.

REGULATORY AUTHORITIES

To ensure fairness and competitiveness in advertising, Advertising Standards Council of India (ASCI) was established in 1985. Being a voluntary organization, ASCI has drawn up a code for self-regulation in advertising industry with an objective to achieve acceptance of fair advertising practices in the interests of consumers. ASCI seeks to ensure that advertisements conform to its Code for self-regulation, which requires advertisements to be legal, decent, honest and truthful and not hazardous or harmful while observing fairness in competition. The ASCI also lays down similar codes for advertisements in specific sectors/industries from time to time. However, the codes are self-imposed discipline to be followed by those involved in the industry and in no way are the codes mandatory. As such, compliance with the code is rare and very few complaints are actually received by ASCI. The ASCI deal with complaints received from consumers and industry against such advertisements that are false, misleading, indecent, illegal, or unfair or in contravention to the advertising code.

According to the ASCI code, complaints against deviant advertisements can be made by any person who considers them to be false, misleading, offensive, or unfair. The Consumer Complaints Council (CCC) considers and decides on the complaints received from the general public including government officials and even *suo moto* complaints from the member of the ASCI Board or CCC. The Reserve Bank of India, Securities and Exchange Board of India (SEBI) and Insurance Regulatory and Development Authority (IRDA) are some of the other regulatory authorities that regulate advertisements in their respective fields.

NEED FOR UNIFORM LEGISLATION

H.G. Wells once famously said that advertising was legalized lying. This reflected the dilemma on advertising and its effect on consumers. The dilemma becomes more strengthened in an era of competitive world where every organization wants to win-over and attract the attention of more consumers. In the process, advertisements sometimes tend to exaggerate and misrepresent facts. This is where the legal system ought to strengthen itself for the overall benefit of the society.

Keeping in view the above discussion, it can be said that even if there are multiple laws pertaining to advertisements, hardly any specific legislation governs advertising in the country, other than ASCI. The absence of a single statutory regulatory body enhances need for a comprehensive law/regulation on advertising in all forms of media which would act as a one-stop window for all matters related to advertising. It would be like a uniform code mandatory on all advertising agencies and in case of any default or misrepresentation of facts, consumers or other relevant stakeholder could approach it for necessary action.

Besides, the changing context of globalization and the era of e-connectivity further emphasize need for regulation and strengthening of such steps. Consequently, there is a need for uniform legislation regulating advertising industry in the country.

Consumers are the people who buy the product only after they are made aware of the products available in the market. If the product is not advertised, no customer will come to know what products are available and will not buy the product even if the product was for

their benefit. It also helps people find the best products for themselves, their children and their family. Advertising is important for the seller and companies producing the products as it help increase their sales and it is also important for the society as it helps in educating people and generating awareness among them. But in view of its importance, advertising ought to be well-regulated by an effective mechanism to maintain accountability and transparency. The slogan 'Customer is the King' should be the underlying factor in the entire business of advertisement. It should be implemented in letter and spirit and every effort should be made to legally empower the consumers.

REFERENCES

1. Aggarwal, Vir Bala & Gupta, V S. (2001). *Handbook of Journalism and Mass Communication*. New Delhi: Concept Publishing Company.
2. Arens, William F. (2002). *Contemporary Advertising* (Eighth edition), Boston, London: McGraw-Hill/ Irwin.
3. Chand, Smriti (n.d.). *History of Advertising in India since 18th Century*. Available at <http://www.yourarticlelibrary.com/advertising/history-of-advertising-in-india-since-18th-century/22252/>
4. Jethwaney, Jaishri & Jain, Shruti (2006). *Advertising Management*. New York: Oxford University Press.
5. Kaptan, Sanjay & Acharya, Akhilesh (2000). *Advertisement in Print Media*. Jaipur: Book Enclave
6. Rao, Harita & Rao, Gurram Ramachandra (2003). *India: Advertisement and Copyright Protection*. Available at <http://www.mondaq.com/india/x/20565/advertising+marketing+branding/Advertisement+and+Copyright+Protection>

WEBSITES

1. Advertising and Marketing Industry in India <https://www.ibef.org/industry/advertising-marketing-india.aspx>
2. Advertising Laws in India: An overview. <https://www.lawteacher.net/free-law-essays/commercial-law/advertising-laws-in-india-law-essays.php>
3. Advertising Standards Council of India (ASCI). <https://www.ascionline.org/>
4. Bee Hive Digital Concepts for Mahatma Gandhi University Kottayam, Available at <https://www.scribd.com/doc/118469856/history-of-advertising>
5. Module on Advertising and Public Relations <http://download.nos.org/srsec335new/ch17.pdf>

AN ANALYTICAL STUDY OF ONLINE ADMISSION SYSTEM IN IGNOU FROM LEARNERS' POINT OF VIEW

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ABSTRACT

Indira Gandhi National Open University (IGNOU) is offering around 225 certificate, diploma, degree and master programmes for distance learners. Admission in these programmes is done twice in a year i.e. January and July sessions. Keeping pace with the changing technological environment and need of the hour, IGNOU has designed and developed an Online Admission System (OAS) which was launched in May 2015. Besides certain innovative features, the new system of admission is student friendly, cost effective and time saving on the part of the students as well as the university. However, being the new and technology based system of admission, the OAS has certain limitations and challenges also. In order to get the first hand feedback and to investigate learners' perspective, an analytical study of the OAS has been done. Besides analysing the responses of the users on various components of the online admission, the present paper has also analysed the technological preference of the students. The result spurs interesting insights into the online admission system and suggests the scope of improvement in the OAS.

Keywords: Offline Admission, Online Admission System, Open and Distance Learning, Satisfaction of the Learners.

INTRODUCTION

Admission is the first and very important step of the student life cycle in an educational institute. Particularly, in an Open and Distance Learning (ODL) system like the Indira Gandhi National Open University (IGNOU) where students have varied socio-economic background and geographical spread, it becomes more important to make the admission system more student friendly and make it more accessible for them. Evidently, the increased use of Information and Communication Technology (ICT) has increased the accessibility of ODL system by way

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of introducing the technology enabled admission system. Exploiting the potential of ICT, the IGNOU has not only developed technology enabled teaching-learning system, but it has introduced ICT enabled admission and evaluation system also.

At present, IGNOU offers around 225 programmes in about 30 established disciplines and a few inter-disciplinary areas through a network of study centres under direct supervision and guidance of the regional centres spread in difficult parts of the country. In order to reach out to the unreached marginalized and disadvantaged group of learners, IGNOU has been making special and innovative efforts. The specific efforts made by the University for providing educational opportunities to all irrespective of their gender, caste, religion, socio-economic and geographical background, include the use of technology to increase accessibility, improve teaching-learning and support services. Recognising the potential of technology and need for increasing accessibility, the university has introduced a scheme of online admission. It provides education and effective support services to the unreached students through established regional centres and study centres across the country. Millions of learners have been benefited by enrolling themselves through IGNOU for higher education and lifelong learning.¹

The traditional offline admission system at IGNOU has certain limitations. To overcome these limitations, the online admission system of IGNOU was designed and developed in 2015. An integrated admission system has both offline & online admission systems to facilitate the students who do not have the desired facilities to register through online admission system. This model captures the student data from OAS and enable to integrate it with existing IGNOU Student Database Management System (ISMS) at IGNOU for all programmes covered in common prospectus.² This OAS platform has been designed, developed, tested and successfully implemented for July-2015, January-2016, July-2016, and January- 2017 cycles of admission.³ From July-2016, provision for Online Re-registration was also introduced for BA, B.Com, B.Sc, B.SW and BTS programmes. The increasing number of students opting for OAS indicates the usefulness and effectiveness of the system. The admission data for different admission sessions shows that total 1,43,649 and 31,311 students got enrolled during July-2015, and January-2016 respectively. For July- 2016 cycle, 16,465 have re-registered and 80,179 got admission January- 2017 session.

In order to get first hand feedback and suggestions on OAS, a feedback study was conducted for a sample of 1145 students.⁴ For generalising the study and evaluating the impact of corrective measures, a research on the perception of the prospective students on Online Admission System in IGNOU has been carried out.

The review of literature reveals that over the years, the offline admission system has certain problems and limitations.⁵ A number of innovative measures have been taken to resolve the problems associated with the offline admission system and to make it more learners friendly.⁶ The use of ICT in the field of education has revolutionized the teaching-learning, evaluation and support system.⁷ Accessibility has always been a concern, particularly in the ODL System.⁸ The use of ICT has enhanced flexibility in the interface between learners and teachers of various educational activities which are more interactive, individualized accessible to the online environment.⁹ Many conventional universities have integrated ICT in their activities. One of major integration is admission through online.⁵ Moreover, as per the recent order of the

University Grant Commission (UGC), all the central universities are required to implement Online Admission System for all the programmes.

While intrinsically associated with the Online Admission System in IGNOU, it has been observed that on one side this system has lot of advantages for the students, but on the other side it has certain limitations and scope of improvement.¹⁰University faces bottlenecks of infrastructure,¹¹ data security and authentication.¹²The present study deals with the perception of students on online admission system and also critically analyses the technical preferences of the users of OAS.

OBJECTIVES OF THE STUDY

The basic objectives of the present analytical study of the online admission system in IGNOU include:

- To study the perception of the learners about the Online Admission System in IGNOU;
- To analyse the technical preferences of the students while using the OAS, and
- To give suggestions for further improvement of the OAS in IGNOU.

RESEARCH DESIGN AND METHODOLOGY

The present study includes two different types of samples having primary feedback data collected directly from the students through online feedback survey form. While the other sample includes secondary data on technical preferences of the users obtained from the back end database i.e. the payment gateway, in the case.

After implementation of the Online Admission System in IGNOU, a feedback data was collected between July, 2016 to Sept. 2016 for the July-2016 admission session.⁴ The data was critically analysed and related issues and problems were identified. Accordingly, as per the feedback and suggestions of the students, corrective measures were taken to improve and modify the OAS software and support service. Thereafter, the similar online mechanism was executed to collect the feedback system during November-December, 2016 for the January-2017 admission session. A four point rating scale having nine components of the online admission system was uploaded on the OAS web-portal in digital form. During the period of study, more than 7000 students responded and submitted their feedback forms. But only 5033 responses were found complete in all respect. Thus, these 5033 students form the sample of the present study pertaining to the various components of OAS. The responses of the students on the nine components of the OAS are presented in the Table1.

ANALYSIS OF DATA AND RESULTS

The data collected in the present study has been analyzed both quantitatively and qualitatively. Users perception of Online Admission System and related support services in IGNOU has been studied in details and the findings reveals that the scheme of Online Admission has been appreciated by almost all users. However, they have given certain suggestions also for improving the system.

As the new system of admission is technology-mediated system, it was noticed that different users have different technological preferences. Therefore, the secondary data collected from

backend sources have also been analysed and discussed in the next section. An analytical details and findings of the present study are discussed below:

User's Perception of Online Admission System / Feedback Companion of Two Sessions

The questionnaire had nine items covering different aspects of Online Admission System focused on assessing the users' perception on ease of using the online admission system including its accessibility, ease of navigation, payment and other support services. The responses to all the items of the feedback questionnaire have been analyzed and learners' perception of the Online Admission System in IGNOU is reported in the Table 1.

Table 1: Students' Responses on Various Components of OAS for January-2017 and July-2016(parenthesis) Admission Sessions

Feedback Questions	Poor (%)	Average (%)	Good (%)	Excellent (%)
Overall Look & Feel about the OAS portal	4.63 (2.56)	33.06 (20.21)	21.36 (30.31)	40.95 (46.92)
Ease of Navigation of the OAS Website	5.07 (2.84)	33.18 (22.77)	24.20 (30.73)	37.55 (43.67)
Ease of filling the online admission form	4.77 (2.08)	28.29 (16.61)	18.16 (26.09)	48.78 (55.22)
Content and Information about OAS	6.76 (4.57)	29.29 (20.83)	22.95 (27.34)	41.01 (47.27)
Document uploading system on OAS portal	9.76 (3.74)	25.87 (15.50)	18.56 (24.29)	45.82 (56.47)
Photo & Signature uploading on OAS portal	5.42 (3.11)	26.56 (12.87)	16.89 (23.39)	51.12 (60.62)
Online Payment for OAS	4.85 (40.55)	25.23 (37.51)	13.61 (17.65)	56.31 (4.29)
Telephone Helpdesk for OAS	38.72 (33.91)	23.90 (24.08)	19.91 (23.60)	17.46 (18.41)
Email Support for OAS	23.07 (21.04)	27.62 (21.59)	20.17 (26.99)	29.15 (30.38)

In order to compare the changes, if any in the perception of the students about different components of the OAS, the students' response during July- 2016 admission session as reported in the earlier study⁴ has also been given in the parenthesis in the Table1.

The analysis of the data reported in the Table 1 shows two very interesting trends. The first trend is that there is a drastic improvement in the online payment system for OAS during January- 2017 admission cycle as compared to the same for July- 2016 admission cycle. During July- 2016 admission, only 4.29% students had reported it excellent, but during January- 2017 admission session, 56.31% students have found it excellent. But unfortunately in all other aspects of OAS as reported in the Table1, it is noticed that there is a decline in the responses of students of January- 2016 cycle saying as 'excellent' as compared to July- 2016 admission session. It needs to be investigated further to find out the reasons for this kind of declining trend.

User's Technical Preferences on Online Admission system

As the online admission system is a technology-driven admission system, the backend data of the registered students was also collected and analyzed to assess the users' technical preferences of online admission system. The secondary data included total 99,109 students which had 31,302 students of July- 2016 admission session and 67,807 students of January, 2017 session. Their technical preferences have been analysed in the next section. In this study, it has been tried to find out about the preference of user's operating system while accessing the online admission system and also to know about using the browsers and preference of mode of online payment. The technical preferences and findings pertaining to OAS are discussed below:

a) Preference of Using Operating system for OAS

The percentage wise details of using operating system and device by the users of online admission system while submitting their online application is given in Table 2.

Table 2: Students Preference of Using Operating System for OAS

Operating System	Checkout Failure Rate	Cancel Rate	Forward Rate	Fail Rate	Success Rate	Total (%)
Windows	3%	6%	17%	8%	63%	81%
Android	6%	8%	23%	11%	48%	17%
iPhone	4%	8%	20%	7%	58%	1%
Mac OS	4%	5%	13%	5%	72%	1%

The data given in the Table 2 reveals that majority of users (81%) preferred Windows operating system for using online admission system. The success rate of using Windows operating system has been 63%. The Android operating system has been the second best preference (17%) for transacting through online admission system. In this case the success rate is 48%. In addition to it, iPhone and Mac operating systems have also been used (each 1%) for transaction on online admission system. Here, it is important to mention that the success rate in case of Mac operating system has been the best (72%) among all the operating systems.

The data shows that some of the users have Windows mobile and Blackberry also. But in these cases the transactions have been cancelled, forwarded or failed. But it indicates that some of the users want to use mobile devices also for operating the online admission system.

b) Preference of using Browser for OAS

As the Online Admission System is an internet based application, Table 3 shows that the users have used different browsers for accessing the OAS in IGNOU.

Table 3: Students' Preference for Using Browser for OAS

Browser	Checkout Failure Rate	Cancel Rate	Forward Rate	Failure Rate	Success Rate	Total Txns (%)
Chrome PC	11%	11%	17%	5%	55%	79%
Firefox	13%	11%	14%	4%	58%	15%
Safari (Mobile)	22%	11%	24%	9%	33%	6%
Safari (PC)	11%	11%	--	--	78%	0%
Opera (PC)	--	--	50%	--	51%	0%

The browser- wise transaction data given in the Table 3 shows that majority of the users (79%) have preferred to use Chrome browser, followed by Firefox (15%) and Safari through mobile (6%). It is also noticed that the users tried to use Safari and Opera browsers also through their Personal Computers. But their transactions could not be completed. The success rate of Chrome (PC), Firefox and Safari (Mobile) browsers have been 55%, 58% and 33% respectively. It is interesting to note that majority of users (79%) preferred chrome browser, but its success rate (55%) is less than that for Firefox (58%). Here it is important to mention that the Internet Explorer is one of the widely used browsers in India. But because of certain limitations, the online admission system in IGNOU has not been made compatible to the Internet Explorer. The compatibility issues related to at least the widely used browsers need to be addressd.

c) Preference of Using Mode of Online Payment

The analysis of the data on mode of online payments shows that the users have used mainly three modes of online payment which includes debit card, credit card and net-banking. The percentage of using different modes of online transaction is given in Table 4.

Table 4: Students' Preference of Using Browser for OAS

Mode of payment	No. of Candidates	%
Debit Card	2344	40.55
Credit Card	1020	17.65
Net-Banking	2416	41.80
Total	5780	100.00

The analysis of the feedback on mode of online payment for online admission system given in the Table 4 reveals that majority of candidates- (41.80%) used net banking, followed by 40.55% students using debit cards and 17.65% using credit cards. It is important to note that the payment service of OAS needs to be looked into seriously to ensure the ease of services for the students. Since the students may have limited access to credit/debit cards or net banking, alternative arrangement may be considered for payment. Similarly support services through telephone and email services may also be improved to provide better utilization of OAS in real time.

**Table 5: Preference of Bank while Using Net banking,
Credit Card and Debit Card**

S. No.	Bank Name	Total Transaction %			Success of Transaction %		
		Net Banking	Credit Card	Debit Card	Net Banking	Credit Card	Debit Card
1.	SBI Bank	70%	26%	40%	29%	98%	75%
2.	HDFC Bank	8%	25%	9%	76%	95%	97%
3.	ICICI Bank	7%	17%	5%	63%	89%	86%
4.	AXIS Bank	5%	8%	5%	58%	100%	90%
5.	PNB Retail	2%	1%	10%	46%	100%	82%
6.	Union Bank	2%			52%		
7.	Kotak Mahindra Bank	1%	5%	2%	92%	88%	100%
8.	Corporation Bank	1%	--	--	50%	--	--
9.	IDBI Bank	1%		2%	70%		67%
10.	State Bank of Travancore	1%	--	--	63%	--	--
11.	Indian Bank	1%	--	--	29%	--	--
12.	Indian Overseas Bank	1%	--	--	100%	--	--
13.	YES Bank	0%	0%	0%	0%	0%	0%
14.	State Bank of Bikaner and Jaipur	0%	0%	0%	0%	0%	0%
15.	State Bank of Hyderabad	0%	0%	0%	0%	0%	0%
16.	CITI Bank	0%	13%	1%	0%	82%	100%
17.	Standard Chartered Bank	0%	3%	1%	0%	80%	100%
18.	Canara Bank	0%	1%	4%	0%	100%	79%
19.	HSBC Bank	0%	1%	0%	0%	100%	100%
20.	Bank of Baroda	0%	0%	9%	0%	0%	44%
21.	SBI (Maestro)	0%	0%	7%	0%	0%	54%
22.	Bank of India	0%	0%	5%	0%	0%	80%

Perception on Support Services

The success of any new scheme lies in the timely and effective support service. For this purpose, the IGNOU had provisioned for three types of support services for online admission system – first through telephonic support through 24x7 helpdesk, second through e-mail support and the third type of support was through face-to face helpdesk at the Headquarters as well as all the Regional Centres. In the present study, users' feedback was sought on the effectiveness of the telephonic helpdesk and the email support. The 73.15% of the users found the services provided by the telephone helpdesk average or above average, whereas 36.75% users found it poor, which is a matter of serious concern and demands improvement in the services of telephone helpdesk. However, 18.41% users have reported it to be excellent support. Similarly, while responding about the email support regarding online admission system, about 42.08% users say that it was poor, whereas 23.32% find it average, 19.03% good and 15.57% say that it was excellent. Here again it necessitates for improving the email support for online admission system.

Mode of getting Information about OAS

As the OAS in the university was new to many of the first time users, it was thought necessary to find out about the mode of getting information about the Online Admission system. The quantitative data of the response is given in the following table:

Feedback Questions	Newspaper Advertisements	IGNOU Website	From Friends	Other Sources	Total
How did you come to know about OAS?	442	3794	1088	456	5780
Percentage (%)	7.65	65.64	18.82	7.89	

The response of the users reveals that majority of the students (67.15%) came to know about OAS through IGNOU website followed by 19.90% through their peer group. Very few (4.61%) students came to know through newspaper. It shows that a majority of users keep on accessing IGNOU's website. Thus, obtained feedback helps university for further improvement of OAS in real time.

FINDINGS & SUGGESTIONS

In any education institute, the admission system is one of the important components to ensure accessibility. The online admission system as seen in this study enhances the accessibility and related support. The major findings and suggestions are given below:

- i. There is a decline in the overall look and feel of the OAS portal, ease of navigation, ease of filling OAS form, information about OAS, ease of uploading documents and photo during January-2017 session as compared to July-2016. It is certainly a matter of concern and need to be addressed immediately.
- ii. There is great improvement in the ease of online payment. It can be attributed to the increased number of payment gateways and have brought in a spirit of competition. It is good for users and may be further enhanced.

- iii. Majority of users preferred to use Windows operating system followed by Android operating system. It may be because of the fact that Windows in case of PCs and android in case of mobile OS are dominating the market. In view of the market dominance, it becomes necessary to make the OAS suitable for such operating systems. Though Windows is the most preferred operating system, but it is interesting to note that the success rate is lower than that of the Mc OS. This issue need to be addressed.
- iv. While addressing any online platform, the choice of browser is also very important. In case of OAS, majority of users have preferred Chrome browser for accessing OAS. But the success rate is maximum in case of Firefox browser. To make OAS more popular and user friendly, it should equally be compatible to all the browsers.
- v. In this web- based admission system, the ease of online payment increases its success. It is found that the net banking has been the first preference followed by debit card for making online payment. The process of online payment has improved immensely from July- 2016 to January- 2017 admission session. It may be attributed to the special efforts to provide more choice of payment gateways.
- vi. While analysing the preferences of banks for making payment, it is found that the SBI is the most preferred bank by majority of users. But it is interesting to note that the success rate has been very good in case of debit cards and credit cards as compared to the net banking across the banks. It necessitates that the net banking system needs to be improved.
- vii. Regarding support services to the OAS, it is found that both telephone and email supports are not up to the mark. They need to be improved and for that purpose a dedicated call centre may be set up for the Online Admission System in IGNOU.
- viii. Major means of publicity for OAS has been the website of IGNOU. But it is not sufficient. Other means of publicity should be explored fully for creating awareness about the OAS.

Online admission system facilitates the university to provide better facility to the students to access the system at their own pace and place. Based on the stakeholders' experiences, it is suggested that OAS can be extended for other remaining programmes including merit based programme like MBA, B.Ed., Nursing and other programmes. It can also be integrated with the Learning Management System (LMS) in future. Further, OAS may be strengthened by providing effective infrastructure and technical support for upgrading the system for effective student access. Based on the feedback from the students, it is also necessary that the telephone and email supports need to be improved as per need. Online chat facilities on OAS and exclusive telephone services to attend the student queries may be implemented for better services for students.

It would be good if in near future this OAS application may also be integrated with entire student life cycle at IGNOU viz. learning management system, distribution of printed materials, learning & counseling, supplementary e-content, virtual class, assignments, examinations, result processing, convocations, placement cell and alumni portal etc.

REFERENCES

1. Profile of IGNOU – Preamble. www.ignou.ac.in. retrieved on 02Feb.,2018.
2. IGNOU Common Prospectus 2015-16. www.ignou.ac.in. retrieved on 02Sept.,2016.
3. Gowthaman, K., & Sharma, O. P. (2017). “Technology Enabled Hybrid Model of Admission System-A Software Maintenance Perspective”. *International Journal of Innovations & Advancement in Computer Science*, Volume 6(9).
4. Gowthaman, K., Sharma, O. P., and Dikshit, J. (2017). “Learner Friendly Admission System in Open University: A Case of IGNOU”, *Indian Journal of Open Learning*.
5. Paulsen, M. F. (2002). “Online Education Systems: Discussion and definition of terms”. *NKI Distance Education*, pp.1-8
6. Mincer-Daszkiwicz, J. (2004). “Student Admission System for Warsaw University”. In *EUNIS'2004, The 10th International Conference of European University Information Systems*.
7. Rao, A. M. M. (2009). “Web-enabled user support services system in distance learning”. In *Proceedings of the 2nd International Conference on Interaction Sciences: Information Technology, Culture and Human*,pp. 86-90.
8. Miao-miao, Zeng et al.(2008).“Innovating the Way of ICT in Education Based on IMS Learning Design”. *Proceedings of the 2008 International Conference on Computer Science and Software Engineering*, Volume 5:522-525. Available at <http://doi.ieeecomputersociety.org/10.1109/CSSE.2008.46>
9. Garg, S.; Kumar, K.; Kanjilal, U., & Khare, P. (2006). “Use of ICTs for capacity building in the ODL system”, *PCF4, 2006*. Available at <http://pcf4.dec.uwi.edu/viewpaper.php?id=469>
10. Mahajan, S. L. (2002). “Information communication technology in distance education in India: A Challenge”. *Indian Journal of Open Learning*,11(2):269-278.
11. Sharma, R. C. (2003). “Barriers in using technology for education in developing countries”. In *Information Technology: Research and Education, 2003. Proceedings of ITRE2003*.pp. 512-516.
12. Usun, S. (2004). “Factors Affecting the Application of Information and Communication Technologies (ICT) in Distance Education”. *Turkish Online Journal of Distance Education*, 5(1). Available at <https://files.eric.ed.gov/fulltext/ED494441.pdf>

BOOK REVIEW

*Review by Annavajhula J. C. Bose**

THE HUMAN ECONOMY: A CITIZEN'S GUIDE

EDITORS: Keith Hart, Jean-Louis Laville and Antonio David Cattani

Publisher: Polity Press, Cambridge, UK. 2010, pp.xvi + 371

Price: \$84.95 Hardcover

“Neoliberalism has been wounded, but it is not yet defeated.” “Economics, which ought to be a science for human emancipation, has become a dehumanized expert ideology remote from people’s practical concerns and from their ability to understand what to do.” “The project of economics needs to be rescued from the economists.” “It is time for the people to have their say in economic matters.” “Humanity is and always will be inspired by visions of a future fit for us all to live in.” “In order to be human, the economy must be at least four things: 1. It is made and remade by people; economics should be of practical use to us all in our daily lives. 2. It should address a great variety of particular situations in all their institutional complexity. 3. It must be based on a more holistic conception of everyone’s needs and interests. 4. It has to address humanity as a whole and the world society we are making.”

These are some representative signature statements of the editors of this book under review. Brought out by way of 32 contributions from 35 authors—13 unconventional economists, six anthropologists, 13 sociologists and three political scientists—hailing from Argentina, Austria, Belgium, Brazil, Britain, Canada, Denmark, France, Germany, Norway, Peru, South Africa, Switzerland and the United States—this book exposes the reader to a not well-known vision of a better world that is possible to achieve out of a dialogue between successful social experiments in many parts of the world and theoretical reflections on them. As the editors say, this book “is the first expression in English of a project that began...at the first World Social Forum in Porto Allegre, Brazil, as part of a strong counter-movement that took root in Latin America and Europe.” They want “to bring to the attention of English readers some currents of economic theory and practice that have flourished in non-Anglophone countries over the last two decades, particularly in France, Brazil, Hispanic America and Scandinavia.” To these they have added significant work by English-speaking authors that was sidelined during neoliberalism’s heyday which now deserves to find a wider audience.

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The project that this book is describing as “work in progress” is about the “human economy”, which “refers to an emphasis both on what people do for themselves and on the need to find ways forward that must involve all of humanity somehow.” The idea of a ‘human economy’ put forward here is the economy that is made and remade by people in their everyday lives contrary to the economy that is dominantly conceived of as an impersonal machine, remote from the everyday experience of most people. The dominant neoclassical idea of an economy based on narrow self-interest is absent from many societies and does not even reflect what is best about ourselves. One certain victim of the 2008 financial crisis has been free market economics. “It is impossible any more to hold that economies will prosper only if markets are freed from political bondage. Attacks on the economists by politicians and journalists have become commonplace...The ideological hegemony of mainstream economics, especially since the 1980s, has been holed below the water. This is not to say that the free marketers have been silenced, but public acceptance of the notion that the economy is social, institutional, and in need of political guidance is now common place.”

Accordingly, this book makes the case for a new “new institutional economics” to be formed out of anthropology, sociology, political economy, economic philosophy and world history. The pioneers of this new economics were Marcel Mauss and Karl Polanyi.

Mauss teaches us that progress does not lie in seeking to replace one economic system brutally with another. Rather, economic organization always consists of a number of contradictory institutional forms, irreducible to each other and combined with different emphasis. He insists that modernity rests on a particular relationship between reciprocity and redistribution, between voluntary collective actions of equal citizens and the State’s attempts to redress inequalities. According to Polanyi, economy is not one ‘natural’ thing. It is always plural and socially constructed. It has been a mistake to see the economy as independent from society, as a self-regulating market. There is the presence of different economic principles (market, redistribution, reciprocity) in concrete human economies. The approaches of these two scholars lead to the idea of a “plural economy” as a framework for considering relations between these complementary forms and for resolving potential conflicts among them. The self-regulating market in the 1930s lead to authoritarian regimes; it generated so much uncertainty that it created the ground for Nazism and Stalinism. We cannot repeat this terror of the past. Nor can we afford the current madness of the polarity of “Macworld” and “Jihad”. To avoid these dangers, we have to embrace economic principles other than the market (like reciprocity, redistribution) and institutionally embed the market in a perspective of solidarity economy as well as establishing non-capitalist enterprises, i.e. recognizing diverse forms of property by using the ideas of social economy and social enterprises. And in order to go in this direction, democratic solidarity is essential as reflected in the solidarity economy found in Europe, South America and elsewhere. The institutional base of this economy includes self-organisation in civil society (unions, cooperatives, mutual insurance and non-profit organisations) and social protection by public rules.

To put it differently, the editors of this book are putting forward a view as follows: The 20th century left us with two extreme cases that we should avoid in the future: a market society whose inequality was justified by an appeal for individual freedom, on the one hand, and the

subordination of economy to a political will whose egalitarianism was a mask for coercion, on the other. Our task is to find new ways of guaranteeing a plural economy within a framework of democracy. Instead of making an abstract appeal for an alternative economy, we should be devising fresh combinations within the field of economic possibilities open to us. Marcel Mauss and Karl Polanyi and their followers are inspiring guides in this regard.

The book is divided into five parts. Part 1 portrays how a “world society” is emerging by critically discussing globalization, global public goods, international organisations, development and alter-globalisation. Interestingly alter-globalisation refers to how a remarkably successful network of social movements has arisen to challenge the prevailing global disorder and envision a different way of organizing globalization. Part 2 makes the case for economics with a human face by discussing plural economy, ecological economics, feminist economics, fair trade, labour economy vis-à-vis capital economy, microcredit, and informal economy. Part 3 is about the principles of moral politics and discusses citizenship, corporate social responsibility, welfare, gift, moral economy, and communism. What is interesting is the exploration of ‘everyday communism’, a common human propensity for sociability that, with some redirection of emphasis, might serve grounds for non-capitalist economic organization. The reviewer found Part 4 very interesting. This part deliberates about beyond market and State. Here the third sector that includes interalia, solidarity economy, community participation, local development, NGOs, social capital, social enterprise, and social entrepreneurship has been critically examined. The third sector is the middle ground between public responsibilities on the one hand and private gain on the other as reflected in the voluntary or non-profit activities of a wide variety of organisations around the world. The bankruptcy of mainstream economists gets exposed when we notice the appearance of a solidarity economy movement in different national and continental contexts, stressing the diversity of political and economic practices within civil society at local and international levels. This movement has extended and renewed the social economy, thereby offering a concrete alternative at a time of capitalist crisis. This movement cannot be overlooked in the quest for a new economic model and public action. What people do daily is undermined by elitist ideologies, often represented by bureaucratic organisations. Economic inequalities are likely to be solved by understanding what people do, and responding favourably through removing the constraints which undermine what they do. It is better to have faith in people than the elites who have been taking the people for a ride. The final and Part 5 is about new directions in terms of community and complementary currencies, digital commons against the forces of corporate privatization, mobility, alternative energy and worlds of emancipation. A new human universal, a world society fit for humanity as a whole, is a matter of urgent personal concern for everyone.

The editors of the book sum up very well thus: “Building a human economy presupposes renewed public engagement. Regulation by the political authorities must be balanced by the public expressions of a civil society focused on attaining the common good. The social rights of citizens must be made consistent with encouraging forms of self-organisation where solidarity has a greater economic role. Market contracts and citizenship are not the only way of delivering freedom and equality. These also come from people living together, from the mutuality and egalitarianism of everyday life. At the other extreme, there is no getting

round the need to curb the power of the capitalist corporations. This requires a new alliance of grassroots movements, harnessing the voluntary reciprocity of self-organised groups, and public policy aimed at regulating capitalism and coordinating redistributive institutions. One challenge of course is to identify the appropriate levels of political association in a world that can no longer assume a national monopoly of politics.”

The book makes a wonderful reading to get rid of any hopelessness or cynicism about the possibility of a better world, and is a must read for everyone, especially in social sciences and humanities. A cheaper paperback is urgently required to be disseminated—in regional languages as well—in South Asia and other developing parts in Asia. In the final analysis, the editors are not selling this book as a dream but as a “rich resource for emancipatory politics” in organizing economic life as the reproduction of human beings and of whatever sustains life in general. This book is no doubt a firm step forward in defeating neoliberalism.

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