

ISSN 0970-5260

**Panjab University**  
**Research Journal (Arts)**

**Volume LI**

**No 1**

**January-June 2023**



Editor-in-Chief  
Rani Mehta

**Panjab University**  
**Chandigarh (India)**



## Contents

| <b>Sr. No.</b> | <b>Article</b>  | <b>Author(s)</b>  | <b>Page</b> |
|----------------|---|---|-------------|
| 1.             | Revisiting External Factors Impacting India-Israel Bilateral Ties Post 2014 (Modi Era)                      | Jaskaran Singh Waraich,<br>Urmila   | 1-28        |
| 2.             | Buddhist Perspective of Historicity of Sarasvati River: New Light   | Priyatosh Sharma,<br>Saundarya Kumar<br>Deepak                              | 29-44       |
| 3.             | Emotional Intelligence of Adolescents in Child Care Institutions: A Multidimensional Analysis               | Hazel Berret Wahlang,<br>K. C. Kapoor,<br>Agnes Humtsoe                     | 45-62       |
| 4.             | Conjugal Rights of Prisoners: A Fundamental Sacrosanct  | Bharat  | 63-80       |
| 5.             | Gender Beyond Binary: A Qualitative Analysis of Tribulations Faced by the Third Gender                      | Richa Walia   | 81-100      |
| 6.             | Dog Bites In Northern India: The Prevention of Rabies through Community Engagement                          | Gaurav Gaur   | 101-116     |
| 7.             | Socio-emotional Competence through Emotion Regulation in Young Children                                     | Arisha Sajid,<br>Richa Mehta  | 117-134     |
| 8.             | Appraisal of Covid-19's Positive Impact on India  | Priya Sharma,<br>Himani Pandey,<br>Shubham Kumar Sanu,<br>Vishwa Raj Sharma | 135-158     |
| 9.             | Mapping the Spatio-Temporal Dynamics of COVID 19 Outbreak in Chandigarh (U.T.), Using Geospatial Techniques | Rahul,<br>Ravinder Kaur   | 159-178     |
| 10.            | Street vending, vulnerability and exclusion during the COVID-19 pandemic: the case of Chandigarh            | Manjinder Kaur  | 179-200     |
| 11.            | Mid-Day Meal Scheme-Satisfaction and Health Improvements among Rural Students                               | Rama Goyal  | 201-223     |



## **Revisiting External Factors Impacting India-Israel Bilateral Ties Post 2014 (Modi Era)**

JASKARAN SINGH WARAICH, URMILA

### **Abstract**

*Since the Modi regime came into power in 2014, India's policy stances have shifted dramatically, including a considerable shift in Indo-Israel Bilateral ties. The partnership was elevated to a strategic level during Prime Minister Modi's landmark visit, a first tour by an Indian PM, to Israel between July 4–6, 2017 in which seven Agreements/MoUs were inked in the domains of R&D innovation, water, agriculture, and space (Venkatesan, 2018). In addition to signing five other semi-government agreements, Israeli Prime Minister H.E. Mr Benjamin Netanyahu travelled to India from January 14 to January 19, 2018, during which four Government to Government (G2G) agreements were signed. Before these trips, Indian President Pranab Mukherjee and Israeli President Reuven Rivlin both visited each other on official visits in October 2015 and November 2016, respectively (Reich, Bernard, and David H. Goldberg 2016 p.254) Mutual assistance in various practical areas such as trade, agriculture, Science & Technology, culture, and security has increased as a result of greater than before high-level exchanges and visits on both sides. An extraordinary strengthening of relations with Israel has been observed in the recent past. However, various challenges like radicalisation, terrorism, China, Arab-Israel relations, Palestine issue and Iran factor have also kept the relations on toes. Despite all these hurdles, India's changed behaviour subduing idealism and adopting Realism has borne sweet fruit in the present times raising India's stature in an unprecedented manner in the global arena. The paper intends to analyse the impact of external factors influencing the Indo-Israel bilateral ties. Furthermore this paper will also highlight the competing interests of India, Israel and China in the Middle East.*

**Keywords:** Modi regime, Israel, China, India, Realism, Idealism, Constraints, Terrorism,

## **Introduction**

The full diplomatic ties between India and Israel were achieved in 1992, and since then, the bilateral ties have flourished on the political, military, agricultural, and commercial fronts. Both nations consider their cooperative relationship as a strategic requirement as they both perceive themselves as isolated democracies that are endangered by neighbours who support, finance, and train terrorism. Although both nations achieved independence from the British rule within a few months of one another, they found themselves travelling in very different directions for almost 40 years, Israel looked to the US and Europe for its future while India was in the favour of Non-Aligned Movement and was inclined towards the Arab world and the Soviet Union.

To encourage the visit of Indian Jews to Israel, India decided to give de-jure recognition to Israel in 1950 and officially permitted Israel to start a consulate in Mumbai (Nanda, Prakash&Sondhi,M.2009 p.291). India's victory over Pakistan in the 1999 Kargil War was also made possible due to Israeli help in form of weapons(Bahl, Raghav 2019 p.156-157). Israel also helped India through humanitarian aid. Israel deployed a two-week emergency response group from the Israel Defense Forces (IDF) to India in the wake of Gujarat's devastating earthquake in 2001 to give aid and treatment to the affected people. The partnership was elevated to a strategic level during Prime Minister Modi's landmark first tour by an Indian PM to Israel between July 4–6, 2017 in which seven Agreements/MoUs were inked in the domains of R&D innovation, water, agriculture, and space (R, Venkatesan, Nov.2018). In addition to signing five other semi-government agreements, Israeli Prime Minister H.E. Mr Benjamin Netanyahu travelled to India from January 14 to January 19, 2018, during which four Government to Government (G2G) agreements were signed. Before these trips, Indian President Pranab Mukherjee and Israeli President Reuven Rivlin both visited each other on official visits in October 2015 and November 2016, respectively (Reich, Bernard, and David H. Goldberg 2016 p.254). Mutual assistance in various practical

areas such as trade, agriculture, Science & Technology, culture, and security has increased as a result of greater than before high-level exchanges and visits on both sides.

The Indian armed forces announced in the early 2000s that it intended to launch a modernization programme, for which resources amounting to tens of billions of dollars would be committed. Since then, defence contracts with Israel have increased dramatically, and India is now one of the top export markets for Israeli weaponry.

Despite numerous obstacles, both diplomatically and domestically, New Delhi is interested in establishing a better connection with Tel Aviv for a variety of reasons. Israel has, first and foremost, consistently proven to be a trustworthy partner. Pragmatism is another essential component that keeps this partnership strong. Significant disagreements exist between the two nations over Syria, Iran, and Palestine which can't be overcome easily. But despite their differences, the two countries have decided to continue with their disagreements. Palestine is a case that amply illustrates how they have come to accept one another's opposing viewpoints

India and Israel are also concerned about events in South Asia that have to do with terrorism, as well as the rise of Islamic radicalization and extremism in the region. Pakistan is the nation where all of these issues are interconnected. Israel and India are extremely worried about Pakistan's potential to make the area more vulnerable in the foreseeable future.

The research paper thus is an endeavour to analyse various aspects of India-Israel relations including constraints and challenges.

## **Review of Literature**

1. Prashad, Vijay (2013) highlights the diplomatic relations of India with Israel and Palestine. Before 1992, India had strong relations with Palestine and was the first country to recognize the Palestinian Liberation Organization in 1975. India's relations with Israel depended on the arms deal, where high-level politics was involved. The report

also examined that the BRICS countries tried to settle disputes between Israel and Palestine.

2. Ashok Sharma and Dov Bing (2015) report "India-Israel relations: The evolving Partnership" recognises India-Israel collaboration in commerce, defence, strategic intelligence, and security-related fields and offers insight that the relationship would eventually become larger and more extensive, embracing research, development, and co-production in the defence sector as well as water resources management, agriculture, science, and technology, bilateral trade, and the environment.
3. Khattak, Masood Ur-Rahman (2016) talks about the diplomatic relations between India and Israel. Talking about the defence equipment, he mentions the Air-Defence system of India, which was upgraded by Israel SAM-QR, TAVOR TAR-21 rifles and Galil sniper, and a \$304 million contract was signed between India and Israel in 2007. The author also focuses on the China-Pakistan strategic partnership and its effect on India's security.
4. Ghosal, Debjani (2016) talks about Indo-Israel balanced relationship and examine factors which are important for their relationship and some key areas of interests for both nations and also discuss about the challenges faced by both nations to achieve full potential. Author also discusses about the Kashmir issue and the terrorism, because some challenges faced by both nations are related to Islam factor. The Home Minister Rajnath Singh's visit to Israel in November 2014, discussed investment policies, Israeli technology along with 'Make-in-India' initiative for production and manufacturing defence equipment and Urban Warfare Training. Author also talks about the India's relations with Arab countries or India's 'Look West' Policy.
5. Wald, Salomon (2017) focus on political, Economic, Technological, and Defence ties between India and Israel. For several years, India's relations with Israel were concealed because of the Muslim



dominance, but after 25 years, at present, the diplomatic relations are robust. The author also focuses on cooperation in areas of Science and Technology, Defence, and counter-terrorism, which plays an important role in flourishing their strategic relationship.

6. Kumar, Manoj (2017) focuses on bilateral relations between India with Israel. The study mentions that before the 1980s, India's policy was not in the favour of Israel, and India's dependence on the Gulf countries for energy sources was the main factor in not accepting diplomatic relations with Israel. It was after the 1980s that India's policy saw a change towards Israel, as Israel came forward to support India in the Indo-Pak Wars of 1962, 1965, and 1971.
7. Mallick, P K. (2017) focuses on Indo-Israel strategic relations over history. It was during January 1992, under the rule of then Prime Minister Narasimha Rao that the diplomatic relations between the countries flourished. Later, under the opposition government, those ties with Israel received more strong cooperation. The author mentions that the Israel consulate was established in Mumbai to help the Indian Jewish community to migrate to Israel, and the Indian political leaders visited Israel for strong bilateral relations.
8. Khalid, Asma (2017) talks about defence cooperation between India and Israel. She explained the Indo-Israel relations since 1992 and how India-Israel's economic and strategic ties have grown over the years. Both nations are developing their cooperation in the agriculture sector, research and IT start-ups. Prime Minister Narendra Modi's recent visit to Israel enhanced their bilateral relations and security cooperation. The focus of both nations was to shift India-Israel's bilateral strategic relation to buyer-seller "which will further boost the objective of the "Make in India initiative".
9. Chakravarty, Pinak Ranjan (2017) highlights the relations between India and Israel. India recognized Israel and Palestine, and India voted for independent two states. Both nations faced so many challenges.

Today India and Israel are closer than ever before, and India never lost its faith in the Arab world too. India got support from the Arab - world too, therefore India always supports the two-state solution. The recent visit of officials from both nations marks the maturing of India and Israel ties.

10. Rajiv, S Samuel C. (2017) discussed the Indian first ever Prime Minister's visit to Israel to celebrate the 25<sup>th</sup> year of Indo-Israel diplomatic relations. Israel waited for 70 years for Indian Prime Minister Narendra Modi's trip to Israel from July 4-6 2017. This article also highlights the strong defence cooperation apart from AWACS, unmanned aerial vehicles, aerostat radars and assault rifles that India needs to co-develop defence system for the Indian Air Force and Indian Navy for the long-range surface-to-air missile, the medium-range SAM.
11. Vinayak, Yashmin Sofat (2017) explained the concept of Make in India is a campaign designed to make the country a manufacturing hub leading to economic transformation in India. Launched by the Honourable Prime Minister, Shri Narendra Modi on 25 September 2014 in Delhi, it is an international campaign aimed at revitalizing manufacturing-based economic activities and generating skilled and unskilled employment for tapping the demographic dividend. The long-term objective of the Make in India campaign is to ensure a high increase in growth and employment.
12. Cowshish Amit (2017) study, "India-Israel defence trade Issues and challenges," looks at India's defence capabilities and attempts to identify any gaps that need to be filled. The paper also emphasises the importance of defence cooperation between India and Israel in the post-cold war era. Additionally, it separates a procurement "policy" from a procurement procedure, ensures greater clarity and transparency about the future procurement of the military forces' needs, and aligns defence plans with a realistic assessment of the money that will likely be available to carry out these plans.

## **Research Gap**

Many researchers have done work on Indo-Israel relations as far as the existing literature and research is concerned, but still, very less work has been done in the field of India-Israel strategic relations. An attempt will also be made to analyse and comprehend the prospects of India's cooperation with Israel. There are many places where India-Israel emerging strategic relations can be explored like sharing of dual-use technology, energy security, water security, homeland security, terrorism fighting networks, and world-centric focusing networks, building academic linkages, cultural centres, space technology, water technology. Therefore, the research attempts to include all these aspects and to investigate the challenges and prospects these changes will have on the strategic partnership.

## **Objectives of the Study are as follows:**

- To examine the emerging challenges to the India-Israel strategic partnership.
- To evaluate the impact of external factors on India-Israel ties.
- To critically analyse the competing interests of India and China vis-a-vis Israel.

## **Evolution of Indo-Israel Bilateral Ties:- A Brief Description**

The Congress-led Government of India, led by Prime Minister Narasimha Rao, established full diplomatic relations with Israel in January 1992 (Sitapati, Vinay, 2016 p.193). Several factors aided Rao in overcoming India's four-decade-long apprehension regarding Israel. Full diplomatic ties with Israel sent a strong message to the West that New Delhi was formally abandoning the ideological rigidity that characterised India's foreign policy during the Cold War when the Nonaligned Movement (NAM) was at its peak (Miskovic Natasa, and Fischer-Tine Harald, 2017 p.210-212).

However, in the past, India had worked hard to maintain Arab friendliness

by avoiding rapprochement with Israel, but when Israel's Arab neighbours engaged in talks, New Delhi could hardly be blamed for maintaining regular relations with the Jewish state.

As a result, New Delhi's security and geopolitical imperatives compelled it to pursue a pragmatic strategy towards Israel. With the advent of the National Democratic Alliance (NDA) government, led by Atal Bihari Vajpayee, there was a marked shift in Indian policy. The government authorities were more willing to publicise the occurrence because of the Bharatiya Janata Party's (BJP) pro- Israel stance (Press Trust of India, 2018).

Even the eruption of the second intifada and international condemnation of Israel's attitude toward Palestinians did not deter the Vajpayee government from strengthening ties with the Jewish state. Defence collaboration with Israel had increased dramatically, notably in terms of intelligence sharing.

However, India's foreign and security policies have been fundamentally reassessed following the recent change in government. Over the last 8 years since the Modi regime came into power, India's policy stances have shifted dramatically, including a considerable shift in Indo-US relations, an extraordinary strengthening of relations with Israel, a cautious endeavour to alter the nature of India-China relations, and a methodical drive to expand into Southeast Asia. Israel appears to have taken precedence over other West Asian countries in India's diplomatic agenda following Prime Minister Narendra Modi's election in 2014. By pulling the bilateral partnership out from "under the carpet," Modi is credited with boosting the strategic character of the Indo-Israeli cooperation (Karmon, Ely 2022 p.17).

As a result, strategic relations between India and Israel are poised to reach a historic high point, but the friendship will need to be fostered for a few years before it matures. According to India's External Affairs Minister S.Jaishankar India and Israel are facing similar challenges like radicalism and terrorism and many other rapidly developing consequences of

geopolitical events (Press Trust of India, 2021).

Similarly, there are various other political challenges that time and again keep testing the friendship of the two nations. For instance, India's Internal Politics is an important factor in India-Israel relations. The emerging propensity between Israel and China, the Middle East factor in India-Israel relations, India's Iran-Israel Dilemma, Palestine issue in India-Israel relations and others are impeding the pace of India-Israel relations. In this paper, all these emerging and existing threats and their implications will be discussed in a detailed manner.

### **Converging Aspects of Bilateral relationship of India-Israel**

#### ***Counterterrorism and Radicalisation***

For both India and Israel, combating terrorism is a big issue and challenge. As part of their Strategic Dialogue, the two countries established a Joint Working Group in 2003 (Adeney, Katharine, and Saez Lawrence 2007 p.229). This Joint Working Group has provided a forum for sharing practical experiences in the areas of border security, suicide terrorism, aviation security, terror financing, information security, and digital and cyber warfare. While comparing the terrorism faced by both the countries Iran, Syria, Hezbollah, and Hamas pose a threat to Israel (Katz, Yaakov, and Yoaz Hendel 2012 pp.8-10).while extreme Islamist groups supported by Pakistan, particularly the Taliban, Lashkar-e-Toiba, and Jaish-i-Mohammad pose a threat to India(Press Trust of India 2022).

In his talk to the American Jewish Committee in May 2003, Indian National Security Adviser Brijesh Mishra highlighted the convergence of Indo-Israeli interests and their strategic significance (Gupta, Amit 2012 p.112). In that speech, he urged that democratic countries targeted by international terrorism should join a "viable alliance" and develop multilateral institutions to combat the threat. He named India, the United States, and Israel as countries that match that definition (Gupta, Amit 2012 p.112-113). During the Joint Working Group meeting on June 22, 2003, Zvi Gabey, Deputy Director-General of the Israeli Ministry of Foreign

Affairs said, "We find ourselves in the same camp that fights terrorism and we have to develop our relationship according to that"(Koshy, Ninan 2006 p.148).

Since the Mumbai attacks in 2008, Israel and India's strategic engagement and collaboration have developed dramatically, indicating a level of continuity that remains at the core of bilateral relations. As a result, Israel has offered India counter-terrorism satellite imaging, unmanned aerial vehicles (UAVs), hand-held thermal imagers, night vision devices, long-range reconnaissance and observation systems (LORROS)\* and detection technology. During Israeli President Reuven Rivlin's historic meeting with Modi in New Delhi in November 2016, counter-terrorism was a top subject of discussion (Embassies.gov.il, 2016).

### ***Delhi Terror Attack 2012 and blast Near Israel Embassy***

In a terror activity, an Israeli Embassy car was attacked by a bomb blast in a high-security zone of New Delhi on February 13, 2012(The Economic Times, 2012).The driver of the vehicle, the wife of an Israeli diplomat, and two other people were hurt. The strike was immediately blamed on Iran by Israel. The possibility of Iranian complicity in the attack presented New Delhi with a severe diplomatic issue. There was a lot of circumstantial evidence, including the fact that an identical attack on another Israeli Embassy car in Tbilisi, Georgia, was attempted the same day.Furthermore, the attack in New Delhi occurred one day after the fourth anniversary of Hezbollah leader Imad Mughniyah's execution in a car explosion.

According to the evidence and the indications, a clandestine battle between Israel and Iran, as well as Hezbollah, had "just arrived in India." According to The Times of India, this was harmful to India's security, and New Delhi needed to take action. Some Indian publications speculated on the possibility of Hezbollah and local recruits in India working together to undermine Israeli interests in the nation.

### ***Blast near Israel Embassy***

Similarly, on the 29th of January, 2021 a small blast occurred near the

Israel Embassy. At the explosion scene, a message and an envelope marked to the Israeli Embassy were recovered. The letter vowed retaliation for the execution of General Qasem Soleimani, the leader of the Quds Force by the United States in January 2020, as well as for the purported assassination of Iranian nuclear scientist Mohsen Fakhrizadeh by Israel in November 2020. The bomb blast took place on the same day on which India and Israel were celebrating the 29th anniversary of their diplomatic relations (Team, BS Web 2021). These terrorist activities occasionally create various hurdles in bilateral relations and keep the diplomats on their toes. The increasing radicalization and action of sleeper cells in India poses a major challenge in India-Israel relations. Another major factor which is emerging as a major challenge in India-Israel relations is China's growing influence on Israel. Here it is noteworthy to mention that Israel as a major arms exporter also sees China as a market.

### **External factors in India-Israel Partnership**

#### ***China***

The first nation in the Middle East to recognise the PRC as one "China" was Israel (Covarrubias, Jack 2010 pp.168-170). After the US-China détente, their defence cooperation began in the late 1970s with tacit US support for Israeli military technology and arms shipments to China (Middle East Institute, 2012). This suited Israel because these sales made up for the loss of other markets including Iran (which severed ties with Israel after the Islamic Revolution in 1979), (Kaye, D. D., Nader, A., & Roshan, P.A 2011 pp.9-18), West European members and others (after the USSR got mired in Afghanistan). According to some reports, Israel helped China in several other projects like developing its PL-8H surface-to-air/ship-to-air missile and the PL-9 air-to-air missile from the Israeli Python missile. It also helped China redesign its DF-3 intermediate-range ballistic missile and the DF-15 short-range ballistic missile. Due to American apprehension, Israeli military shipments to China started to taper down in the early 1990s. Interestingly, China and Israel are not

natural allies as far their geopolitics and global aspirations are concerned. Israel is a strategic partner of China's biggest rival, the United States. As far as the relations between Israel and China are concerned, Israel welcomes Chinese money and collaborates with China on research and China is drawn to Israel's cutting-edge innovations, many of which have US origins(RAND Corporation, 2020 pp.35-39).

In addition to this, the recent illegal sale of weapons to China by Israel has made India conscious. China which doesn't possess good relations with India and its other neighbours can use these weapons against these countries. A recent report further increased India's tensions when Israel's internal intelligence agency "Shin Beth" detained at least 20 persons in what looks to be one of Israel's worst weapons-industry scandals, the unauthorized development, production, and export of loitering munitions to an "unnamed country somewhere in Asia" which some of the reports suggest is China (Zeitlin, Alan,2021).

Considering the recent alleged arms scandal and tensions between Israel and America over the growing affluence between Israel-China, the Israeli administration has decided to pacify the US-Israel relations. In order to reduce future tensions, Israel has pledged to inform the Biden administration of any significant economic agreements with China (Lis, Jonathan, 2022).

Though these issues directly don't affect India's interests, however, strained US-Israel relations and Israel's closeness to China would definitely change the power matrix in the region. Various factors in India-Israel relations differentiate latter are relations with China. In addition to commercial relations, historical relations between the two are of significance. Islamic Terrorism and the stand of both countries in countering this menace also distinguish their relationship with others. In contrast, China always obstructed or vetoed the UN resolutions to declare some of the Islamic terrorists as Global terrorists and thus hindering the counter-terrorism process through which both India and Israel are affected



(The Economic Times, 2022). Another important factor which occasionally keeps bringing awkward moments between India and Israel is West Asia. India's historical ties with West Asia and the regions' negative perception of Israel give India's foreign policy a very narrow path to walk on.

### ***Middle East***

Though in the recent past the intensity of the enmity between Israel and Arab countries has significantly reduced, it persists and is vulnerable to various geopolitical triggers. Since India's Independence, the internal Muslim population and Muslim-dominated Arab countries become a big factor in restricting India's ties with Israel (Kumaraswamy, P.R 1999 pp.873-893).The fear of hostile reactions from Muslim countries in case India inches closer to Israel was prevalent. The internal factor that the reaction of Muslim voters could go against the political party that would try to engage with Israel was also prevalent.

Since 1992, a lot of changes have come. Energy dependence on the Arabs has been reduced (though India still buys the largest chunk of its oil supplies from Middle Eastern countries), (Sarant Louise, 2016). These oil-producing Middle Eastern nations are dependent on nations like India, China, Japan, and others for exports and thus an important source of earning. Israel is no longer a factor in the energy market, and oil has lost its potency as a political tool. Second, Indian diplomats started to realise that declaring anti-Israel sentiment publicly did not guarantee Arab neutrality whenever India and Pakistan fought wars. No matter how strongly India criticised Israel, the Arabs consistently backed Pakistan. India started to realise that it has become a common perception that it was always in the pocket of the Arabs due to its automatic backing for every Arab and Muslim position against Israel both inside and outside the UN. India realized that, contrary to popular belief, the Arab-Israeli conflict was not the main issue in the Middle East and that, even if it were resolved, the rivalry between Shiites and Sunnis, which has been for more than a

century, would still exist. All of this explains why India's relations with Israel progressively improved during these 30 years since 1992, which was also the time when its ties to Saudi Arabia, Iran, and the rest of the Muslim Middle East grew rapidly. It was a masterful exercise in balancing the Middle East and Israel.

During the 1965 India-Pakistan War, the India-Arab friendship saw its first significant test. Pakistan received backing from the Gulf States and Iran, a fellow member of the Central Treaty Organization (Tahir-Kheli, Shirin, 1977 pp.474-490). The purported Israeli supply of weaponry to India was also criticized by the Arab media. Again, the Arab world did not back India during the 1971 Bangladesh War, except for Oman, Syria, and Iraq. Algeria stayed neutral (Ward, Richard Edmund, 1992 pp.30-31). Israel, on the other hand, did offer India assistance. India recognized it would need to re-evaluate its support for the Arabs because the Arab world's harsh response during the Bangladesh liberation war had not been anticipated (Raghavan, Srinath, 2013 pp.180-182).

At a period when many nations viewed the PLO as a terrorist organisation, India, whose ruling elite had been greatly influenced by Arafat, supported the UN giving him this platform. PLO office was established in New Delhi in 1975. India was the first non Arab nation to recognise the PLO as the only authentic voice of the Palestinian people in 1977. The Arab world applauded these actions (Mehrish, B. N, 1975, pp.137-160).

Later, in 1992, the establishment of diplomatic ties between India and Israel met with a generally unfavourable response from the Arab world. Pakistani propaganda was in full swing in the meantime. The Organisation of Islamic Cooperation (OIC) frequently criticised India on the issue of Kashmir and the treatment of Indian Muslims, mostly at Pakistan's instigation. However, today, India's relevance in the Arab world has grown as a result of the shifting global economy and the country's fast economic growth over the past 20 years. Today, India stands on its own in the global firmament.

After assessing the history and current relations between Middle Eastern countries and Israel, it can be assessed that though the relations between Israel and these countries have improved a lot and these countries also understand the evolving geopolitics of the region and the world, there are still some issues among these countries which can erupt the conflicts any time. India has to keep a balancing approach with all these Middle-eastern countries and Israel as well as to keep the relations intact and smooth. The Middle East is not the only issue which plays a critical role in the India-Israel relations. Iran which is an old friend of India but is also considered a terrorist-supporting nation and remains in news for its nuclear program is one of the top most concerning nations for Israel and the USA. Iran's alleged nuclear enrichment program is a bone of contention between Israel and Iran and other Middle Eastern states. Therefore, Iran also plays a critical role in shaping India-Israel relations and is a known challenge for both.

### *Iran*

In the complicated game of wars, peace treaties, and covert diplomacy that has characterised the Middle East over the past century, it is especially important to look at how Israel and Iran interact with one another and how it affects India. The repercussions of alleged Israel's murder of Colonel Sayeed Khodaye of Iranian Army Unit 840 on May 22, 2022, which has brought relations between Iran and Israel to a low point, are highly unpredictable. According to the New York Times, Col. Sayeed Khodaye, 50, was murdered outside his home on a peaceful residential street in Tehran when two motorcycle-riding gunmen approached his car and fired five bullets on him. Iran blamed Israel for this execution, which was consistent with earlier Israeli targeted killings of Iranians in a covert conflict that has been going on for years on land, sea, air, and electronically (Fassihi, Farnaz, and Ronen Bergman, 2022).

The recent killing of Colonel Sayeed Khodaye of Iranian Army has once again ignited their relations. India will suffer significant implications as a

result of the tensions between Israel and Iran, which pose a threat to destabilise the entire region. It would be relevant for maintaining India's overall security in terms of energy and growing fundamentalism. It would also concern India's capacity to handle relations between Iran and the Arab world as well as between Israel and the Arab world. With Iran as a major crude oil producer (India stopped importing oil from Iran in mid-2019 following sanctions by the Trump administration), India is hopeful that once the sanctions will be uplifted Iran can play a significant role in the country's energy security matrix. Furthermore, Iranian oil is cheap due to Tehran's favourable terms for India (Akaha, Tsuneo, 2022, p.139).

India will suffer significant implications as a result of the tensions between Israel and Iran which pose a threat to destabilise the entire region. This would be relevant to maintaining its overall security, which depends on the stability of the West Asian region. It would also concern India's capacity to handle relations between Iran and the Arab world as well as between Israel and the Arab world. Additionally, India's investment in the Chabahar port was severely hampered by the sanctions put in place against Iran (Stobdan, P, 2020, pp.185-186). India's strategic needs in Afghanistan and Central Asia are attached to Chabahar. India's relations with Iran continue to be a crucial defence against Pakistani manipulations at a time when the situation on the ground in Afghanistan is changing rapidly. India's strategic footprint in the region depends heavily on Iran's access to Afghanistan and the greater Central Asian region.

Although Iran was the only nation in the Middle East to criticise India for warming relations with Israel, both New Delhi and Tehran have made significant strides in their mutual understanding of one another's strategic imperatives. Israel occasionally has voiced worries over certain issues in New Delhi-Tehran relations, despite Iran's assiduous avoidance of mentioning Israel in its interactions with India.

Each of the two countries has important enough ties with India for the other to attempt to undermine them. When asked in an interview about his

thoughts on India's expanding connections with Israel, Iran's ambassador to India, Ansari, a seasoned diplomat, said: *“That is your business. It is not our business to advise you. Any country can choose their own friends. That’s your right as well as ours. But we should not let our friends choose our enemies. If they (Israel) are your friends, don’t let them choose your enemies.”*(The Indian Express, 2015).

### *Palestine*

In an effort to strike a balance between India’s longstanding ties to Palestine and its burgeoning relations with Israel, T S Tirumurti, India’s permanent representative to the UN, delivered a carefully crafted statement during the UN Security Council's “open debate” on the escalating violence between Israel and Palestine on May 16, 2021(Statesman News,2021).

The declaration, the first on the subject from India, seems to imply that Israel is to blame for starting the present cycle of violence by establishing its origins in East Jerusalem rather than in Gaza. It appears that the suggestion that neither side “try to unilaterally modify the existing status quo, particularly in East Jerusalem and its neighbourhoods,” is a criticism of Israel’s settler programme. The careful balancing was demonstrated by the strong criticism of the “indiscriminate rocket firings from Gaza” on civilian population centres in Israel but to take no notice of Israeli strikes inside Gaza; the standard practice omission of any mention to East Jerusalem as the capital of a Palestinian state since 2017; and the use of syntax “Haram Al Sharif/Temple Mount,” which equalises the claims of both Israel and Palestine (Subramanian, Nirupama, 2021). After being unambiguously pro-Palestine for the first 40 years, India’s position on the world’s longest-running conflict has changed to a delicate balancing act with its three-decade-old good relations with Israel. India's stance has come to be seen as being pro-Israel in recent years.

### ***Palestine Liberation Organization (PLO)***

For more than 40 years, India's foreign policy was almost akin to its relationship with Palestine. India blamed Israel for starting the conflicts in 1967 and 1973 as the aggressor (Subramanian, Nirupama, 2021). In the 1970s, India supported Yasser Arafat, the PLO's leader, as the single and authorised representative of the Palestinian people. The PLO was given diplomatic status by India, the first non-Arab nation to do so, recognised it as the only representative of the Palestinian people and asked it to establish an office in Delhi. India additionally helped the Palestinian flag being raised on UN property in September 2015 (AP, The Indian Express, 2015). Up until that point, India had always backed East Jerusalem as the capital of a Palestinian state in its many pronouncements that expressed its support for a two-state solution. When Prime Minister Modi visited Israel for the first time as PM of India in July 2017, Ramallah was not on his itinerary. At that time, it was believed that India had "de-hyphenated" the relationship between Israel and Palestine and would henceforth deal with each separately. In reality, India carefully balances the de-hyphenation process, switching from one side to the other as necessary. For example, India voted to approve a resolution at the United Nations General Assembly rejecting the Trump administration's recognition of Jerusalem as the capital of Israel even though it abstained at UNESCO in December 2017 (Kumar, R, 2017). India's balancing act is a never-ending work in progress and therefore takes position according to the evolving situation. As discussed earlier, In May 2021, India made a similar remark before the UN. Even though it wasn't in favour of Palestine, Israel was not happy.

*India's cooperation with Palestine:* India has also been providing the Palestinian people with material and technical support in addition to political support. Since 1995, India has provided \$30 million in budgetary support for various development efforts in Palestine. India gave USD 1.25 million to the UN organisation for Palestinian refugees in 2016 (PTI, The

Economic Times,2020).while expressing worry over the region's precarious status and continued violence. India, which has a sizable Muslim population, has always shown sympathy for the Muslims in Palestine. Politicians in India likewise adopted a pro-Palestine stance without offending the feelings of the minority.

Today, before supporting Israel, India must address certain significant issues, such as the fact that it still depends on the Arab Nations for its energy security. Before pursuing ties with Israel, India should think about its relations with Iran and Saudi Arabia. Iran backs the Palestinian cause, and Saudi Arabia has not yet recognised Israel as a sovereign nation. Any undesired leaning and pro-Israel stance in every aspect would surely inflict huge damage to the India-Arab relations in the longer perspective.

### **India, Israel and China- Competing Interests**

There occurred numerous significant global events in 1992 that will be remembered forever. It was also the year when both China and India formed formal diplomatic relations with Israel. According to Prakash Nanda, China currently leads India in the drive for economic and technological cooperation with Israel. According to data made public by Israel's National Bureau of Statistics, China overtook the United States as the country from which Israel imported the most goods in 2021(Staff, AFP and TOI,2022). Israel increased its imports from China by roughly 40% from \$7.7 billion in 2020 to \$10.7 billion in 2021.

China was also the source of Israel's highest trade deficit, which came to \$6.6 billion.Surprisingly, China is becoming the leading source of funding for joint ventures in Israel involving international firms, including Israel's renowned hi-tech start-up companies, surpassing even the United States. Over the past 20 years, there has also been a gradual rise in the volume and value of investment deals, particularly from 2014 onward. Based on the data gathered, the majority of China's investments and *Mergers and Acquisitions* (M&As) in Israel were in the technology sector (449 deals

with a reported value of roughly \$9.138 billion out of a total of 463 deals worth \$19.444 billion); there were eight deals in the infrastructure sector with a total value of \$5.916 billion (including four deals in the transportation sector, two in the ports sector, and two in the electricity sector- all by companies owned by Chinese Government.

In other terms, China is well ahead of India in terms of commerce and investment as far as relations with Israel are concerned( Staff, AFP and TOI,2022).The left-wing Nehruvian political environment in India is largely responsible for China's advantages over India in its relations with Israel. The Communist Party of India-Marxist (CPI-M), notably, raises a frenzied pro-Palestinian protest voice whenever the subject of India-Israel relations is brought up and threatens to paint any overtly Indian move as anti-Muslim. Even Maoist China, the purportedly authentic homeland of Marxists, has subtly softened the Palestinian issue to improve relations with Israel, especially in the area of the arms trade. Israel sold armaments to China in the 1990's and 2000s, and as relations between the two countries began to improve, this had an impact on Chinese policymakers.

Chinese academician Zhiqun Zhu stated that *"The burgeoning relations between China and Israel have already had some effect on other policies. In the Israeli-Palestinian conflict, China has taken a more balanced position now than its pro-Palestine stand in the past."*(Zhu, Zhiqun, 2017) .China has prioritised pragmatism and national geo-interests in all of these. India has the potential to become both a formidable rival and Israel's preferred civilisational partner in this race for an advantageous relationship. After all, Israel and India are emerging nation-states and ancient civilizations. Ancient inhabitants of those countries have endured persecution at the hands of similar expansionist foes. In addition, India has historically been the homeland of the Jews who immigrated there; it is also the only country in the entire world where Jews were not persecuted on account of their race.

Naturally, the Jewish state looked for India's friendship on numerous



occasions. Unfortunately, India has frequently acted schizophrenic due to Nehruvian myopia and the left-Islamist hatred of Israel. It has since been revealed that Indian authorities occasionally requested assistance from Israel. In exchange, India even didn't recognise this assistance, let alone develop full diplomatic ties.

In retrospect, it appears that left-wing forces may have played a part in this, at least post-Cold War, to enable China to usurp India's inherent advantage in forging strong ties with Israel.

The CPI (M) has always represented China's geostrategic interests in India. CPI (M) leader Prakash Karat criticised the Malabar joint India-US naval exercises in *People's Democracy*, the party's official voice, noting that the exercise's goal was "to restrain China". In other words, the forces in India that have accepted the Chinese colonisation of India in principle are the CPI (M) and its media allies. We should view the party's persistent and deliberate attacks on the ties between India and Israel in this framework.

The criticism of Israel serves two goals for CPI (M). According to a 2009 report by *India Today*, it aids the party in strengthening its position with the Islamic vote bank in Kerala, where the Marxists are still a potent political force (*India Today*, 2009). The party notably targeted Israel which has emerged as India's second-largest strategic ally while siding with extreme Islamists like Abdul Nasser Madhani\* with an intention to garner Muslim votes (*India Today*, 2009).

Later, in July 2014, the Modi government refused the CPI (M)'s request for Parliament to adopt a resolution denouncing Israel. The Indian government was harshly criticised by *People's Democracy* (mouthpiece of CPI) in an editorial, which noted that India is the "biggest consumer of Israeli arms" and urged readers to "pressurise this BJP-led NDA administration to immediately suspend India's purchase of Israeli defence equipment". Once more, CPI (M)'s stance was carefully calibrated to

China's advantage.

Sitaram Yechuri, the leader of the CPI (M), frequently travels to China and meets with the most powerful individuals there. When he arrived in 2015, the Chinese President himself gave him a briefing on the OBOR initiative (The Hindu, 2015). Yechuri wanted China to incorporate India's spice trade into its grandiose Maritime Silk Route project without expressing any concerns about the road passing through Gilgit, which is a part of PoK. Therefore, by claiming that India is implicated in Israel's alleged atrocities and provoking Islamists, the CPI (M) will obstruct India-Israeli relations. However, they do not comment on China's relations with Israel. The CPI (M) and allied media also criticised the developing India-Israel relations in light of Modi's visit to Israel.

The People's Democracy is not the only organisation that openly criticises India-Israeli relations but there are several other groups which intentionally try to sabotage India-Israel relations. All of these movements ostensibly appear to be promoting humanitarian causes (which in itself is to be questioned). However, the majority of the signatories are also included in petitions endorsing Maoists and terrorists like Yakub Memon who are pleading for mercy. Once more, the intention is very clear. Through manufactured discontent and by fuelling Islamic vote bank politics, they create a schizophrenic ambiguity in the nascent India-Israeli relations. In the end, this aids China's development. The simple fact that the majority of these so-called "humanitarians" never bother to call for a boycott of China over its treatment of Tibetans, its actions in the occupied Tibetan regions and persecuted Uyghur Muslims showcases their agenda.

## **Results and discussion**

After discussing the above aspects it can be said that India-Israel relations are bound with various other geopolitical aspects which keep India-Israel relations on tenterhooks. Middle East factor, Iranian factor, India's internal electoral politics, Palestine issue, China factor etc are some of the

issues which force India to adjust its foreign policy accordingly. However, in the recent past, India is able to break down the shackles of internal as well as external pressures which were acting as a hurdle in India-Israel relations.

### **Conclusion**

In the end, it can be said that the relationship between India and Israel has become so firm that it is difficult to come across any misunderstanding. The problems of the Middle East like Israel's relations with Iran, Syria, Saudi Arabia and Palestine issue will keep Indian policymakers and Governments busy changing their stances on case to case basis. The change in the stance of the Government of India's policy towards Israel post-Modi's coming into power in 2014 has boosted the India-Israel relations unprecedentedly, purely based on realism and national interest. Keeping a distant approach on the issue of Palestine is an evident example of how India has started giving primary importance to its National Interest rather than being called an idealist state. India's changed behaviour subduing idealism and adopting Realism has borne sweet fruit in the present times raising India's stature in an unprecedented manner in the global arena. India's favourable posturing towards Israel, the USA, France, Japan, Australia and even Russia in the current Russia-Ukraine war is a part of India's comprehensive plan to become a significant global power.

### **References**

- Adeney, K., & Saez, L. (2005). *Coalition Politics and Hindu Nationalism*. London: Taylor & Francis.
- Adeney, K., & Saez, L. (April,2006). *Coalition Politics and Hindu Nationalism*. Routledge Advances In South Asian Studies.
- Aneja, A. (2015, October 20). *Communist Party of China values ties with CPI(M)*. Retrieved from The Hindu: <https://www.thehindu.com/news/international/yechurys-call-on-xi-jinping-signals-strong-cpcpci-m-ties/article7783317.ece>

- Bahl, R. (2019). *Super Century*. New Delhi: Penguin Random House India Private Limited.
- Bing, D., & Sharma, A. (2015). India–Israel relations: the evolving partnership. *Israel Affairs*, 21 (4), 620-632.
- Boškovska, N., Fischer-Tiné, H., & Mišković, N. (2014). *The Non-Aligned Movement and the Cold War: Delhi - Bandung - Belgrade*. oxfordshire: Routledge.
- Business Standard. (2021, january 30). *Minor blast outside Israel embassy in Delhi; few cars damaged*. Retrieved from Business Standard: [https://www.business-standard.com/article/current-affairs/latest-news-today-live-updates-29-january-2021-121012900177\\_1.html](https://www.business-standard.com/article/current-affairs/latest-news-today-live-updates-29-january-2021-121012900177_1.html)
- Chakravarty, P. R. (2017, february 11). *India-Israel Ties Finally Out Of The Closet – Analysis*. Retrieved from Eurasia review: <https://www.eurasiareview.com/11022017-india-israel-ties-finally-out-of-the-closet-analysis/>
- Covaerrubias, J., & Lansford, T. (2010). *Strategic Interests in the Middle East: Opposition or Support for US Foreign Policy*. London: Routledge.
- Cowshish, A. (2017). India–Israel Defence Trade: Issues and Challenges. *Strategic Analysis*, 41 (4), pp.401-412.
- Embassy Of Israel In India. (2016, November 16). *President Rivlin meets Indian PM Narendra Modi*. Retrieved from Embassy Of Israel In India: <https://embassies.gov.il/delhi/NewsAndEvents/Pages/President%20Rivlin%20meets%20Indian%20PM%20Narendra%20Modi.aspx>
- Fassihi, F., & Bergman, R. (2022, may 25). *Israel Tells U.S. It Killed Iranian Officer, Official Says*. Retrieved from The New York Times: <https://www.nytimes.com/2022/05/25/world/middleeast/iran-israel-killing-khodayee.html>
- Foregin Policy News. (2017, August 15). *India-Israel defence co-operation: Regional implications*. Retrieved April 22, 2023, from Foregin Policy News: <https://foreignpolicynews.org/2017/08/15/india-israel-defence-co-operation-regional-implications/>
- Ghosal, D. (2016). Strategic Hyphenation between India and Israel: The Major Areas of Cooperation and Constraints in the Post-Cold War Era. *Jadavpur Journal of International Relations*, 20 (1), pp.65-101.
- Goldberg, D. H., & Reich, B. (2016). *Historical Dictionary of Israel*. Lanham: Rowman & Littlefield.

- Gupta, A. (2012). *Global Security Watch—India (Praeger Security International)*. London: Praeger.
- Haskel, E., Schwindt, K., & Efron, S. (2020). *Chinese Investment in Israeli Technology and Infrastructure: Security Implications for Israel and the United States*. Santa Monica, CA: RAND Corporation.
- Hendel, Y., & Katz, Y. (2012). *Israel Vs. Iran: The Shadow War*. Washington: Potomac Books.
- Indian Express. (2015, September 11). *UN strongly approves Palestinian proposal to raise flag at UN headquarters*. Retrieved from Indian Express: <https://indianexpress.com/article/world/middle-east-africa/un-strongly-approves-palestinian-proposal-to-raise-flag-at-un-headquarters/>
- Karmon, F. (2022). *India's Counterterrorism Cooperation with Israel* : (Vol. 16). Perspectives on Terrorism.
- Khalid, A. (2017, August 15). *India-Israel defence co-operation: Regional implications*. Retrieved from Foreign Policy News: <https://foreignpolicynews.org/2017/08/15/india-israel-defence-co-operation-regional-implications/>
- Khattak, M. U.-R. (2016). Strategic Significance of Indo-Israel Defence Collaboration: Implications for Pakistan's Security. *IPRI Journal*, XVI (2), 49-69.
- Koshy, N. (2006). *Under the Empire: India's New Foreign Policy*. New Delhi: Leftword Books.
- Kumar, M. (2017). India-Israel Relations: Perceptions and Prospects. *Strategic Assessment*, 19 (4), 93-102.
- kumar, r. (2017, december 24). *The Yes Vote At United Nations Against US: What It Tells About India's Multilateralism*. Retrieved from Outlook: <https://www.outlookindia.com/website/story/the-yes-vote-at-united-nations-against-us-what-it-tells-about-indias-multilatera/305906>
- Kumaraswamy, P. R. (1999). Israel and Pakistan: Strange bedfellows or natural allies? *Strategic Analysis*, 23 (6), 873-893.
- Liang, W., Yuan, J., & Akaha, T. (2021). *Trump's America and International Relations in the Indo-Pacific*. New York: Springer Cham.
- Lis, J. (2022, january 3). *Israel Pledges to Inform U.S. on Major Deals With China*. Retrieved from haaretz: <https://www.haaretz.com/israel-news/2022-01-03/ty-article/.premium/israel-pledges-to-inform-u-s-on-major-deals-with-china/0000017f-f72a-ddde-abff-ff6ff6f10000>

- MEHRISH, B. N. (1975). Recognition of The Palestine Liberation Organization (PLO) : An Appraisal of India's Policy. *The Indian Journal of Political Science* , 137-160.
- Middle East Institute. (2012, July 16). *Israel-China Arms Trade: Unfreezing Times*. Retrieved from Middle East Institute: <https://www.mei.edu/publications/israel-china-arms-trade-unfreezing-times>
- Nanda, P. (2009). *Rising India: Friends and Foes*. Bombay: Lancer InterConsult.
- Prashad, V. (2013, April 7). *India's Israel Policy*. Retrieved from Aljazeera center for studies: <https://studies.aljazeera.net/en/reports/2013/04/201347114923799215.html>
- Press Trust of India. (2018, August 19). *Israel condoles death of Atal Bihari Vajpayee, calls him a 'genuine friend'*. Retrieved from Business Standard News:[https://www.business-standard.com/amp/article/current-affairs/israel-condoles-death-of-atal-bihari-vajpayee-calls-him-a-genuine-friend-118081900041\\_1.html](https://www.business-standard.com/amp/article/current-affairs/israel-condoles-death-of-atal-bihari-vajpayee-calls-him-a-genuine-friend-118081900041_1.html)
- Press trust of India. (2020, october 14). *India provides USD 1 million for palestinian refugees*. Retrieved from the economics times: <https://economictimes.indiatimes.com/news/international/uae/india-provides-usd-1-million-for-palestinian-refugees/articleshow/78661813.cms>
- Press Trust Of India. (2021, October 18). *India, Israel share similar challenges from radicalism, terrorism: EAM S Jaishankar*. Retrieved from Business Today: <https://www.businesstoday.in/latest/world/story/india-israel-share-similar-challenges-from-radicalism-terrorism-eam-s-jaishankar-309680-2021-10-18>
- Press Trust of India. (2022, May 30). *Pak-based terror group JeM, LeT maintain training camps in Afghanistan: UN report*. Retrieved from The Hindu: <https://www.thehindu.com/news/international/pak-based-terror-group-jem-let-maintain-training-camps-in-afghanistan-un-report/article65475232.ece>
- R, V. (2018, January 11). *India, Israel ink 7 agreements*. Retrieved from The Hindu Business Line: <https://www.thehindubusinessline.com/economy/policy/india-israel-ink-7-agreements/article9750607.ece>
- Radhakrishnan, M. G. (2009, April 1). *CPI(M) invokes Israel factor to consolidate among Muslims*. Retrieved from India Today: <https://www.indiatoday.in/elections-south/kerala/story/cpim-invokes-israel-factor-to-consolidate-among-muslims-43234-2009-03-31>
- Raghavan, S. (2013). *1971: A Global History of the Creation of Bangladesh*. Cambridge: Harvard University Press.

- Roshan, P., Nader, A., & Kaye, D. D. (2011). A Brief History of Israeli-Iranian Cooperation and Confrontation. In *In Israel and Iran: A Dangerous Rivalry* (pp. 9-18). California: RAND Corporation.
- Sarant, L. (2016, September). *The Middle East: An end to oil dependency*. Retrieved March 12, 2023, from Nature: <https://www.nature.com/articles/537S6a>
- Singka, A. k., & Vinayak, Y. S. (2017). *Make In India For Inclusive Growth - Initiative And Challenges*. Saarbrucken: LAP LAMBERT Academic Publishing.
- Sitapati, V. (2016). *Half-Lion: How Narasimha Rao Transformed India*. New York: Penguin Viking.
- Stobdan, P. (2020). *India and Central Asia: The Stratgic Dimension*. New Delhi: KW Publishers.
- Tahir-Kheli, S. (1977). Iran and Pakistan: Cooperation in An Area of Conflict. *Asian Survey*, 17 (5), 474-490.
- The Economic times. (2012, February 13). *Blast in an Israeli embassy car in Delhi triggers panic; three injured*. Retrieved from The Economic Times: <https://economictimes.indiatimes.com/news/politics-and-nation/blast-in-an-israeli-embassy-car-in-delhi-triggers-panic-three-injured/articleshow/11873849.cms>
- The Economic Times. (2022, June 17). *China blocks India, US bid to designate Pak-based Abdul Rehman Makki as global terrorist by UN*. Retrieved from The Economic Times: <https://economictimes.indiatimes.com/news/defence/china-places-hold-on-us-india-joint-proposal-to-list-pakistan-based-terrorist-abdul-rehman-makki-under-unscsanctions/articleshow/92272661.cms>
- The Indian Express. (2015, December 22). *If they (Israel) are your friend, do not let them choose your enemies: Iran envoy Gholamreza Ansari*. Retrieved from The Indian Express: <https://indianexpress.com/article/india/india-others/if-they-israel-are-your-friend-do-not-let-them-choose-your-enemies-gholamreza-ansari/>
- The Times Of Isarel. (2021, December 20). *10 Israelis set to be indicted for illegally exporting missiles to China*. Retrieved from The Times Of Israel: <https://www.timesofisrael.com/10-israelis-set-to-be-indicted-for-illegally-exporting-missiles-to-china/>
- The times of israel. (2022, Jjanuary 24). *China was Israel's leading source of imports in 2021, surpassing US*. Retrieved from The times of israel:

<https://www.timesofisrael.com/china-was-israels-leading-source-of-imports-in-2021-surpassing-us/>

Vasudeva, P. K. (2021, May 24). *Balancing Act*. Retrieved from The Statesman: <https://www.thestatesman.com/opinion/balancing-act-2-1502968707.html>

Ward, R. E. (1992). *India's Pro-Arab Policy: A Study in Continuity*. Westport CT: Greenwood Publishing Group.

ZhuZhiqun. (2015). China's New Diplomacy. Rationale, Strategies and Significance. *European Review of International Studies* , 166-168.



## **Buddhist Perspective of Historicity of Sarasvati River: New Light**

PRIYATOSH SHARMA, SAUNDARYA KUMAR DEEPAK

### **Abstract**

*There is a long debate on the existence of the most pious Rig Vedic River Sarasvati River. At present, many scholars agree on the existence of this river which originated from the Himalayas and joined the Ganga at Trivenī, Prayāgrāj. Major work has been done by geologists and geographers to trace out the pale channels of this river. On the other hand, historians have successfully attempted to find out the historicity of Sarasvati in Ancient Vedic texts and recognised this river with various names and adjectives such as Ghaggar, naditamā etc. But, this perspective of the Sarasvati River has been questioned by some scholars and they believe Sarasvati to be a mythical river rather than a historical reality. This research paper is an attempt to look at the Sarasvati River through Buddhist literature. Buddhist literature affirms the presence of this river from very early times. The proposed research paper will investigate such literature and try to find out the historicity of this river. In other words, this paper will see Sarasvati as a river from the Buddhist perspective. Further, it will discuss the idea of river in Buddhism. Buddhist approach to looking upon a river is different from the Vedic approach. Here, an endeavour has been made to investigate and focus on the Buddhist idea of the river through Buddhist literature.*

**Keywords:** Sarasvati, Buddhism, sacred river, Vedic period, Pali

### **Introduction**

River is an important part of Indian culture. It holds a virtuous position in Hinduism and is considered as mother, for instance, the Ganga, the Yamuna, the Sarayu, the Godavari etc. are held in an exalted, sacred position. All these rivers are worshipped and revered by the people in various festivals and rituals. Most of the major Hindu temples are on the

banks of rivers. In sculpture, paintings and other art forms rivers are depicted, in the form of human beings, as assisting or escorting major gods like Vishnu etc. Such respected position of a river in Indian culture can be found from, if not earlier, the Rig Vedic period i.e. 1500 BCE to 1000 BCE (according to Western academic view). Some ancient rivers, including river Sarasvati, are highlighted by scholars due to one or many reasons. River Sarasvati is also known as Rigvedic Sarasvati as this Veda, the oldest literature of human civilization, gives the first-ever reference to Sarasvati as a river. Sarasvati is enlisted in the *NadiStuti* hymn (10.75) in Rigveda. This hymn tells that the Sarasvati River flows between Yamuna and Satluj and it is known as *Naditamā* (literally, the best of the rivers). In several Brahmanas and the epic Mahābhārata, it has been reported to have disappeared in the desert near Vinashana. There's a legend about the disappearing of this river near Mānā village, Badrināth. According to that legend, Vyāsa composed the epic Mahābhārata on the bank of this river. Ganesh used to listen to Vyāsa for transcribing the epic. Ganesh had accepted the proposal to become the scribe of Vyāsa with the only condition that he (Vyāsa) will recite without any break. But due to the noise of the river, Ganesh was unable to listen. Therefore, Vyāsa cursed Sarasvati to disappear from the Earth from that place.

The historicity of river Sarasvati has been challenged for a long time by some scholars. This river is considered a myth and its existence, as they believe, is only in legends. Although, many historians, archaeologists, geologists and geographers attempted to establish that river Sarasvati was existing in early times and due to many reasons it dried up later. At present, scientific study has made it possible to trace the pale channels of this river. Brahman texts have always been referred to prove the historicity of the river Sarasvati. Although, Sarasvati got the legendary identity only because of these very Brahmanical texts. The very first faith, not merely a philosophy, which challenged Brahmanism or Hinduism was Buddhism which later evolved as a religion. River Sarasvati must be looked upon through a Buddhist perspective to investigate its historicity because Buddhism always played a role to counter and criticise Brahmanism. The proposed research paper is an attempt to find out the Buddhist perspective

of the river Sarasvati. This perspective will help to cross-check the mythical aspect of the river Sarasvati. Secondly, it will investigate the historicity of the Sarasvati River through Buddhist Pāli and Sanskrit literature.

Buddhism emerged in Eastern India in the sixth century BCE as an alternative faith to Brahmanism or the Vedic religion, the then-only existing religion in the Indian subcontinent. Buddhism challenged Brahmanism and gained popularity throughout the country. It was patronised by many rulers like Aśoka, Kaniṣka, Harṣavardhan etc. During the reign of Emperor Aśokain 250 BCE, nine Buddhist delegates were sent for the propagation of Buddhism to various parts of the Indian subcontinent as well as Southeast Asia, for instance, *Suvarnabhūmi*. Its unique nature of tolerance, self-enquiry for knowing truth, lacking in deist authority and determinism, equality and adaptability made it popular in India, Southeast Asia and other countries of Asia. Later on, Buddhism was divided into various schools and ideologies and adopted, wherever it reached, elements of folk religion or cults in its respective regions. In all of its forms and schools, Buddhism always opposed Vedic rituals and practices. Buddhism even does not believe in Veda and its divinity but believes in the existence of the river Sarasvati. This is a clear indication that river Sarasvati is not merely an imagination of Hindu mythology but Buddhism too affirms its existence.

### **The idea of River in Buddhism**

A river is a natural flow of water originating from glaciers, lakes, mountains or hills, bogs etc. and ends up in a major water body like a sea, lake, or another river or sometimes it dries up in the desert or any other dry place. In early times, the river was the main source of fresh water and it was used for drinking, irrigating crops and in other daily usages of water. The river is always a cheap and good means of transport. After attaining enlightenment, the Buddha spent his whole life wandering to propagate 'the *dhamma*.' He was travelling throughout the year except in the rainy season. In the Rainy season, he used to stay for about three months and then restarted the journey. So, it is not surprising that he was using rivers for many purposes like taking baths, drinking water and of

course as means of transport.

Crossing a river was not always an easy task, especially in the sixth century BCE. Major rivers take giant form in some regions like the Northern plains of India, where the Buddha belonged to. For instance, one who travels between Bodhgayā and Sārnāth needs to cross the Son River. Thus the Buddha would have crossed the Son River, probably near Dehri, with his accompanying monks and nuns. They required a boat or raft because this river was around four kilometres wide and crossing this by swimming with belongings was not easy. In the rainy season, crossing a river becomes more challenging due to the flood and its current. Thus, the Buddha kept the propagation on hold for this season. The Buddha was used to encounter the rivers for several reasons. In various texts related to the life story of the Buddha, like the *Mahāparinirvāna Sutta*, he is reported to do the same. For attaining *Bodhi*, the Buddha went to Bodhgayā where he used to sit and meditate under a tree, the *Bodhi* tree which was on the bank of a river, Niranjanā River. Thus, the Buddha was very familiar with the various facets of a river which he used as metaphors in his teachings.

A river is the lifeline of any civilization. All the ancient civilizations developed on the bank of rivers, for instance, Indus Valley civilization on the bank of the Indus-Sarasvati Rivers, Egyptian civilization on the bank of the Nile River, Mesopotamian civilization on the bank of the Dajla-Farat Rivers etc. Vedic civilization evolved in an agrarian culture while Buddhism, on the other hand, **promoted** urbanisation. The river was playing a major role in both the economic atmospheres but in different ways. This is a fact that the river has the status of mother and it is worshipped in Hinduism but the Buddhist perspective of the river varies from this. Before investigating the significance of the Sarasvati River in Buddhist literature, it is significant to know how does Buddhism view a river?

In Nadi Sutta, discourse on the river, the Buddha teaches the concept of *anattā* or non-self. According to the discourse, a person who believes in an 'abiding self' is like a person sweeping away with the swift current of a river flowing down from the mountains. He tries to grasp riverside grasses

like *kāsa*, *kuṣa*, *babbaja* or reed and *bīraṇa* to save his own life. At last, he tries to hold a tree but even the tree along with the four grasses would tear away. Therefore, the man will fail to save himself and he will be in trouble due to the swift current in the river. Here, the plants as well as the river have been used as parables. The river is the river of life and the person is spiritually ignorant. These five plants are symbolically used for five *Skandhas* or *khandhās* (aggregates or collections) - *rūpa* or material form or just 'form'; *vedanā* or feelings, *saññā* or perception, *sankhāra* or fabrication and *viññāṇa* or consciousness. That spiritually ignorant person who believes in 'abiding self,' is flowing down with the swift current of the river of life and all these *khandhās* will not save him but these will lead him to trouble. The Buddha is suggesting here, to his followers, not to be attached to the five *khandhās*. Therefore, after listening to the Sutta, disciples of the Buddha detached themselves from form, feeling, perception, fabrication and consciousness.

The term 'four rivers' is popular in Buddhism and 'crossing the four rivers' is believed an essential condition for emancipation. According to Lalitvistāra, the Buddha, with the intention to travel beyond the 'four rivers' conquered Māra, an evil who attempted to prevent the Buddha from reaching enlightenment, and overcome all the hostile forces on the bank of the Nirājanā River. At another place in the same text, the Buddha tells a god, who met the Buddha at Jetavana, about how he crossed the four rivers. Again, the Buddha has been requested to save the human beings who are carried away by 'the four rivers. Further, the Buddha is telling his wife Gopā about the meaning of her dreams. He tells that the dream about breaking off the legs of her bed and the handle of the King's parasol is an indication for Gopā to immediately cross the four rivers. The term 'four rivers' is frequently used in various texts. Thus, it is important here to know what these 'four rivers' are and what is the meaning of crossing these rivers. These 'four rivers' are basically four *oghas*- flooded streams, which keep a man away from emancipation. These four *oghas* have been used symbolically for four 'outflows' (*āśravas*). These *āśravas* or floods are- (i) the ogha or flood of sensuality or sensuous desire (*kāmogha*); (ii) the ogha of existence or desire for rebirth (*bhāvogha*); (iii) the ogha of wrong views (*ditthogha*) and (iv) theogha of ignorance or lack of knowledge

about the Four Noble Truths (*avijjogha*). So, 'river' has been used metaphorically here as a 'flood of desire' and 'crossing the four rivers' means to overcome all these four desires which prevent someone from attaining salvation.

Here, two aspects of the river have been found in Buddhism- the 'river of life with a swift current of worldly pleasure' and the 'flood of desire.' In both cases, a river has been represented in its negative aspect because it (a river) prevents people from attaining *nirvāṇa* in both cases. A river of life has a swift current because it is full of matters and a person makes it more challenging for himself by believing in 'abiding self.' Matter produces desires and a person with desire will be far from emancipation. On the other hand, a river which is a 'flood of desires' will also keep people far from *nirvāṇa* or emancipation. Thus, the Buddha suggests his disciples detach themselves from matters and follow the *maddhyammārga* or 'middle way' to overcome the challenges raised from 'these rivers.' This shows the intrinsic positive aspects of a river in both perspectives.

Other than the said views, a river shows one more aspect of the Buddha's teachings of change and impermanence. Rivers produce obstacles but teach us to face them and move forward towards the ultimate goal-*nirvana*. The Buddha, while comparing one's life with a river, says that life is like a river. It is always on a journey just as a river always flows on and on. Sometimes slowly and smoothly while sometimes it flows harshly and roughly. This is based on the principle of 'everything is impermanent and changing.' Every moment life is changing like a river and once, in future, it will be non-existence.

### **Economic Aspect of River in Buddhism**

Although a river is not considered a mother in Buddhism it is significant here too. It is economy, rather than faith, which provided river more importance in Buddhism. River always played an important role in the support and spread of Buddhism. It is not surprising because the river has been used for trade since Indus Valley Civilization which continues to a later period. On the other hand, trade is correlated with Buddhism since its inception. There is a reference to trade in the *Jātakas* through rivers in very

early times. In fact, when Buddhism emerged, society was facing a new drastic change from an agrarian economy to a new kind of economy where there were urbanisation, monetization, expansion of trade and commerce, the establishment of new commercial relations etc. A major part of people, who were following Brahmanism or Vedic religion, needed such kind of faith which would fulfil their religious satisfaction in this new economic atmosphere. And Buddhism fulfilled this requirement. Buddhism provided more support to trade than to agriculture, hence, it was conducive towards the merchant class. Buddhist monasteries were established on the major trade routes. Therefore, the monasteries had two purposes related to religion and economy. These monasteries, later, got involved in trade activities and many monks started to keep wealth. This is admitted fact that both, trade as well as Buddhism were complementary to each other and flourished together.

Not only the economic but also the political scenario was changing this time. Both altered the social standing of rulers and merchants. This was the time when the merchant class was rising economically and became an eminent part of the contemporary economic and political system. But they were in third position in the Brahmanical social hierarchy. They wanted upliftment in their social status. On the other hand, the ruler class was second in this hierarchy. Small *janpadas* were now powerful states. But *Kshatriya*, the ruling class, were inferior to Brahmans in the social hierarchy. Both classes were seeking upward change in their status. Buddhism was suitable to fulfil the economic, political and social needs of both the eminent classes of contemporary society. Thus, Buddhism supported and succeeded to attain the support of merchants and rulers.

Although Buddhism supported trade and commerce more it does not follow the much materialistic approach towards economy. 'Buddhist Economics' has its ethics based on moral values. Wealth should not be earned at the cost of happiness and health. Its objective is to use wealth to fulfil the happiness of oneself and others. Thus, Buddhism supported trade and commerce and gave importance to the economy but did not deviate from its spirituality and moral values.

### **The confluence of five rivers**

Fa-Hien found the confluence of five rivers near Pātliputra when he was travelling from Vaishāli to Pātliputra. The confluence was at a distance of four *yojans* east of Vaishāli. He tells himself about this confluence in his travelogue; although, he does not mention the names of those five rivers. But W. Hoey does not believe in the existence of such confluence. There is no historical evidence which affirms that five rivers have ever met actually at a single point near Pātliputra. So, he finds exaggeration in this statement of Fa-Hien. At present, Patna, the capital city of Bihar, is the place where two rivers Gandak and Son meet the Ganga from north and south respectively. Son River or Sone River originates near Amarkantaka and meets with the Ganga River in Haldi Chhapra, Bihar. This place is just west of Patna. This river is the second largest river joining Ganga from the South after Yamuna. While Gandak or Gandaki, a Himalayan-borne river comes from Nepal and meets the Ganga from the North in Pahleza, Sonpur near Patna. Most of the part of Gandak is in Nepal and there it is known as Narayani. Haldi Chhapra is about 35 km distant from Pahleza, Sonpur. If it is considered as the said confluence then there are only three and not five rivers. Thus, the question remains unanswered: what does it mean and why was the term 'confluence of five rivers' used by Fa-Hien? The answer is in Cullavagga- a part of Vinaya Piṭaka. In fact, the 'confluence of five rivers' takes a significant place in Buddhism and it has been used as a metaphor. In Dhammapada also there is a reference to the 'confluence of five great rivers' and again there is no mention of their name. Here, it is said that the Buddha had gained popularity and he had a big number of followers near the 'confluence of five great rivers.' Although the story revolves around Jetavana and here too, no historical evidence of such confluence has been found. On the other hand, in Cullavagga, there is mention of five great rivers- the Ganga, the Jumna or Yamuna, the Acirāvati or Irāvati (modern Rāpti), the Sarabhu or Sarayu and the Māhi but there is no mention of such confluence. These are the five great rivers of Jumbudwipa and have a unique relation among them.

According to the Buddhist idea about the system of the universe, there is a great lake in the northern part of the Jumbudwipa, the largest Continent on



the Earth which is in the south of Mount Mahā Meru. This lake is Anótatta-wila and is recognised as the modern lake Mānsarovar. Four rivers are flowing from the four sides- north, south, east and west, of the lake. The river flowing towards the south flows three times round to the lake and then goes towards the south after rushing from a great rock. This stream strikes against another rock and rises into the sky and then flows sixty yojans straight on the land. After this, the river journeys a long distance through rocks, mountains and caves. At last, it strikes a four-sided rock Wijja and is divided into five streams like five fingers. These five streams are the five great rivers named- Ganga, Yamuna, Achirawati, Sarabhu and Māhi. These rivers last by falling into the sea. These five great rivers are the same great rivers mentioned in Cullavagga.

Hoey finds that 'the confluence of the five rivers' denotes the point where the fifth and last river of them flows into the already united stream of the other four. Then which river is the fifth river of 'Fa-Hien's confluence of the five rivers?' The first four rivers Ganga, Yamuna, Achirawati and Sarabhu are recognised easily with the modern rivers the Ganga, the Yamuna, the Airawati and the Sarayu respectively. But scholars are not unanimous about the fifth one i.e. the Māhi. Hoey relates this river with modern Gaṇḍak which has been discussed earlier. B. C. Law too believes that the Māhi River is a tributary of the Gaṇḍak River. Thus, Hoey concludes that 'the confluence of the five rivers' of Fa-Hien is the same concept as mentioned in the Buddhist system of the Universe. Further, this confluence is near Patna as the fifth river Māhi joins the Ganga here.

### **River Sarasvati in Buddhist Literature**

Brahmanical literary sources provide ample evidence to prove the historicity of the Sarasvati River. Archaeological remains and modern scientific research finds evidence of pale channels of a river which was flowing in the past in the North-Western region of the Indian peninsula. But whether these are the remains of river Sarasvati or not is a contested issue for some scholars. On the other hand, the Brahmanical approach to river Sarasvati has also been challenged often by saying that these texts have created the mythical river Sarasvati and there was no existence of any such river. For historicity, historical evidence is necessary and the

literary source is one of the best examples. Therefore, another perspective or the alternate perspective of literary sources should be examined to investigate the historicity of river Sarasvati. The Buddhist approach can be the best example as it does not believe in Brahmanical mythology and Vedic rituals. Here, an endeavour has been made to look at the Sarasvati River from a Buddhist perspective through its literature.

B. C. Law identifies, in his *Geography of Early Buddhism*, *Sarassatī*, a river name used in Buddhist literature, as the Vedic Sarasvati and places it as a sacred river for Hindus along with the Gangā. *Sarassatī* rises in the hills of Sirmu, called Semalik, in the Himālayas and emerges in the plains of ĀdBadri in the Ambālā district of Haryana. This river was forming the western boundary of Madhyadeśa. Another source says that the *Sarassatī* channel was branching off from Toyavāpi to the Puṇṇavaḍḍhanavāpi.

Now, come again to the great rivers of Cullavagga. These five great rivers are significant in Buddhism and also in its idea of Cosmology. Although, Sarasvati is not named as one of the five great rivers in Cullavagga as well as in the five rivers of the Buddhist idea of Cosmology. But another text Milindapañho mentions Sarasvati as one of the ten greatest rivers, including these said five rivers, out of five hundred rivers flowing down from the Himālayas and watering Jambudwipa. According to this text, only ten rivers- the Ganges, the Jumna or Yamuna, the Aciravati, the Sarbhu or Sarayu, the Māhi, the Indus, the Vetravati, the Sarasvati, the Vitamsa or present-day Jhelum and the Kandrabhaga or Chandrabhaga are reckoned in enumerations of great rivers and rest of the rivers were excluded due to their intermittent flow of water. Mentioning only ten names out of five hundred rivers shows the great significance of these ten rivers in contemporary times, especially from the Buddhist point of view. And yes, River Sarasvati is one of the ten great rivers among those five hundred rivers flowing down from Himavant. Sarasvati was a Himālayan borne river carrying effluent water in her course in plain and it was flowing throughout the year.

Although, Buddhism admits the greatness of the river Sarasvati, but challenges its divinity. Buddhism does not believe in getting rid of the impurities or stains from humankind only after taking a bath in its water.

In *Visuddhimagga*, Buddhaghōṣa named six rivers- the Ganges, the Yamunā, the Sarbhū, the Sarasvatī, the Aciravati and the Māhi, and told that these rivers cannot wash out the inner impurities of any living creature on the Earth. It means that people, the Hindus, were taking holy baths in these rivers including river Sarasvatī. Thus, it can be considered that the Sarasvatī River was existing in the fifth century CE as the text, *Visuddhimagga*, was composed at this time. This is not the latest reference to the existence of the river Sarasvatī. This river appeared also in the writings of later times.

Harṣavardhan gave equal reverence to Lord Śiva, the cult of the Sun and other religious faiths but he, according to P. V. Bapat, was a Buddhist. He belonged to the Puṣyabhuti dynasty and his capital was Thaneśwar, which was situated on the bank of river Sarasvatī. Harṣavardhan's mother, Yaśomatī, burnt herself after the death of her husband, Harṣavardhan's father Prabhākaravardhana, on the bank of Sarasvatī River. Prabhākaravardhana died in *c.* 605 CE. Hence, the river seems to be existing in the seventh century CE. Sarasvatī is frequently mentioned in *Harṣcarita*, the biography of Harṣavardhan written by his court poet Bāṇa or Bāṇabhatta. According to *Harṣcarita*, Harṣavardhan performed his father's funeral on the bank of river Sarasvatī and took a funeral bath in that river. A mendicant stayed in a deserted house near a jungle on the bank of river Sarasvatī (Ch. 3, P. 6). At another place, there is mention of a big temple built of reeds near the Sarasvatī River. This was in a village where Harṣavardhan stayed during the march for subjugation (Ch. 7, P. 1). These references show that the river Sarasvatī was existing that time in northwest India.

Although, it was the seventh century CE and by that time, according to modern study, Sarasvatī got disappeared. No scientific evidence has been found to prove that the river was existing after 2000 BCE. Then what is the relevance of the Sarasvatī of *Visuddhimagga* and *Harṣcarita*? In *Visuddhimagga*, Sarasvatī has been used as a metaphor. It is just said that the said six rivers are considered pious and people used to take holy baths in these rivers. Here, the author aims to tell that taking holy baths in such rivers can remove impurities from the body only and inner impurities will

remain which will be washed out by the true path of purification only. River Sarasvati is the holiest river, according to Rig Veda, hence, mentioning this name is merely an attempt to show that even 'the holiest river' cannot make anyone pure if he or she does not follow the true path. Thus, Buddhaghosa says that Sarasvati is not a divine river.

The same idea of purification through ablutions in water is found in *Tripīṭaka*, the Buddhist scripture. A Pāli text *Majjhima Nikāya*, a part of *Sutta Piṭaka*- the second of the five nikayas, or collections, enlisted Sarassatī or Sarasvati as one of the sacred rivers along with some other rivers like Bāhukā, Sundarikā and Bāhumatī. Bāhukā is said a river to which sacrifices were offered. While Bāhumatī is a holy river where people bathe to wash out their sins. The only information about Sundarikā River is that this river was in Kosala. Here, the Buddha himself addressing monks, including a Brahman Sundarikā Bhāradvāja, in Jetavana grove at Sāvattthi where he was telling them about purification through ablutions in water. The Buddha prefers internal bathing of the mind instead of outer bathing of the body. 'Internal bathing of mind' comes in the context of the Hindu traditional ritual of taking a 'holy bath' in pious rivers. Ganga, Sarasvati etc. are considered virtuous rivers and taking a bath in such rivers is fruitful in many ways. Although, the Buddha refutes, in this sutta, this Brahmanical idea of a holy bath and suggests instead the internal bath of mind. Here it is noteworthy that the said rivers other than the Sarasvati are not so much popular or revered in Hindu tradition at present. The existence of Sarasvati here proves that this is not merely a Hindu mythical river but a popular river among Buddhists too.

On the other hand, the frequent presence of river Sarasvati in Harṣcarita shows that the river was existing near the capital of the kingdom but other contemporary writings do not discuss this river. It has been found disappeared from Prayāgrāj during Harṣvardhan's time. Prayāgrāj is known as *triveṇī* i.e. *Sangam* or confluence of three rivers- the Ganga, the Yamuna and the Sarasvati. Chinese Buddhist traveller Yuan-Chwang, popularly known as the Prince of the Travellers, came to India during Harṣvardhan's reign. When he reached Prayāg, present-day Prayāgrāj, he found a confluence of two rivers only and i.e. the Ganga and the Jumna or

Yamuna. River Sarasvati was not there. Not only Yuan-Chuang but Fa-Hien, I-T'sing and other foreign travellers do not mention river Sarasvati in their travelogues. Even Claudius Ptolemy in his *Geography* does not mention the name of the river Sarasvati. During the time of Ptolemy, Sarasvati was not existing or at least not a significant river as mentioned in Rigveda. Therefore, Bāṇa's Sarasvati has to be explained here. It seems that this Sarasvati River, which is not the Rigvedic Sarasvati River, was not so popular or it was popular by any other name. It should be kept in mind that Sarasvati was worshipped as a river as well as a goddess and this name was very common among people. Thus, there is a possibility that the Bāṇa's river Sarasvati is another river, and not the Vedic Sarasvati, with the same name.

The places named near the Sarasvati River are in northwest India. The absence of the name Sarasvati as a river from the travelogues of foreign travellers does not indicate that Sarasvati was not existing in the past. B. C. Law mentions this river as defining the eastern boundary of ancient Northern India, at present it comprises eastern Afghanistan, Pakistan, Kashmir along with adjoining hill states and the Cis-Satluj states. This river disappeared to the west of the Kālakavana or Black Forest near Prayāg.

### **Submissions**

The Buddha spent much of his time in traversing where he experienced rivers as more challenging obstacles than anything else. The main challenge was to cross a river, especially during the Rainy season due to currents and floods. He faced river-borne challenges often during his spiritual mission and overcome the obstacles raised by the rivers. Thus, it is natural that the river and things associated with it became metaphors in his spiritual quest. For instance, swift currents of the river, crossing four rivers etc. Further, the river was playing an important role in the economy even before the inception of Buddhism. It is significant but not as a mother as it is in Brahmanism. Buddhism was rising in changing atmosphere of contemporary economy and society. In this new atmosphere role of the river increased and became an important part of Buddhist ideas.

The idea of a river, as discussed earlier, is also applicable to river Sarasvati. Although, it is a great river along with some other rivers but not divine as it is told in Brahmanical literature. Worshipping Sarasvati as a goddess might be mythical, but giving the Sarasvati River the eminence as the most pious river might be an exaggeration but the historicity of river Sarasvati cannot be doubted. The Sarasvati River is not a myth and it was existing in ancient times. It was flowing somewhere in the North or North-West region of India. This fact has been endorsed by Brahmanical as well as Buddhist literature. Brahmanical texts have been referred to the river Sarasvati frequently to prove its historicity. On the other hand, many Buddhist Pāli and Sanskrit texts also mention Sarasvati as a river and help to trace its course. Modern geological and geographical studies investigate the ancient course of river Sarasvati and find the same as it is told in history. This is also true that this river is not existing at present time and scholars are not unanimous about the time of its disappearance. Buddhism which challenged the philosophy and practices of Brahmanism or Hinduism, affirms the historicity of the 'Rigvedic Sarasvati River.' Although, Buddhism refused to believe in the divinity of river Sarasvati but enumerates it as one of the ten great rivers, out of five hundred rivers, of Jambudwīpa, flowing down from the Himālayas. Modern scientific study is complimentary to the textual study of the Sarasvati River. Brahmanical as well as Buddhist literature provides umpteen evidences which prove the historicity of river Sarasvati.

## Notes

The Tāṇḍāya Brahman, the Jaiminiya Brahmins and the Mahabharata, also mention that the river Sarasvati dried up in a desert.

Nadi Sutta is a discourse of Samyukta Nikāya, the third Nikāya or collection of Sutta Piṭaka (22.93).

In *Mahājanaka Jātaka*, there is a reference to trade from Champā to Suvarṇabhūmi and in this trade route, a waterway through the river was used. E. B. Cowell (Ed.). (2015). *The Jātaka or Stories of the Buddha's Former Births* Vol. VI, No. 536.

'Buddhist Economics' is a new approach to studying economics. It is based on Buddhist philosophy and gives preference to the well-being of humankind rather than material well-being.

Dhammapada is a part of the Pāli canon. It is the second book of the minor collection,

*Khuddak Nikāya*, of the basket of the discourse, *Sutta Piṭaka*.

According to the Buddhist tradition of cosmology, Mount Maha Meru or Sumeru is in the centre of the world. The Sun and the Moon revolve around this mountain. It is the place where all the gods reside.

According to Buddhist tradition, Himavanta is *Pabbatarāja*, literally the king of the mountains. Himavanta is also referred to as Himavā. These are the names of the Himālayas.

Visuddhimagga is a Theravada text written in Pāli by Bhadantācariya Buddhaghosa. This text is a milestone in the history of Pāli literature. Buddhaghosa systematically summarised and interpreted the *Tripīṭakas* in a single text. Visuddhimagga is considered the oldest and the most authentic record of the Buddha's sayings.

Scholars are not unanimous about the date of the drying up of river Sarasvati. This date 2000 BCE is also doubtful. Because after this time the Vedic culture flourished and Sarasvati is present as the best river in contemporary text, Rig Veda. Even Buddhist texts, which came later, admit the existence of this river.

It is noteworthy that these rivers are different from the five popular rivers as mentioned in various Buddhist texts and commentaries like Cullavagga. Although, Sarasvati is common between *Majjhima Nikāya* and *Milindapañho* rest of the rivers are named as pious rivers in the former text only.

According to Chinese versions of this Nikaya, *Samyukta-āgama* and other translations, the Buddha met with a Brahman Sundarikā on the bank of a river and their meeting was the occasion of delivering this discourse. The Brahman was in doubt about the purification through ablutions in water and the Buddha made it clear through preaching the *Vatthūpamasutta*. On the other hand, the Pāli version, which is the original composition, tells that the Buddha was addressing his disciples on his own and uttered this *Vatthūpama sutta*. See Anālayo. (2011). *A Comparative Study of the Majjhima-nikāya. Vol. I. Introduction, Studies of Discourses 1 to 90*. Taipei, Taiwan: Dharma Drum Publishing Corporation. P. 49-50.

## References

- Anālayo.(2011). A Comparative Study of the Majjhima-nikāya. Vol. I. Introduction, Studies of Discourses 1 to 90. Taipei, Taiwan: Dharma Drum Publishing Corporation.
- Banabhatta.(E. B. Cowell and F. W Thomas, Trans. 1897).The Harsha-charita of Banabhatta.Retrieved July 24. 2020 from <http://www.columbia.edu/itc/mealaac/pritchett/00litlinks/harshacharita/index.html>
- Bapat, P. V. (Ed.). (1956). 2500 Years of Buddhism. New Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India.
- Bodhi, B. (Trans.). (2000). The Connected Discourses of the Buddha: A Translation of the Saṃyutta Nikāya. Boston: Wisdom Publication.
- Buddhaghosa, B. (Translated by Bhikkhu Ñāṇamoli, 2010). Visuddhimagga: The Path of Purification. Kandy, Sri Lanka: Buddhist Publication Society.

- Cowell, E. B. (Ed.). (2015). *The Jātaka or Stories of the Buddha's Former Births* Vol. VI, No. 536.
- Darian, J. C. (Autumn, 1977). *Social and Economic Factors in the Rise of Buddhism. Sociological Analysis*, 38(3), 226-238. Retrieved September 16, 2020, from <https://www.jstor.org/stable/3709803>
- Dauids, T. W. R. (Trans. from Pāli). (1890). *The Questions of King Milinda*. Vol. I. Oxford: The Clarendon Press.
- Dauids, T. W. R. & Stede, W. (Eds.). (1921-25). *Pali-English Dictionary*. London: Pali Text Society.
- Deepak, S. K. (2019, February). *Ideatic Transmission of Buddhism: A Case Study of Bihar and Myanmar (c. 250 BCE to c. 1200 CE)*. *International Journal of Research in Social Sciences*, 9(2).
- Hardy, R. S. (Trans.) (1853). *A Manual of Buddhism in Its Modern Development*. London: Partridge and Oakey.
- Hoey, W. (1907). *The Five Rivers of the Buddhists*. *Journal of the Royal Asiatic Society of Great Britain and Ireland*. 41-46. Retrieved June 24, 2020 from <http://buddhism.lib.ntu.edu.tw/FULLTEXT/JR-ENG/hoey.htm>
- Horner, I. B. (Trans.). (2001). *The Book of the Discipline (Vinaya-Piṭaka)* Vol. V (Cullavagga). Oxford: The Pali Text Society.
- Law, B. C. (1932). *Geography of Early Buddhism*. London: Kegan Paul, Trench, Trubner & Co.
- Legge, J.- Fa-Hien's- *A Record of Buddhistic Kingdoms being an Account by the Chinese Monk Fa-Hien of his Travels in India and Ceylon (A.D. 399-414) in Search of the Buddhist Books of Discipline*. London: The Clarendon Press.
- Malalasekera, G. P. (1937). *Dictionary of Pāli Proper Names*. Vol. I & II. London: John Murray.
- Ñāṇamoli, B. & Bodhi, B. (Trans.). (1995). *The Middle Length Discourses of the Buddha: A New Translation of the Majjhima Nikāya*. Kandy, Sri Lanka: Buddhist Publication Society.
- Pesala, B. (Ed.). (2019). *The Dhammapada and Its Commentary*. London: Association for Insight Meditation.
- Rinpoche, C. N. (Trans.). (2013). *The Play in Full: Lalitvistara*. 84000, Dharmachakra Translation Committee. Retrieved July 24, 2020 from [https://read.84000.co/data/toh95\\_84000-the-play-in-full.pdf](https://read.84000.co/data/toh95_84000-the-play-in-full.pdf)
- Roy, P. C. (Trans.). (1884). *The Mahabharata of Krishna-Dwaipayana Vyasa*, Vol. I (AdiParva). Calcutta: Bharata Press.
- Vajirā, S. & Story, F. (Trans.). (2010). *Last Days of the Buddha: The Mahāparinibbāna Sutta*. Candy, Sri Lanka: Buddhist Publication Society.
- Watters, T. (Trans.). (1904-05). *On Yuan-Chwang's Travels in India (A.D. 629-695)*. Vol. I, London: Royal Asiatic Society.
- Wilhelm Geiger (Trans.). (1986). *The Mahāvamsa or The Great Chronicle of Ceylon*. New Delhi: Asian Educational Services.



## **Emotional Intelligence of Adolescents in Child Care Institutions: A Multidimensional Analysis**

HAZEL BERRET WAHLANG, K. C. KAPOOR, AGNES HUMTSOE

### **Abstract**

*In Child Care Institutions (CCIs), adolescents are individuals under 18 years of age who do not live with their primary caregivers and who, for various unfortunate reasons, are being housed in CCIs in order to ensure their care and protection. This study examines the level of emotional intelligence of adolescents residing in Child Care Institutions (CCIs) in Meghalaya; determines the differences between the levels of emotional intelligence of males and females living in CCIs; and identifies the emotional intelligence of adolescents using four dimensions of emotional intelligence: understanding emotions, understanding motivations, empathizing with others, and handling relations. For this study, a descriptive survey method was utilized, and 200 adolescents between the ages of 11 and 18 who live in CCIs in the East Khasi Hills District of Meghalaya were randomly selected as samples. The investigators collected data using the Emotional Intelligence Scale developed by Dr Arun Kumar Singh and Dr Shruti Narain, which contains 31 items. Study findings indicate that 80 per cent of adolescents living in CCIs possess low levels of emotional intelligence, with no significant difference in the emotional intelligence scores of males and females. A poor emotional intelligence was also found in both males and females living in CCIs. Therefore, there is a need to take care of these adolescents seriously and sincerely.*

**Keywords:** Adolescents, Emotional Intelligence, Child Care Institutions

## INTRODUCTION

The concept of Emotional Intelligence refers to the ability to process emotional information accurately and efficiently and thus regulate emotions in an optimal manner (Antony, 2005). There are two aspects of emotional intelligence according to Antony, namely recognizing our own emotions and those of others, as well as regulating these emotions. The concept is viewed as a skill rather than as knowledge about our emotions (Antony, 2005). According to the Mayer-Salovey-Caruso Model, Emotional Intelligence has four major branches:

- **Perceiving Emotions:** The ability to recognize emotional signals. The ability to empathize and understand the perspective of others is enhanced by acquiring these skills.
- **Managing emotions:** It involves not simply numbing negative emotions, but learning to control them so that they do not negatively impact the individual. It is truly beneficial for individuals to be able to manage their emotions successfully in order to be able to assist others in doing the same.
- **Using emotions to facilitate thinking:** It is undeniable that our emotions affect the way we think and it is in our best interest to utilize these feelings in order to develop reasoning, solutions, effective decision making, and creative thinking.
- **Understanding emotions:** Identifying the causes and consequences of emotions, these individuals recognize one's emotions, regardless of how complex they may be, even contradictory emotional states, and are able to express these emotions verbally (Wadkar, 2016).

An individual tends to be maladjusted without emotional intelligence because they lack the ability to adjust with family, friends, and colleagues is their ability to monitor their own emotions and that of others, to analyze different emotions, label them appropriately, and utilize these emotions to guide their thinking and behavior (Wadkar, 2016). Emotional

intelligence is not only a better indicator of the quality of potential relationships, but it can also provide insights into success and happiness in general. Due to the fact that emotional intelligence focuses on taking control of one's feelings, thoughts, and behavior, thus guiding a person with direction to succeed and lead a fulfilling life (Baruah, 2017).

Adolescents' emotional intelligence plays a significant role in their development and is a vital component of enhancing their wellbeing. It has been demonstrated by Furqani (2020) in his review of emotional intelligence that a person's psychological well-being increases with their degree of emotional intelligence. Furthermore, it suggests adolescents can enhance their social relationships, reduce stress and frustration, and gain a better understanding of other people's emotions, which will assist in preventing or reducing behavior associated with delinquency by developing their emotional intelligence (Furqani, 2020). In another study involving 250 high school students, it was discovered that emotional intelligence had a negative correlation with depression and anxiety levels, and that ability to regulate mood (Emotional Repair) was positively correlated with self-esteem (Fernández-Berrocal et al., 2006). In another study, it was found that females are more likely to be empathic, socially responsible, and able to form interpersonal relationships, while males are only sensitive to family or siblings relationships, thus resulting in a difference in emotional intelligence, with females showing a higher level than males (Katyal & Awasthi, 2005).

It is widely recognized that Child Care Institutions (CCIs) play an indispensable role in fostering children's rehabilitation and development. According to the state-by-state listing of CCIs and children in January 2018, India had 9283 CCIs serving 314702 children, and Meghalaya had 128 CCIs catering to 1879 children (Make a Difference, n.d.). When we look at adolescents in Child Care Institutions (CCIs), we find that they are under the age of 18 years and in these institutions for care and protection as they lost the opportunity to live with their primary caregivers for a variety of reasons. Across the globe, researchers have demonstrated that

children living in institutions suffer psychological and physical harm throughout their lives as a result of the lack of parental care and attention (Lumus, 2014). And a study by Shulga, Savchenko and Filinkova (2016), demonstrated that family deprivation has a detrimental effect on the psychological development of adolescents. Adolescents who are orphaned without family experience a passive response to life, and often contemplate death. Furthermore, their social intelligence and understanding of behaviour and consequences is the least developed. They also state that the main characteristic shared by orphaned adolescents is a tendency to set unrealistic life goals and a lack of critical thinking about these goals. In contrast with the orphan adolescents, adolescents living with their families look at their future with optimism, have realistic aspirations, a higher level of self-esteem, and are aware of their strengths and weaknesses (Shulga, Savchenko & Filinkova, 2016). Additionally, studies have shown that adolescents who are not orphaned are more likely to be psychologically well than those who are orphans (Khan & Jahan, 2015).

It is the investigators' intention to examine the adolescents living in Child Care Institutions who are deprived of their families for one reason or another in this study.

### **OBJECTIVES OF THE STUDY**

- 1) To investigate the level of emotional intelligence among adolescents living in CCIs in Meghalaya.
- 2) To study the difference in the level of emotional intelligence between male and female adolescents residing in CCIs.
- 3) To investigate the level of emotional intelligence among adolescents in terms of 4 dimensions of Emotional Intelligence, namely, understanding emotions, understanding motivations, empathy and handling relations.

**Hypotheses:** H<sub>0</sub> (1): There is no significant difference between the emotional intelligence mean scores of male and female adolescents in CCIs.

## **METHODOLOGY**

In this study, the investigators employed a descriptive survey method in order to describe the current status of emotional intelligence among adolescents living in child care institutions. In the present study, the population consisted of adolescents between the ages of 11 and 18 who lived in Child Care Institutions in the East Khasi Hills District of Meghalaya. Utilizing a simple random sampling technique, 200 adolescents between the ages of 11 and 18 living in different types of CCIs were chosen as samples for the study.

The investigators collected data using the Emotional Intelligence Scale developed by Dr Arun Kumar Singh and Dr Shruti Narain, which contains 31 items. This scale is divided into four dimensions, namely, understanding emotions consisting of four items, understanding motivation consisting of eight items, empathy consisting of ten items, and handling relations consisting of nine items. The respondents were asked to indicate Yes or No in response to each item, with a scoring key of +1. A total score was obtained by adding the scores of each item together. A reliability coefficient of 0.86 was obtained for this scale, which was significant at the .01 level (Singh & Narain, 2019).

In accordance with the study objectives, the data collected were tabulated, analyzed and interpreted with the help of statistical tools.

## **RESULTS**

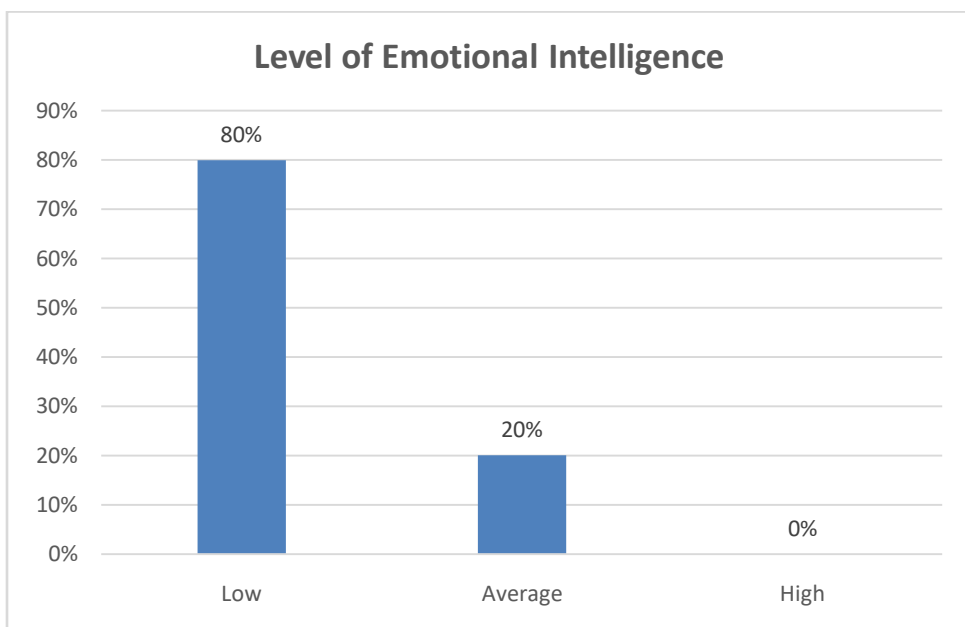
Based on the given objectives, the results of the study were analyzed as follows:

#### 4.1. Level of Emotional Intelligence among Adolescents in Child Care Institutions

**Table 1**

**Shows the level of Emotional Intelligence of Adolescents in Child Care Institutions**

| Level of Emotional Intelligence | Scores           | No. of Adolescents | % of Adolescents | N   | Mean  | SD   |
|---------------------------------|------------------|--------------------|------------------|-----|-------|------|
| <b>Low</b>                      | Below 20         | 160                | 80%              | 200 | 17.41 | 3.70 |
| <b>Average</b>                  | Between 21 to 26 | 40                 | 20%              |     |       |      |
| <b>High</b>                     | Above 27         | 0                  | 0%               |     |       |      |



**Fig. 1: Shows the level of Emotional Intelligence of Adolescents residing in CCIs**

Table 1 and Figure 1 indicate that 80 percent of the adolescents residing in CCIs possess a low level of emotional intelligence and the remaining 20 percent possess an average level of emotional intelligence. Further, the result also portrays the absence of high emotional intelligence among adolescents in CCIs.

#### **4.2. Difference in the level of emotional intelligence between male and female adolescents residing in CCIs.**

**H<sub>0</sub> (1):** There is no significant difference between the emotional intelligence mean scores of male and female adolescents in CCIs.

**Table 2**  
**Shows the Result of Emotional Intelligence Mean Scores, SD and t-value of Male and Female Adolescents Residing in CCIs**

| <b>Variables</b> | <b>Sub-Groups</b> | <b>N</b> | <b>Mean</b> | <b>SD</b> | <b>t-Value</b> | <b>Level of Significance</b>  |
|------------------|-------------------|----------|-------------|-----------|----------------|-------------------------------|
| <b>Gender</b>    | Male              | 100      | 17.68       | 3.51      | 0.29           | Not Significant at 0.05 level |
|                  | Female            | 100      | 17.13       | 3.90      |                |                               |

As shown in table-2, the computed mean scores of emotional intelligence of male and female adolescents in Child Care Institutions came out to be 17.68 and 17.13 respectively and the computed SD is 3.51 and 3.90. Further, the computed t-value came out to be 0.29 at 0.05 for df 198, which is lesser than the table value of 1.98. Hence the hypothesis was retained. Therefore, it is interpreted that there is no significant difference between the mean scores of male and female adolescents with regard to their emotional intelligence and both male and female adolescents of Child Care Institutions have been found equally poor in their emotional intelligence.

### 4.3. Emotional intelligence of adolescents with regard to the understanding of emotions

**Table 3**

**Frequency Distribution of Emotional Intelligence of Adolescents Residing in CCIs with regard to Understanding Emotions**

| Class Interval | Frequency | Percentage |
|----------------|-----------|------------|
| 0-1            | 77        | 39%        |
| 2-3            | 109       | 54%        |
| 3-4            | 14        | 7%         |
|                | 200       | 100%       |

Based on the results of Table 3, 54 percent of adolescents scored 2-3 on understanding emotions out of a possible 4. It can be concluded from this that the majority of adolescents possess an average level of understanding emotions. Furthermore, the result also shows that 39 per cent of the adolescents scored 0-1 indicating a low level of understanding of emotions and only seven per cent of the adolescents scored 3-4 out of a total score of 4, which indicates only seven per cent of adolescents, demonstrated a high level of understanding emotions.

### 4.4. Emotional intelligence of adolescents with regard to understanding motivations

**Table 4**

**Frequency Distribution of Emotional Intelligence of Adolescents Residing in CCIs with regard to Understanding Motivations**

| Class Interval | Frequency | Percentage |
|----------------|-----------|------------|
| 0-2            | 13        | 7%         |
| 3-5            | 116       | 58%        |
| 6-8            | 71        | 35%        |
|                | 200       | 100%       |



As shown in Table 4, 58 percent of adolescents scored 3-5 out of 8 on understanding motivations, which indicates that most adolescents possess an average level of understanding motivations. Further, the result also depicts that 35 percent of the adolescents scored 6-8 which portrays that they possess a high level of understanding motivations and only seven percent of the adolescent scored 0-2 out of the total score of 8 on understanding motivations.

#### **4.5. Emotional Intelligence of adolescents with regard to Empathy**

**Table 5**

#### **Frequency Distribution of Emotional Intelligence of Adolescents Residing in CCIs with regard to Empathy**

| <b>Class Interval</b> | <b>Frequency</b> | <b>Percentage</b> |
|-----------------------|------------------|-------------------|
| 1-4                   | 37               | 19%               |
| 5-7                   | 141              | 70%               |
| 8-10                  | 22               | 11%               |
|                       | 200              | 100%              |

Table 5 indicates that 70 percent of the adolescents scored between 5-7 out of a maximum score of 10 concerning empathy as a dimension of emotional intelligence. Further, the result also describes that 11 per cent of the adolescents scored between 8-10 and about 19 percent of the adolescent scored between 1-4 out of the total score of 10 on empathy. The result indicates that the majority of the adolescents possess an average to low level of empathy and only 11 per cent of the adolescents were found to possess a high level of empathy.

#### 4.6. Emotional Intelligence of Adolescents with regard to Handling Relations

**Table 6**  
**Frequency Distribution of Emotional Intelligence of Adolescents Residing in CCIs with regard to Handling Relations**

| Class Interval | Frequency | Percentage |
|----------------|-----------|------------|
| 1-3            | 29        | 15%        |
| 4-6            | 149       | 74%        |
| 7-9            | 22        | 11%        |
|                | 200       | 100%       |

As depicted in Table no. 6, 74 per cent of the adolescents scored between 4-6 out of the total score of 9 with regard to handling relations as one of the dimensions of emotional intelligence. The result also further describes that 15 percent of the adolescents scored between 1-3 and about 11 per cent of the adolescents scored between 7-9 out of the total score of 10 on handling relations. The result portrays that the majority of the adolescents possess an average to low level of handling relations and only 11 per cent of the adolescents were found to possess a high level of handling relations.

#### DISCUSSION

A significant aspect of this study is the fact that very few studies have been conducted with adolescents in child care institutions in Meghalaya. As reviews have revealed, these adolescents living in CCIs have a bleak past that has caused them to be separated from their families. When looking at the average entry of children to the CCIs, 53 per cent of children entered the CCIs between the ages of 6 and 12 years old, 35 per cent of children entered between 0 and 6 years of age, seven per cent entered between 12-18 years of age, and three per cent did not know their age of entry into the CCIs (Make a Difference, 2020). As seen from this review, it shows that children living in CCIs are deprived of family love

and support from a very young age, which is a crucial developmental period.

Based on this study, it was found that the majority of adolescents living in CCIs possess low levels of emotional intelligence, which represented 80% of the respondents and research has demonstrated that emotional intelligence is negatively correlated with depression and anxiety levels and positively correlated with self-esteem and mental health (Fernández-Berrocal et al., 2006; Hossain & Halder, 2015). Another review showed that individuals who display a high level of emotional intelligence are able to manage challenges and remain optimistic when faced with challenging circumstances and view obstacles as opportunities (Children Bureau, 2018). Hence, it is therefore necessary to enhance the emotional intelligence of adolescents in CCIs in order to enhance their ability to manage their relationships with others, their motivation, and to develop empathy and understanding of their own emotions as well as others' emotions.

Furthermore, it was found that there was no significant difference between the mean scores of male and female adolescents when it comes to their level of emotional intelligence, indicating that both male and female adolescents living in CCIs were scored equally low. The results of this study contrast with that of Katyal and Awasthi's 2005 study, which found that females were more likely to be empathic than males and showed higher levels of emotional intelligence as well (Katyal & Awasthi, 2005).

Individuals who possess an understanding of emotions are able to identify emotions in one's own and others' physical, emotional, and mental states (Singh & Narain, 2019), and this study further indicates that the majority of adolescents possess an average level of understanding emotions, which comprises 54 percent, and 39 percent possessing an insufficient understanding of emotions. Additionally, the results indicate that the vast majority (70 per cent) of adolescents in this study possess an average level of empathy, and a comparative study conducted by Parveen and Sadiq

(2019) indicates that orphans scored slightly higher when it comes to empathy than children of working mothers. Another study also indicates that empathy has a strong correlation with academic performance (Sekhri, Sandhu & Sachdev, 2017). Although this study didn't investigate the relationship between academic performance and empathy of adolescents living in CCIs, further research may be done in this area.

An average of 3-5 points out of a total of 8 were achieved by 58 percent and an average of 6-8 points was achieved by 35 percent of the adolescents on understanding motivation. According to this study, motivation is understood as a high drive for achievement coupled with an attitude of optimism and initiative (Singh & Narain, 2019). The results of a comparative study conducted by Khan and Jahan (2015) indicate that non-orphans adolescents have a greater level of achievement motivation than orphans adolescents.

In addition, the results of this study indicate that most adolescents have low to average levels of handling relations, while only 11 percent of adolescents possess high levels of handling relations. The term "handling relations" is used in this study to describe the ability of the adolescents living in CCIs to cope with their relationships with others in a constructive manner (Singh & Narain, 2019). The results of this study are consistent with those of Parveen and Sadiq's (2019) study working mothers' children score slightly higher on Emotional Intelligence's dimension of managing relationships than orphans.

## **SUGGESTIONS**

As the primary objective of this study was to investigate the emotional intelligence of the adolescents living in child care institutions in the East Khasi Hills District, Meghalaya, further studies can be conducted to understand how their specific living conditions and environment in child care institutions may influence their emotional development. To gain comprehensive insights, a comparative study could be undertaken, including child care institutions from different districts. This would allow

researchers to compare the emotional intelligence levels among adolescents from various locations and identify any potential differences or patterns.

Further investigation into child care institutions with adolescents displaying high emotional intelligence would be particularly valuable. By examining these specific cases, the research can delve into the strategies employed in their homes or districts that contributed to the enhancement of their emotional intelligence. Understanding these strategies could offer important lessons and best practices that might be applicable to other childcare institutions aiming to foster emotional intelligence in their residents. Overall, this study has the potential to provide valuable knowledge on the emotional well-being of adolescents in childcare institutions and the factors that contribute to the development of emotional intelligence in such settings.

A study conducted by Lolaty, Ghahari, Tirgari and Fard (2012) highlights that life skills training enhances emotional intelligence, which also leads to various beneficial outcomes such as improved academic performance, reduced substance abuse, and enhanced stress management abilities. Based on these findings, it is recommended that life skills interventions should be actively implemented in childcare institutions to enhance the emotional intelligence of the adolescents residing there.

By incorporating life skills training programs into the daily routines of childcare institutions, adolescents can develop essential skills that contribute to their emotional well-being and overall growth. The improvement in emotional intelligence may, in turn, have a positive impact on their academic performance, as they become better equipped to manage stress and handle challenging situations effectively. By providing them with the necessary tools to cope with emotional challenges, they may also be less likely to turn to harmful substances as a means of escape or relief. Hence, implementing life skills interventions in child care institutions has the potential to create a supportive and nurturing

environment that fosters emotional growth and resilience in adolescents.

Moreover, the Department of Social Welfare can organize a series of Capacity Building Programmes on Understanding Child Development and the importance of emotional intelligence for functionaries to assist functionaries in effectively contributing to the holistic development of children and adolescents living in CCIs. It is particularly important since they are the primary source of support for children and adolescents living in child care institutions.

### **IMPLICATIONS**

The findings of this study can serve as a crucial baseline for social workers and caregivers, providing them with a better understanding of the emotional intelligence levels of the adolescents they interact with in childcare institutions. By having this baseline understanding, they can gain insights into the emotional strengths and areas of improvement among the adolescents under their care.

The knowledge gained from this study may motivate social workers and caregivers to prioritize and invest in the development of emotional intelligence among the adolescents. Recognizing the significance of emotional intelligence in shaping individuals' overall well-being and success, these professionals are likely to be more proactive in designing and implementing targeted interventions to enhance emotional intelligence.

The research outcomes can also foster a sense of responsibility and dedication of the childcare institutions towards the adolescents under their care. Armed with knowledge about the adolescents' emotional intelligence levels, they may feel more driven to tailor their approaches, support systems, and resources to meet the specific emotional needs of each individual. This personalized approach can contribute to a more positive and nurturing environment for the adolescents in childcare institutions. Moreover, having a baseline understanding of emotional intelligence can

aid in the identification of adolescents who may require additional support or specialized interventions. For those with lower emotional intelligence levels, caregivers can focus on implementing strategies to bolster their emotional skills and resilience, thereby enhancing their overall emotional well-being.

Overall, this study's insights have the potential to inspire social workers and caregivers to be proactive in their efforts to develop emotional intelligence in the adolescents they work with. By fostering emotional growth and competence, they can play a vital role in empowering these young individuals to navigate life's challenges more effectively and develop into well-adjusted and emotionally resilient adults.

## **CONCLUSION**

The significance of this study lies in the fact that there have been no previous studies on the emotional intelligence of adolescents living in childcare institutions in the East Khasi Hills District in Meghalaya. But, due to the limited scope of this study, it is possible to extend it to adolescents living in CCIs in other districts and observe a comparative analysis.

The study identifies four dimensions of emotional intelligence: understanding emotions, empathy, understanding motivation, and handling relationships. Each dimension is evaluated to understand the adolescents' emotional intelligence levels in each area.

**Understanding emotions:** The research indicates that over half of the adolescents possess an average level of understanding emotions, while a significant percentage lacks sufficient skills in identifying their own and others' emotional states. This suggests a need for interventions to enhance emotional awareness and emotional identification among adolescents in CCIs.

**Empathy:** Around 70 per cent of the adolescents display an average level of empathy, and it is noted that empathy correlates with academic

performance. Further research may explore the relationship between academic performance and empathy.

**Understanding motivation:** The study shows that a considerable percentage of adolescents score relatively low in understanding motivation, which may indicate a need for interventions that help develop a strong drive for achievement.

**Handling relationships:** The findings reveal that only a small proportion of adolescents exhibit high levels of effectively coping with relationships. This highlights the importance of targeted interventions to enhance relationship skills and promote constructive interactions among adolescents.

The importance of researching this topic cannot be overstated because adolescents are still forming their identities in society, so understanding their level of emotional intelligence will help caregivers formulate an intervention plan for enhancing it among adolescents. Several studies have shown that emotional intelligence is an essential skill in order to understand and manage one's emotions and those of others, which will determine an individual's success and ability to deal effectively and constructively with life situations, come what may.

These insights highlight the varying degrees of emotional intelligence among adolescents, emphasizing the need for targeted interventions to enhance emotional awareness and relationship skills during this crucial developmental stage. By addressing these areas, we can empower our youth to navigate their emotions and social interactions more effectively, fostering healthier and more fulfilling lives.

As an intervention strategy, CCIs could enhance emotional intelligence by instilling life skills in adolescents living in CCIs, and research has shown that life skills-based interventions contribute to the development of emotional intelligence (Kaur, 2011). Additionally, the investigator proposes that caregivers be oriented to Emotional Intelligence so they can be equipped to recognize and assist adolescents in developing emotional



intelligence by practising it by confronting the challenges they face on a daily basis constructively.

## References

- Antony, J. (2005). *Emotions in counselling*. Tamil Nadu: Anugraha Publication.
- Baruah, P. (2017). *Importance of emotional quotient in adolescents*. <https://medium.com/@palkeeb/importance-of-emotional-quotient-in-adolescents-3855a2317b07>
- Children Bureau. (2018). *The importance of developing emotional intelligence for kids*. <https://www.all4kids.org/news/blog/the-importance-of-developing-emotional-intelligence/>
- Furqani, N.N. (2020). The role of emotional intelligence in adolescent development. *Advances in Social Science, Education and Humanities Research*, 277-280. <https://doi.org/10.2991/assehr.k.200120.058>
- Fernández-Berrocal, P., Alcaide, R., Extremera, N., & Pizarro, D. (2006). The role of emotional intelligence in anxiety and depression among adolescents. *Individual Differences Research*, 4(1), 16–27.
- Hossain, M., & Halder, U.K. (2015). Emotional intelligence and mental health of higher secondary students: a gender analysis. *International Journal of Informative & Futuristic Research*, 3(3), 950-955.
- Katyal, S., & Awasthi, E. (2005). Gender differences in emotional intelligence among adolescents of Chandigarh. *Journal of Human Ecology*, 17 (2), 153–155. <https://doi.org/10.1080/09709274.2005.11905771>
- Kaur, TD. (2011). A study of impact of life skills intervention training on emotional intelligence of college adolescents. *Indian Journal of Psychological Science*, 2(2), 112-123.
- Khan, T., & Jahan, M. (2015). Psychological well-being and achievement motivation among orphan and non-orphan adolescents of Kashmir. *Indian Journal of Health and Wellbeing*, 6(8), 769-773.
- Lolaty, H. A., Ghahari, S., Tirgari, A., & Fard, J. H. (2012). The effect of life skills training on emotional intelligence of the medical sciences students in Iran. *Indian Journal of Psychological Medicine*, 34(4), 350–354. <https://doi.org/10.4103/0253-7176.108217>
- Lumos. (2014). *Ending the Institutionalisation of Children Globally – the Time is Now*.

[https://lumos.contentfiles.net/media/documents/document/2017/02/Lumos\\_-\\_The\\_Time\\_is\\_Now.pdf](https://lumos.contentfiles.net/media/documents/document/2017/02/Lumos_-_The_Time_is_Now.pdf)

Make a Difference. (n.d.). *Research report: number of children living in shelter homes in India*. <https://d39uag6u5n989.cloudfront.net/MADWebsite/Research+Resort+on+Number+of+Children+Living+In+Shelter+Homes+In+India.pdf>

Make A Difference. (2020). *Children in need of care & protection: CNCP*. <https://makeadiff.in/cncp>

Parveen, A., & Sadiq, H. (2019). Emotional intelligence of orphans & the children of working mothers – a comparative study. *Journal of Applied Research in Education*, 24 (1), 279-291. [https://www.researchgate.net/publication/326550322\\_Emotional\\_Intelligence\\_Of\\_Children\\_Of\\_Working\\_And\\_Non-Working\\_Mothers](https://www.researchgate.net/publication/326550322_Emotional_Intelligence_Of_Children_Of_Working_And_Non-Working_Mothers)

Sekhri, P., Sandhu, M., & Sachdev, V. (2017). Emerging understanding of emotional intelligence of teenagers. *International Journal of Clinical Pediatric Dentistry*, 10 (3), 289-292. <https://doi.org/10.5005/jp-journals-10005-1452>

Singh, A.K., & Narain, S. (2019). *Manual for emotional intelligence scale*. Agra: National Psychological Corporation.

Shulgaa, T.L., Savchenkoa, D.D., & Filinkova, E.B. (2016). Psychological characteristics of adolescents orphans with different experience of living in a family. *International Journal of Environmental and Science Education*, 11 (17), 10493-10504. <https://files.eric.ed.gov/fulltext/EJ1120236.pdf>

Wadkar, A. (2016). *Life skills for success*. New Delhi: SAGE Publications India Pvt Ltd.

## Conjugal Rights of Prisoners: A Fundamental Sacrosanct

BHARAT

### Abstract

*The conjugal right of the prisoners has always be a debatable issue across the country as well as at the international level. In India, the concept of the conjugal rights of the prisoners is still at its early stage. Since there is no specific law which deals with this concept, accordingly the prisoners knocked the doors of judiciary under the ambit of the fundamental right of 'right to life' beneath Article 21 of the Constitution of India. It is in this backdrop that there is divided opinion regarding the boons and banes of the conjugal right of the prisoners. Some regard it as mere a privilege while other construe it as an extension of the basic human right and fundamentally sacrosanct. Also, in the light of the 'reformatory theory' of punishment, the idea that a prisoner is the product of his/her social and economic conditions is widely accepted now. Thus, this view point of reforming a prisoner within the walls of the prison by providing him the comfort of the family and particularly, the spouse seem to be justified. Using the doctrinal research, this research paper is an attempt to analyse the concept of the conjugal rights of the prisoners in the different jurisdictions along with judicial decisions besides the concerned problems and related issues.*

**Keywords:** Conjugal Rights, Prisoners, Rights of Prisoners, Right to Life and Conjugal Visitations.

### INTRODUCTION

“It is said that no one truly knows a nation until one has been

inside its jails. A nation should not be judged by how it treats its highest citizens, but its lowest ones.”

– Nelson Mandela, the former President of South Africa

Offence does not take place without intention and their families being innocent have nothing to do with it and they suffer in vain. A democracy would be stronger if the criminal laws are stronger. It is irony of the criminal justice system that an offender would be half dead till the punishment is pronounced; as he has spent almost all his life facing the trial. When an offender is behind the bars his family suffers the most especially the spouse. The life of spouse becomes hell with mental torture and torment.

The children born out of such wedlock are as good as orphans in most of the cases. It is pertinent to consider here that most of the people in jails have delayed trials. This is mostly due to two reasons, *firstly*, because of their poor economic situation and they cannot afford bail. And *secondly*, they remain disregarded in the want of legal awareness. Sometimes the male earning member of the family is entrapped and thus, lead to deplorable conditions of their family members especially wives. The criminal justice system of the country does not pay attention to their future, and their further ventures of lives remain undecided. However, Section 9 of the Hindu Marriage Act, 1955 provides for restitution of the conjugal rights of a person, if one spouse abandons the other. The question arises that why it is not practiced in case of Criminal Justice System? Does it not amounts to violation of the fundamental right of the accused besides their basic human rights?

## **CONJUGAL RIGHTS**

Section 9 of the Hindu Marriage Act, 1955 dealing with the restitution of conjugal rights states that:

“When either the husband or the wife has, without reasonable

excuse, withdrawn from the society of the other, the aggrieved party may apply, by petition to the district court, for restitution of conjugal rights and the court, on being satisfied of the truth of the statements made in such petition and that there is no legal ground why the application should not be granted, may decree restitution of conjugal rights accordingly.”

Conjugal rights imply the mutual rights and privileges between two individuals arising from the state of being married. It includes set of rights like right to live together, right to have a physical intimate relationship and procreation of children. The remedy of conjugal right was first granted in England but it was further inculcated in Indian jurisprudence through the case of *Moonshee Bazloor v. Shamsoonaissa Begum*, though England has stopped following this remedy in 1970 but India still follows it under Section 9 of the Hindu Marriage Act, 1955.

In the context of prisons, however, conjugal right of prisoner refer to the concept of allowing a prisoner to spend quality time in privacy with his spouse within the precincts of a jail with the idea that it will have positive impacts in the form of psychological health of prisoner, besides the preservation of marital ties and reduction in the rates of homosexuality and sexual aggression within the four walls of the prisons. Aside from the above, it is also to seen as a fundamental right of the spouses of the prisoners.

It is pertinent to mention here that the conjugal association is allowed only for the legally wedded spouses not the live-in-partners or homosexual partners. It is only allowed to the married prisoners and also those whose marriages are intact. Such visits are not allowed for the unmarried prisoners and prisoners with broken marriage. It totally depends upon the state government to allow the conjugal visits. It is the discretion of the State to permit the conjugal rights to the prisoners, since prisons are enlisted as the State List subject in List II of the Seventh Schedule of the

Constitution of India (*hereinafter* referred to as the Constitution).

The special infrastructure is provided by the prison authorities while the conjugal visits are arranged. The arrangements such as separate rooms within the designated area of the prison, washrooms, linen, drinking water etc. are made by the authorities. The duration of the visit depends upon the framed Rules and regulations. In this way, the prisoners enjoy the quality time with their families especially with their spouses in the arena of the prison. Also, in some states these rights have been allowed to specific kind of the prisoners for instance in Punjab the visitation rights are allowed to the prisoners who have good behaviour, and not to the notorious prisoners.

One of the essential facets of conjugal rights is the “procreation of children”. Now these days, the procreation could be possible with the artificial insemination. The male sperm is artificially injected in the uterus of the woman and she gets pregnant. The prisoners in recent times have approached to the courts for the artificial insemination, either where the State does not have the facility for the conjugal rights or the prisoner does not qualify for the right of conjugal visits, parole, furlough etc.

### **CONJUGAL RIGHTS: AN EXTENSION OF FUNDAMENTAL RIGHT TO LIFE**

Article 21 of the Constitution provides for the fundamental right to live with the human dignity and not mere animal existence. Further Universal Declaration of Human Rights; which is considered as Magna Carta of human rights, state that all persons including prisoners have basic human rights and fundamental freedoms.

The Indian criminal justice system focuses on the reformatory approach of the accused persons. In a landmark judgment, the Supreme Court (*hereinafter* referred to as the SC) has emphasised on the re-humanization of the criminals by the way of the visits of the family. Further, in the case of *Francis Coralie Mullin v. The Administrator*, it was held that the visits

of family and friends to the prisoners in the jail could not be denied and if such denial happens that would amount to violation of the right to live with human dignity under Article 21 of the Constitution.

This fact cannot be denied that though prisoner's liberty is prohibited according to the procedure established by law but still they have a right to live with dignity and to enjoy their marital rights. Since marriage obligation is rooted in the Indian society, to enjoy marriage is the basic right of a prisoner. It can also be said that the spouse of the prisoner cannot be arbitrarily denied the conjugal rights. As the bar on the conjugal rights would also lead to infringement of the right to procreation of children which is also a basic human right granted to every individual, irrespective of the caste, colour, creed, region and religion. Bearing a child is an integral part of a marriage, subject to the consent of the spouses. Mere punishment of one spouse is not a valid justification of putting such bar on procreation. The women have a restricted time to bear the child and thus, there is high possibility that she may lose that time period owing to the imprisonment of the spouse. Therefore, not granting the conjugal rights to the prisoners would lead to the gross violation of their basic human right and it would amount to arbitrary and unreasonable to restriction on the fundamental rights of the prisoners.

The Punjab and Haryana High Court has recognised procreation rights of the prisoners and also the option of artificial insemination to be granted to the prisoners. The Court held that all inmates must not get such rights but only a reasonable classification of the inmates should get them. The prisoners who have committed the grave offences are prohibited of having such kind of rights.

In September, 2022 Punjab became first state in India to implement conjugal visitation to the inmates of the jails. This facility was started in three jails, *i.e.*, the Central Jail in Goindwal Sahib, the Women Jail in Bathinda and the District Jail in Nabha. The inmates who have good

conduct are allowed to have conjugal visitation rights considering the applications made by them. The infrastructure has also been developed in above-said jails by the State government. The State government has aimed to develop infrastructure in other jails of the states also. This would give the prisoners an opportunity for some intimacy during their custody in jails.

There is no denial to the fact that the want of the sexual intimacy exists during the period of imprisonment also. The individuals in prison, regardless of society's view about them, maintain their humanity and individuality. In *D. Bhuvan Mohan Patnaik & Ors v. State of Andhra Pradesh & Ors*, the SC held that prisoners are not to be completely denied of the fundamental rights that are granted otherwise. It was further held that though the imprisonment denies certain kind of fundamental rights like right to move freely, engage in professional commitment of their choice etc. but they cannot be denied of the other constitutional guarantees which are not affected by imprisonment, including those under Article 21 of the Constitution.

Further, in the case of *Sunil Batra v. Delhi Administration & Ors*, (popularly known as the *Sunil Batra I case*) the SC gave verdict ahead of its time and held that experiments for inculcating the positive environment for the prisoners such as activities, action oriented services, visits by/to families, work with wages, participation in the prison projects, for the prisoners and should be considered. In context of prisoners, the social justice is hardly explored. After two years, the SC in the case of *Sunil Batra v. Delhi Administration*, (popularly known as the *Sunil Batra II case*) tried to brought the radical changes in the jails like separating the under-trials from the convicts, invoking their fundamental rights provided under Article 21 of the Constitution, separating the young inmates from the adults, frequent visitation by the family and friends of the prisoners, redefining the duties of the prison administration and district



administration. The SC initiated liberation of the jail inmates from the atrocities inflicted through the physical and mental torture in the jails. The Court pointed out various backhanded practices which were going on in the jails including exploitation of the young inmates by the adults.

Apart from the above-said judgements, there are many other judgments which gave the wide connotation to the rights of the prisoners. For instance, in the case of *State of Maharashtra v. Prabhakar Pandurang Sangzgiri and Anr*, the SC held that the jail inmates have a right of publication of their own books; in *Sheela Barse v. State of Maharashtra*, the Court emphasised on the prisoners' right to legal aid and also issued guidelines for providing speedy and effective legal assistance to them in jails besides putting special emphasis on the protection of the women prisoners. These landmark judgments ensure the rights of the prisoners, but they do not emphasize upon the conjugal rights of the prisoners. Although in the Sunil Batra II case, the Court showed its concern about the problem of homosexuality and sexual abuse of youngsters in jail, but the issue of conjugal rights was not devolved upon.

In the case of *G. Bhargavi, Hyderabad v. Secy., Home Dept., Hyderabad and Others*, the Andhra Pradesh High Court considered a similar matter seeking emergent steps to be taken for allowing the conjugal visits in the jails of Andhra Pradesh. The High Court rejected this claim and stated that if these visits are allowed after considering the good behaviour of the prisoners, there is an apprehension that the environment of the jail can deteriorate and the jail inmates who could not be selected for conjugal visits; will have adverse psychological impact. The Court also observed that in absence of the specific provisions and rules regarding the release of the prisoner for the procreation, conjugal visits could not be allowed.

According to the National Crime Records Bureau (NCRB) report about 1800 children live with their mothers in various prisons in India. Amongst these 1800 children, some are born in prison, while some accompany their

mothers during the incarceration period of mothers till, they attain the age of six. These children end up staying in jail either because they are born in prison, because of their tender age, or because there is no one to look after them outside the prison. The judgment in *R.D. Upadhyay v. State of Andhra Pradesh and Ors.*, highlighted the plight of the women prisoners and their children living with them in Indian jails. The apex court issued guidelines for protecting and promoting the various rights and interests of children living in prisons with their mothers to ensure the holistic development of these children. The Court acknowledged and appreciated steps taken by a few states in this regard. However, the court noted that ‘a lot more is required to be done in the States and Union Territories for looking after the interest of the children’. The Court also proclaimed that the jail environment is not congenial for the growth of a child. So, reasonable steps must be taken to protect children living in Indian jails.

The Punjab and Haryana High Court in *Jasvir Singhand Ors. v. State of Punjab and Ors.*, favoured the accused/criminal’s right to procreation. In January 2010, the Bombay High Court; while hearing the Public Interest Litigation filed for the treatment facilities for the HIV positive prisoners in the jails of Maharashtra, asked the State Government to explore the possibilities to arrange the conjugal visits for the HIV positive prisoners in privacy in the jail premises. The Court stated that when the government already spending crores of rupees to control the menace of HIV, why not opt for the conjugal visits in the jails. The determination of this would be equivalent to the broad interpretation of the fundamental right of right to life under Article 21.

## **CONJUGAL VISITATIONS OF PRISONERS: STATUTORY FRAMEWORK**

Most of the laws across the country, directly or indirectly, accept the importance of maintaining continuity in family and social relations but with respect to the glimpse of the statutory framework related to the

conjugal rights of the prisoners, there is no such enactment in India which provides these rights to the prisoners. There is neither any scheme nor any set-up for the conjugal visitations in the jail. The power to regulate the parole and furlough is with the concerned state government and there is no central legislation to regulate it. For instance, in Punjab the rules related to parole and furlough are regulated by the legislation named the Punjab Good Conduct Prisoners (Temporary Release) Act, 1962 along with the Rules framed thereunder and the instructions issued by the state government. Section 3(1) of the Act permits the State Government to release the prisoners for a specified period of time on temporary basis on parole only on the conditions, *namely* (1) a member of the prisoner's family had died or is seriously ill; *or* (b) there is marriage of the prisoner's son or daughter; *or* (c) in case the prisoner is necessary for ploughing, sowing or harvesting or to carry out any other agricultural operation on his land and there is no friend family member of the jail inmate who can perform all this work in his absence; *or* (d) there is any other sufficient cause. Further, Section 4 of the Act allows the State Government to release the jail inmates on temporary basis, on 'furlough' only in case if he has good behaviour and on the basis of the quantum of sentence awarded or the nature of offence committed. Section 6 of the Act puts up a limitation against the release of inmate, if there is an apprehension of danger to the security of the State or the maintenance of public order. Section 8 of the Punjab Good Conduct Prisoners (Temporary Release) Act, 1962 also suggests penal consequences if the detainee fails to surrender on the expiry of the release period.

Interestingly, there is a fine difference between conjugal visits and furlough/parole. The latter is unsupervised visits away from the wall of the prison whose purpose is not defined; although exercising conjugal right can be one of them whereas the former is purely supervised in the four walls of the prison itself in tune with the constitutional spirit of the right to life with human dignity. Although the SC in various verdicts has

recommended the liberal use of the parole and furlough but it must be noted here that the conjugal rights or the conjugal visitations are still not a ground for the release of the prisoner on parole and furlough under the prevailing provisions of the law and thus, there arises a need to have a relook on the existing provisions to accommodate the conjugal rights.

### **CONJUGAL RIGHTS OF THE PRISONERS: INTERNATIONAL SCENARIO**

Prisoner rights are internationally recognised through the United Nations Standard Minimum Rules for the Treatment of Prisoners, the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights etc. Through such instruments, prisoners are guaranteed the right to life with the inherent and inbuilt notion of dignity. The right to maintain family relations including conjugal visits are reflected in these treaties.

The international community carries a divided opinion upon the pros and cons of this privilege being extended to the prisoners. In the modern times, the reformative theory is adopted across the globe and India is no exception to that. It is also widely accepted that a criminal is a by-product of his social, economic and environmental situations or circumstances. Thus, it becomes important that dignity of the prisoners (including accused and convicts, both) is important within the fortifications of the prison for the healthy health of the individuals and the institution.

In USA, prisoners in federal prisons are denied of conjugal visitations. However, those who are in the state custody are allowed to have the conjugal visitations. For example, states like California, New York and Washington allowed conjugal visitation programs which are known as family reunion visits. But the visitation rights are subjected to different kind of restrictions as implemented by the concerned state. In USA, the oldest conjugal visiting program was started for the inmates at the

Mississippi State Penitentiary in Parchman. This program was started in around 1918, though there is belief that the program has been started since this institution was first opened in 1900. Initially, this program was started only for the black prisoners but later on all inmates were allowed to have such visitation facilities. These conjugal visitations, allowed in Mississippi evolved with time but they never got legal recognition. The prisons are equipped with the facilities for the conjugal and the family visitations and have the separate rooms consisting of the beds and the tables located at the prison grounds. The visits take place every two weeks and can last for up to three days; the prison authorities have made arrangements for every scenario. The widely credited Mississippi state practice ended on January 31, 2014 citing the expense of maintaining the program along with the potential for creating single parents as reasons for the move.

It is not only the Mississippi state but the other states in USA also have the conjugal visitation programmes. Like, in the state of California, for the first time the conjugal visit program was instituted in the year of 1968. The prisoners in California are allowed to meet their children, spouses, parents etc. in the modular homes constructed in the prison ground. Similarly, conjugal visitation programs are also available in New York. The United States Court of Appeal in the case of *William Gerber v. Rodney Hickmen*, denied the claim for the artificial insemination of the petitioner-prisoner who was serving a long imprisonment. He contended that he wants a child and thus, he should be allowed to provide the sperm to his wife and denial of such would amount to violation of his Constitutional right. The Court held that no doubt those basic rights which are attached to the marriage like cohabitation, sexual intercourse, nurturing and bearing child are denied when a person incarnated and he also have no right for the conjugal visits while he is in prison. The Court further held that if artificial insemination would be allowed, it would be opposite to the objectives of the prison system and it would be totally unprecedented if the prison warden would order to conduct this whole

process of the artificial insemination as matter of the right. Thereby in this case the Court disallowed the artificial insemination for the prisoner.

The European Convention on Human Rights (*hereinafter* referred to as the ECHR) is leading Convention which governs the conjugal visitation rights and artificial insemination in Europe. The ECHR provides for the assurance of the right to privacy, right to marriage as well as the family life. Article 8 of the ECHR states that every individual has the right to respect for his private life along with his family life and there shall be no external interference of any authority governed by the government, save in accordance with the law important for the democratic country, for certain objectives like national security, public health, morals etc. All the member countries to this ECHR are under obligation to make provisions accordingly. Accordingly, many countries in Europe allowed the conjugal visits of prisoners for instance Spain, Sweden, and Denmark etc. England, Wales, North Ireland, Scotland also allows the conjugal visits.

In the case of *Dickson v. the United Kingdom*, the European Court of Human Rights denied permission of artificial insemination to prisoners. In this case the petition was filed by two prisoners and both were husband and wife. They prayed for the access to artificial insemination by depending upon the Article 8 and 12 of ECHR. Their application was turned down by the European Court of Human Rights stating that many states have allowed the conjugal visitation rights, and thus, there is no need to bother the authorities to provide extra facilities. Further in the case of *R v. Secretary of State for Home Department*, the Supreme Court of Judicature in UK also denied the claim of a prisoner for artificial insemination. The court held that refusal to permit petitioners with the facility of the artificial insemination would not amount to violation and breach of ECHR. The court culled out three reasons for sustenance of the policy that restricts the provision of facilities for artificial insemination. The court rejected the contention on the basis that there will be likelihood

of serious public concern if the prisoners continue to have been conceiving the child while they are in prisons. The inmates should not be allowed to beget the child while they are incarcerated except in the case of their temporary release.

Along with European and USA, few Latin American countries also provide for the conjugal visits of the spouse of the prisoner within the prison such as Chile, Argentina, Mexico and Puerto Rico. In this context, Chile has taken one step ahead and allowed for both private visits in the jails for the prisoners as well as for leaves for home. The concept is also adopted by countries like Canada, Germany, Russia, Belgium, Spain, Saudi Arabia, and Denmark. Further, in Brazil and Israel the same-sex conjugal visits are also allowed.

### **CONJUGAL ASSOCIATION OF PRISONERS: PROS AND CONS**

The debate of the conjugal rights of prisoners as basic human right and fundamentally sacrosanct got pace in recent times. It is very important to deal with the matter regarding the positives and negatives of allowing the conjugal rights of the prisoners. Just like every coin has two sides, so is the case of permitting conjugal rights of prisoners. The points indicating the positives and negatives of the conjugal rights of the prisoners are discussed hereinafter.

Today, the prison administration faces a lot of problems. Among them, one of the main and serious problems is of 'homosexuality'. The incidents of the male rape are high in the jails. It has always been suggested that that to reduce the incidents of the male rapes and homosexuality, more intimate relations must be available to the prisoners. If the prisoners will be allowed to spend the time with their family members, then it will significantly reduce the unisex relations/rapes which are prevalent in almost all the countries and also, in all states of India. The problem of the homosexuality in prisons is most of the times non-consensual. Forceful

homosexuality is kind of a reaffirmation of their masculinity and it enhances their manly self-image by traumatizing other inmates. Since they are non-consensual, the conjugal visits would be helpful to reduce them. It is also argued that if the conjugal visits are allowed, it will help to strengthen the family ties and will also help the prison officials to improve prison discipline. The prison conjugal visitation is a kind of rehabilitative initiative which may be necessary for the well-being of the prisoners as they are part of society only.

Another main point which is argued in favour of the conjugal visits is that it helps to modify the behaviour of the prisoner, there is normalizing effect because a bond with the family is re-established. This re-connection with the family and spouse are effective to reduce the violence incidents in jail and reforms the prisoner completely when they re-enter the society. However, the reviewers for this point states that all these results are more of speculations and the desired results of modification of the prisoners cannot be achieved, rather it will increase other kind of concerns like security issues, smuggling of the drugs and contrabands and other goods from outside which will in return cause the hassle and difficulties for the prison administration.

Another point, in favour of the conjugal visits, is based on the moral parameter that humanity demands that the prisoners should also be permitted to spend quality time with the families so as to have the nurturing bonds in their respective lives. This notion is based on the very fact that the frustration level is raised to an alarming altitude in the spouse of the prisoner due to the severance of the marital ties and the spouse should not be compelled to pay for the deeds of the prisoner. Although this point of view is usually downplayed by the argument that there is no moral obligation of the society or the law to grant the prisoners a privilege of sex within the walls of the prison and also that it is implied condition of the incarceration that the all marital ties are severed and the opportunity to



beget the children cease to exist, but again the basic human rights cannot be disregarded at all.

The main arguments that are given against the above-said view point includes that the prison homosexuality is not dependent on the deprivation of heterosexual opportunities but rather an urge to master the people who are powerless and are victims. And also, that there are not frequent homosexual encounters, rather they are limited and less in numbers. Besides, another argument which is always put up against the conjugal visits is that the child born out of such relations would always have single parent upbringing before the release of the another parent upon the completion of the imprisonment. Also, in case both parents are in prison and the conjugal right is allowed, then on the one hand the issue of best interest of unborn child needs to be addressed; and secondly, the welfare of the child-born is going to be a big question, as the upbringing of the child may be adversely affected.

Above all, the strong argument that is put up against the conjugal rights is that it tends to cause an extra burden on the exchequer of the state, as there will be the requirement to provide the infrastructural facilities among other related concerns. The jails are already overcrowded, lack of basic infrastructure facilities, it would be difficult for the state to spend on the construction and development of the additional infrastructure especially for ensuring the conjugal visits. To down play this, on the other hand; in the parole or furlough the state does not have to shell a penny and the purpose of conjugal rights can be addressed that way.

It is an open secret that there is an agreement as well as a disagreement in allowing conjugal rights to the prisoners. But with changing scenario, the societies are transforming with the growing sensitization with regard to the human rights of every section of the society including the prisoners. This fact has been widely accepted that all human beings especially the

disadvantaged sections of the society have the basic human rights which should be upheld and protected at any cost.

## CONCLUSION

“The basic principle of the reformatory theory emphasizes on the renewal of the criminal and the beginning of a new life for him”.

To wrap up, in order to administer justice, penalization is required and it is the duty of the state to maintain a peaceful environment. With the change of time, the system of penalization has changed and new approaches and modifications have been implemented in the justice delivery mechanism. Mary Harris Jones has very aptly said that reformation is like education, it is a journey, not a destination. Imprisonment is a reformatory measure for the prisoners and it is always believed by the lawmakers that no matter what crime a criminal has committed he can always be reformed. The justice administration should stick to this viewpoint. Also, it has been held in the plethora of cases that the prisoners should not be denied of the basic fundamental rights under normal circumstance and situations. It is the demand of today's time that the legislators should come up with a blueprint referring to the most basic right of prisoner *i.e.* conjugal right.

The society need to acknowledge the fact that prisoners do not lose their sexual orientation once they are jailed. Controlling or denying their urge for the sexuality may lead to many other issues with severe complications. The fact cannot be denied that there is still more work required to be done for more liberal sexual expression of the prisoners and for that there is need of a more cohesive and humanitarian approach is required.

To maintain discipline in society, the practice of punishment is a very essential element but denying conjugal visits would affect the psychological health and subject innocent spouse to unreasonable punishment too. There is a need to have a compassionate approach while

dealing with this matter, without punishing for the crime which is not committed. Indeed, the conjugal visits are rehabilitative in nature and humane for the prisoners as well as their spouse and thus, fundamental sacrosanct!

### References:

- Anamica Singh and Anupal Dasgupta, "Prisoner's Conjugal Visitation Rights in India: Changing Perspectives" 4 *CULJ* 76-77 (2015).
- D. Bhuvan Mohan Patnaik & Ors v. State of Andhra Pradesh & Ors*, 1975 SCR (2) 24.
- Dickson v. the United Kingdom*, Petition No. 44362/04 decided on December 4, 2007.
- Francis Coralie Mullin v. The Administrator*, 1981 SCR (2) 516.
- G. Bhargavi, Hyderabad v. Secy., Home Dept., Hyderabad and Others*, 2012 (5) ALD 432.
- Jasvir Singhand Ors. v. State of Punjab and Ors.*, 2015(1) RCR (Criminal) 509.
- Michael Braswell and Donald A. Cabana, "Conjugal Visitation and Furlough Programs for Offenders in Mississippi", *New England Journal of Prison Law*, Vol. 67, No. 2, 1975, pp. 67-72, at p. 67.
- Moonshee Bazloor v. Shamsoonaissa Begum*, 1866(11) MIA 551.
- The Constitution of India, 1950.
- The Hindu Marriage Act, 1955.
- The Prison Statistics India (2021).
- The Punjab Good Conduct Prisoners (Temporary Release) Act, 1962.
- The National Crime Records Bureau Reports
- R v. Secretary of State for Home Department*, [2001] EWCA Civ 472.
- R.D. Upadhyay v. State of Andhra Pradesh and Ors.*, (2007) 15 SCC 337.
- Robert S. Summers, "Punishment and Responsibility by A. Hart", 19 *The University of Toronto Law Journal* (1969).
- Shruti Goyal, "Conjugal Rights of Prisoners" 6, *BLR* 58 (2018).

*Sheela Barse v. State of Maharashtra*, (1983) 2 SCC 96.

*State of Maharashtra v. Prabhakar Pandurang Sangzgiri and Anr*, AIR 1966 SC 424.

*Sunil Batra v. Delhi Administration*, (1978) 4 SCC 409.

*Sunil Batra v. Delhi Administration*, (1980) 3 SCC 488.

*William Gerber v. Rodney Hickmen*, 291 F.3d 617 (9th Cir. 2002).

## **Gender Beyond Binary: A Qualitative Analysis of Tribulations Faced by the Third Gender**

RICHA WALIA

### **Abstract**

*The present paper examines the problems faced by third-gender people at the family and community level. Needless to mention that the third gender people are stigmatized for various reasons such as non-binary identity, inability to produce a child, sex work, etc. The first part of the paper deals with the backdrop of the third gender and tribulations faced by third-gender people, supported by a literature review and available statistical data. The next part contains the objectives and the research methodology. A sample of 15 transgender people was taken via using snowball sampling. Five to six respondents did not provide much information due to fear of being identified; hence, those who explicitly provided their life stories have been considered for the analysis. Narrative and in-depth interviews have been conducted to elicit the issues and tensions faced by transgender people at the family and community level. Further questions related to their experiences of oppression, exclusion and support from family, friends, etc., were also asked from the respondents.*

*The interview questions aided in understanding the dichotomy faced by the third gender people in accepting the real self and self expected by society. Findings reveal that out of fear; they hide their inner feelings. Furthermore, social institutions such as the family, community members and media constantly underline the idea of gender-appropriate behaviour, i.e., stereotypes expected from males and females, hence legitimizing the violence suffered by Hijras. Although, the ones who received constant support from their parents or partners could accept their real identity and withstand that, ultimately leading to societal acceptance to some extent.*

**Keywords:** Third gender, stigmatization, binary, tribulations, narrative

## **Gender Beyond Binary**

Traditionally, gender in the discourse primarily focuses on the binary of male or female. Earlier, gender was associated with the biological sex, i.e., the physiological set-up of an individual. Nonetheless, sex and gender are entirely different. The concept of gender first appeared in feminist writings in the 1970s. It challenged the dominant connotation of biological determinism, which legitimized women's inequality based on biological differences between men and women. Judith Butler, a feminist philosopher, marked that gender is not something which is biological in nature rather, it is "performative". Therefore, gender is something which we learn through socialisation, i.e., the set of behaviours and expressions expected from males and females. On the other hand, sex refers to the biological make-up of an individual; however, gender is socially constructed processes and dissimilarities, often coupled with being feminine, masculine or a mixture of both or none. Individuals are not born with a specific gender; rather, they are born into cultures where they "learn gender identity through interactions with others and are socialized to assume a gender role" (Allen, 2011, p. 40).

It was in the 1990s that the intersectionality perspective came up and called for an intersectional analysis covering multiple dimensions of oppression, for instance, sex, gender, class, race, sexuality, ethnicity and disability. Further, in 1990s queer theory started using gender differently, challenging the binary understanding of gender. Although existing societal norms expect that most people's biological sex matches their prescribed gender, consequently, one can observe the dyadic relationship (masculine and feminine) in our daily discourse where one or the other legally binds through marriage. However, some people fall outside this binary, i.e., the third gender (Miller, 2011). Nonbinary people recognize themselves between man and woman, blend both, or may identify separately from these categories. According to Bilodeau & Renn, 2005, individuals whose

gender goes with their biological sex are termed as "traditionally gendered", and whose behaviour matches biological sex are included in the traditional category (Nestle et al., 2002).

### **Third Gender: A Backdrop**

Hirschfeld created the term "transsexual" in 1923; however, at that time, transsexualism was regarded as a medical disorder diagnosed as discontent with one's biological sex. He can be considered the pioneer who introduced this term and systematically classified gender identity disorders. (Hirschfeld,1918). Until the 1960s, scholars used medico-psychiatrically words such as transvestite and transsexual to refer third gender people. In 1969, Virginia Prince first coined the term "transgenderal"; however, this term did not use for long (Ekin & Dave, 2006). In 1978, Prince used "transgenderist" as one of three classes – including transvestites and transsexuals. Transgender people are described as male-bodied person who adopts "the exterior manifestations of the opposite sex... without any surgical interventions" ( Prince, 1978).

Transgender is an umbrella term used for individuals who identify themselves beyond the gender binaries of male and female. The binary includes "transsexuals", "cross-dressers", "drag kings", & "queens", and "genderqueers" (Beemyan, 2003). He further categorized transgender into various types. First is transgender people whose "inner sense of gender varies from their biological sex. Pursuing medical or hormonal treatment is not essential to change their outward appearance. Secondly, cross-dressers are individuals who dress as the opposite of their gender. Drag queens and drag kings dresses as the other gender for entertainment purpose. Lastly, gender queers may not identify as male or female. They deemed their gender transcends the gender" (Beemyan, 2003). Another thing which falls along the gender binary is sexual preference. Sexual preference refers to the degree an individual is sexually attracted to others. The sexual preference binary in western countries is heterosexual/

homosexual (Meyer, 2004). Heterosexual relationships comprise males/females whose gender identity matches their biological bodies. (Cashore & Tauson, 2009). On the other hand, homosexual/gay individuals are either male/male or female/female. Their sexual orientation is different as they tend to have sexual relationships with people of the same sex.

### **Third Gender in the India Context**

Indian writings has acknowledged the other gender from its beginning, the third gender people i.e., Tritiyaprakrti. Danielou, A. (1991) noted various incidences of the third gender in the ancient text; for instance, 'Mohini' is regarded as the female form of Lord Vishnu. Another form of triumvirate is 'Shiva', which is presented as 'Aradhanareeshwara', indicating 'half-woman-man'. This avatar was regarded as the union of the male and the female attributes. The epic Ramayana contains a text where transgender existence has been mentioned; when Lord Rama was exiled from the kingdom for 14 years, many people wanted to accompany him during the exile. Therefore, Lord Rama directed and said all the 'men and women of Ayodhya might return to their homes. However, third-gender people felt bound by this direction and decided to stay there for fourteen years. After returning from exile, Lord Rama was surprised to find them waiting for him at the border. Thus, he sanctioned them the power to grant blessings on auspicious occasions such as childbirth and marriage (Michalraj, M. 2015).

In the medieval period, the Third-gender people played a significant role in the royal courts of Muslim rulers. They occupied high positions in Islamic religious institutions, especially guarding Mecca and Madina's holy places (M. Michelraj, 2015). However, Third gender people have been excluded and disparaged since the British period. During this rule, the perception of the third gender was considerably tainted. They considered them a 'breach of public decency' and categorized them as a 'criminal tribe' under the Criminal Tribes Act 1871 (Preston, L.W. 1987).



After this act, the condition of transgender changed, and people ostracized them. In India, especially in north India third gender is known as Hijras.

Culturally Hijras are defined as performers on auspicious occasions such as childbirth and marriage. Hijras bless the child and the family and provide entertainment for friends, relatives, and neighbours. Although the term Hijras is known to most trans people throughout India, there are several other indigenous terms by which trans people, especially transwomen, identify themselves. These terms vary by regions in India: Kinnars, Thirunangai (or aravanis) in Tamil Nadu, Mangalmuki in Karnataka, shiv shakti in Andhra Pradesh, and Jogappa or Jogta in parts of Karnataka and Maharashtra (Chakrapani. et al., 2007). They fulfill their economic needs by dancing and celebrating in births and marriage ceremonies. Their life is entirely distinct from the general human society. They lived together in a family unit called Gharanas, led by Nayaks, the topmost leaders and Gurus (next-level leaders). Several Chelas (disciples) live under one Guru. The Guru is responsible for fulfilling the basic needs of their chela, and in return, the chela is also supposed to show obedience and respect to the Guru. If the chela deviates from their prescribed norms, the Guru can punish them; the penalties can be economical and even physical.

### **Issues and challenges in contemporary context**

However, our social and legal discourse fails to recognize gender identities and expressions outside this binary. Although the third gender, an invisible section of society, has recently been identified after the landmark judgment of the Supreme court. They do not get emotional support from their families and face a series of human rights violations from community members. Furthermore, they are subjected to unfair treatment such as verbal abuse, physical and sexual violence, false arrests, and victimization in families, educational institutions, workplaces, health care, and public places. The irony is that we do not have a data bank to see

the rate of atrocities committed by the people—a study conducted by an NGO in Delhi and Uttar Pradesh on 900 transgender persons.

The report stated that about 92 per cent of transgender persons were deprived of participating in any form of economic activity. Further, only 2% of transgender persons live with their families. The schoolmates do not accept the one who wants to receive an education. Eighteen per cent of transgender people are physically abused, 62 per cent are verbally abused in school, and 15 per cent are harassed by students and teachers (Kerala Development Society, 2017, pg.45). Another study by the National Institute of Epidemiology depicted the plight of transgender people. Over 60,000 transgender people across 17 states were surveyed. The findings elicit that many transgender people received no support from their biological families (Times of India, 2016). Many reasons were stated for disowning transgender persons from their biological parents, such as societal shame, fear for marital prospects etc. Therefore, It is essential to locate the issues of the third gender, and subsequently, some suggestions will be put forth for the inclusion of the third gender in various spheres of life.

**Table 2.1**

**CBSE announced the total number of students who registered for the exams**

| <b>Year<br/>2020</b> | <b>Total<br/>Number of<br/>Registered<br/>Students</b> | <b>Number of<br/>Boys</b> | <b>Number of<br/>Girl</b> | <b>Number of<br/>Transgender<br/>Students</b> |
|----------------------|--|---------------------------|---------------------------|---|
| Class X              | 18,89,878  | 11,01,664                 | 7,88,195                  | 19  |
| Class XII            | 12,06,893  | 6,84,068                  | 5,22,819                  | 6   |

(Source: NDTV, 2020 Feb 14, 2020)

The table reflects that the number of transgender students registered for the exams is abysmally low. In one of the reports by the Peoples' Union for Civil Liberties, Karnataka (PUCL-K) (2003), personal narratives were collected from the transgender community in Bangalore to understand their plight. Few narratives demonstrate the stark realities of harassment, abuse and sexual violence against transgender people. They are stigmatized for various reasons such as non-binary identity, inability to produce a child, sex work, etc. Due to being stigmatized, they are denied from their civil rights, such as dignified access to education, health services and employment. Nevertheless, Indian Constitution mandates social, economic, and political equality, irrespective of caste, creed, colour and sex. Furthermore, Article 14 -15 grants the right to equality and prohibits discrimination based on religion, race, caste, sex or place of birth. Article 21 guarantees the right to privacy and personal dignity to all citizens. However, the third community (transgender people) continues to be ostracized. Several organizations are working for the welfare of the LGBTQIA+ community. To provide the basic right, i.e., the right to equality, Johar and five others filed a petition in the Supreme Court challenging Section 377 of IPC.

After a long battle, the Supreme Court passed a landmark judgement in which the Supreme Court unanimously decriminalized section 377. Later, the Transgender Person (Protection of Rights) Act, 2019 prohibits discrimination against third-gender persons in various sectors like employment, education and healthcare. Currently, Transgender people are accepted as the third gender in India. Multiple people, such as academicians, researchers, NGOs, and scholars, widely use the term transgender. The third gender, in April 2014, was included in the enumeration process, i.e., the Census of India 2011 after the landmark judgement. Before the 2011 Indian Census had never recognized the third gender; however, in 2011, data were collected related to their employment, literacy and caste. The table reflects that In India, the total population of transgender is around 4.88 Lakh. The literacy level of transgender people is extremely low in India. Table 2.2 indicates the low

literacy level in the community, just 56.07 per cent are literate, compared to 73 per cent literacy in the general population., only 32.1 % of the third gender are working.

**Table 2.2**  
**Number of Third Gender in India**

| <b>India/States/UT's</b> | <b>No. of Third gender</b> | <b>Percentage of literate</b> | <b>Percentage of working population</b> |
|--------------------------|----------------------------|-------------------------------|---|
| India                    | <b>487,803</b>             | <b>56.1</b>                   | <b>34.0</b>                             |
| Jammu&Kashmir            | 4,137                      | 49.3                          | 33.3                                    |
| HimachalPradesh          | 2,051                      | 62.1                          | 49.3                                    |
| Punjab                   | 10,243                     | 59.7                          | 32.1                                    |
| Chandigarh               | 142                        | 72.2                          | 37.3                                    |
| Uttarakhand              | 4,555                      | 62.7                          | 34.9                                    |
| Haryana                  | 8,422                      | 62.1                          | 29.9                                    |
| NCTOfDelhi               | 4,213                      | 63.0                          | 40.1                                    |
| Rajasthan                | 16,517                     | 48.3                          | 37.1                                    |
| UttarPradesh             | 137,465                    | 55.8                          | 27.7                                    |
| Bihar                    | 40,827                     | 44.3                          | 32.5                                    |
| Sikkim                   | 126                        | 65.2                          | 51.6                                    |
| ArunachalPradesh         | 495                        | 52.2                          | 48.5                                    |
| Nagaland                 | 398                        | 70.7                          | 51.8                                    |
| Manipur                  | 1,343                      | 67.5                          | 48.7                                    |
| Mizoram                  | 166                        | 87.1                          | 47.0                                    |
| Tripura                  | 833                        | 71.2                          | 36.9                                    |

|                   |        |      |      |
|-------------------|--------|------|------|
| Meghalaya         | 627    | 57.4 | 42.7 |
| Assam             | 11,374 | 53.7 | 35.8 |
| WestBengal        | 30,349 | 58.8 | 32.5 |
| Jharkhand         | 13,463 | 47.6 | 36.3 |
| Odisha            | 20,332 | 54.3 | 31.8 |
| Chhattisgarh      | 6,591  | 51.4 | 40.1 |
| MadhyaPradesh     | 29,597 | 53.0 | 37.6 |
| Gujarat           | 11,544 | 62.8 | 36.0 |
| Daman&Diu         | 59     | 75.5 | 35.6 |
| Dadra&NagarHaveli | 43     | 73.7 | 32.6 |
| Maharashtra       | 40,891 | 67.6 | 37.9 |
| AndhraPradesh     | 43,769 | 53.3 | 39.7 |
| Karnataka         | 20,266 | 58.8 | 39.8 |
| Goa               | 398    | 73.9 | 34.2 |
| Lakshadweep       | 2      | 50.0 | 0.0  |
| Kerala            | 3,902  | 84.6 | 22.7 |
| TamilNadu         | 22,364 | 57.8 | 43.7 |
| Puducherry        | 252    | 60.6 | 30.2 |
| Andaman&Nicobar   | 47     | 73.8 | 23.4 |

Source: Registrar General of India, Census of India, 2011

### Objectives of the Present Study

After reviewing the literature and data, one can observe that there is a dearth of data and sociological research on the third gender. Furthermore, they face numerous problems which need to be studied in detail.

Therefore, this study has made an effort to:

1. Find out the major problems faced by the third gender at the family and community levels;
2. Examine the coping strategies third gender used to tackle tensions during their life cycle.

### **Research Methodology**

The study was conducted in rural areas of Haryana, where the literacy rate and percentage of working transgender were low. A mutual link was identified from Narayangarh village, and a few transgender people were interviewed from the nearby areas (rural and urban, for instance, Milak village, Sadhora and Raipurani). A sample of 15 transgender people was taken via using snowball sampling. Five to Six respondents did not provide much information due to fear of being identified; hence, those who explicitly provided their life stories have been considered for the analysis. The participants retold their past, which were recorded, and subsequent analysis was done for deeper analysis. The interview questions aided in understanding the dichotomy faced by the third gender people in accepting the real self and self expected by society. Further questions related to their experiences of oppression, exclusion and support from family, friends, etc., were also asked of the respondents.

### **Tribulations faced by indiscernible group i.e., the third gender:**

#### **A Qualitative Analysis**

After conducting detailed interviews, their problems, tensions and issues are divided into various categories.

**D)Self-consciousness vs. Confusion** regarding their gender was the prime tension that arose early in life. This is the very 1st stage, where the transgender individual experiences heightened awareness of female/male identity crises. A few realized their identity early; others bumbled to

apprehend their real self. Geeta remembers the phase of identity crises at a very young age. She was in the fourth grade, ten years old: " I am the second child in a family. Since childhood, I have loved playing with dolls and wearing dresses. Biologically I am male, but my internal feeling of self is different. I remember I loved to do household chores like my mother". Sheela said, "I distinctly remember I love to be like a girl" I did not like to be a boy. I draped my mother's saree and applied my mother's lipstick. I loved to interact with my female cousins. But I didn't disclose my real self because I had fear. Until 15 years, I kept this a secret. I acted like a jester." *Subha hote hi acting start ho jati thi, ladko ke kapde pehno, wise behave, Karo, me thak Gayi thi ye acting karke*" (I started my acting in the morning. I got up and wore male clothing and behaved like males. I was fed up with this acting). At times I felt like a boy, and at other moments, like a girl. All boys used to behave differently than me. But I was confused and did not discuss this with anyone. I realized this thing later when I was helpless and oblivious about how to take a stand. Ria discussed I never felt like a boy; my mother used to adore me by saying " *Mera Beta*". I clearly remember that my language was also feminine. I always used feminine vocabulary such as "*Me jatihu and karti hu*". Initially, my language and behaviour were never taken seriously; however, at the age of 8-9, my mother started pointing out my language. In adolescence, my friends and parents never appreciated my feminine behaviour; however, I never felt erroneous. In her mind, at such a young age, she did not want to be a boy. She tried to drape a *saree*, apply *kajal* and participate in the activities in which young girls participated.

Sachin said it was a confusing phase; I had no idea about my feelings; I never felt a boy in my body. During the early stage of my childhood, I did not realize that I had an unusual feeling. During my adolescent age, I could comprehend the difference between me and other boys. My friends in school mocked me because of my feminine traits. My parents also came

to know about it. Hence, I suppressed my feelings deep inside me. Likewise, Neena distinctly narrated this phase where she was confused about her identity.

**II) Struggle vs. Self-acceptance.** Each participant narrated particular moment in their lives where they faced only two options: to hide their inner feelings or to make a choice. Hina turned 16 and kept helping her mother with household chores. The neighbours started teasing me." *Tu padta kyu nahi, ladki ke jaise kam karta rehta hai*" (Why don't you study? You do household chores like girls). I was verbally abused by all the villagers, especially young boys. One day they undressed me to check whether I had a penis. I felt very ashamed. I even felt suicidal. I narrated the incident to my parents. Instead of consoling me, they asked me to leave the village to avoid the ignominy. "*Tuja or jakar koi kamkar*" (You go and find some work). That night, I cried a lot. I realized that respect in society was much more important for my parents than for their son. After this incident, I decided to leave home. One night, I took my suitcase and left my house. I slept on the roads and begged for many days.

Luckily, I met a woman who told me about the Hijra community and said you might be one of them. I went there and joined their group. Krishna said that when she learned about the Hijra community, she decided to live as a woman. Sachin was interviewed telephonically as he did not want to reveal his identity. Riya (a transgender woman and Sachin's friend) requested him to talk and discuss his feelings with the researcher. Sachin said Nobody knows my real identity except my transgender friend Riya. I have female feelings, but my parents always suppressed my feelings. They used to beat me. One day, I applied kajal, and my father thrashed me. My mother yelled at me like crazy. That day I felt I had committed a sin. I did not want the same thing back in my life; therefore, I tried to behave like a boy. I feel I am in a kind of prison. I am acting; this is not me.

Once I saw Hijra community members, people were making fun of them. I



did not want the same mockery for myself; hence, I decided not to reveal my identity. I want to fly. I want to be a woman, but my father will kill me. *"Kabhi Kabhi man karta hai sab chor du or Riya ke pas aa jau magar samaj or gharwali se bohat dar lagta hai, Riya samjhati hai muje. Acha lagta hai Riya se milna"* (Sometimes, I feel like leaving everything. I want to live with Riya; however, I am afraid of my family members. Riya understands me. I like to hang with her). I met Riya, and we became very good friends. I share my feeling with her over the phone. We met outside the town so that no one would know about us. Geeta narrated that deciding whether to surrender an assigned identity or struggle for a real identity was tough. Both paths were difficult. I chose the second one. I struggled for my real identity. I was around 8 or 9 when I faced turbulence regarding my gender identity. A group of boys mocked me. *"Un logo ne puri class me mera Mazak banaya, muje apne sath nahi bitrate the ladki wali Jagha par be the kobolte the. Muje yaad hai mere koi dost nahi tha"* (They ridiculed me in front of everyone in my class. They did not let me sit in the boys' row and forced me to sit with girls. I do not remember ever having any friends in school).

One day they locked me in the girls' toilet. I become a mockery in the school. I dropped out at the age of 12. My parents also realized something was erroneous with my identity but never interacted with me on this topic. My parents knew about my real identity, but they never discussed this issue, and whenever I tried to defy, they mortified me. It was a tough phase. *"Kaahi se support nahi miltha tha"* (I did not get support from anyone). Once, my sister had to face humiliation because of me. My parents cursed their luck and locked me inside the home. However, they could not lock me for long, but that day I gathered courage and told my parents about my feelings. They threw me out. I was traumatized. I cried bitterly; hearing my voice, a few villagers gathered and took me back home. They held a meeting and decided to send me to the Hijra community. I joined them; initially, living with people you do not know

was tough. However, I made an accord with my destiny. They are my family now; at least I can breathe freely here. I can behave according to my identity. They do not judge and castigate me for my real identity.

Geeta, after realizing her real identity, faced numerous issues. She stated that people around me also realized my real identity, but they never appreciated it. I barely had any male friends. Few girls treated me well; however, due to family pressure, they left my companionship. I was all alone. My mother also heard taunts from neighbours. She never discussed it with me, but I listened to a lady saying, Why is your child not normal like other boys? She loves me a lot. She never ill-treated me due to my different identity. However, back in my mind, I feared I would one day lose my mother. Therefore, I continued with this acting. I tried to behave more manly. If I rewind my life and think it's like an actor. I was acting like a male. One day I decided to quit this role and accept my real identity. I had no courage to tell my mother, so I left home. Somehow, I met the Hijra community and lived with them. After a few years, I met my mother as a boy but told her everything. She is still in touch with me. I miss her. I want to be with her. But due to family and societal pressure, we cannot live together.

With teary eyes she said "*Kitni dukh ki baat hai na, hum apno ke sath nahi reh sakte, hamare apne humko public me nahi apna sakte, Kitne dukh ki baat hai, hum itne bure or alag hai kya?*" (It is very sad that I cannot live with my mother due to my different identity. My mother cannot accept me publically. It is very sad. Are we (The third Gender) so bad? Why are we so different?) It is apparent from the above narratives that all the trans men faced difficulty because it is considered taboo, shameful and humiliating for families. Therefore, family members tried to suppress the feelings of trans men. A few of the transgender said they even felt suicidal and took a bold step to accept their real self. However, quite a few hide their feelings due to shame and guilt. It was observed that those who did not accept their

real self were unsatisfied and feared being humiliated and out casted by their family and friends (Also refer annexure I).

**III)** The third tension was **Remorse vs. Satisfaction** of being transgender or accepting their real identity. Riya, a transgender woman, narrated her feelings. I was born into an educated family. My biological parents abandoned me at birth. Someone adopted me; however, they also left me when I was 12. Homeless and alone, I slept many nights at the bus stand, constantly fearing abuse. I got into sex work for survival. I had no option—lack of education and acceptance by society forced me to get into this work. I feel bad for being transgender. People do not respect us and give us money out of fear. Moreover, I do not like to earn money by begging. If I were born as a boy or girl, I would get a fair chance to live my life. "*Jab ma baap hi sath nahi date tou hum samaj se kya humid kare*" (When our parents do not take our stand what we can expect from society). I feel we will never get justice. Riya's friend sachin said, *Jo me huwo me samaj ko dikha nahi sakta, or jo me nahi huwo ban kar me thak gaya hu*". (I m tired of acting as a male. Although I cannot reveal my real self). I know I am transgender, and I curse myself for being it. I am fed up with acting like a male. I wish I would be born normal next time. This is insane to behave what you are not. I am not at all satisfied with my life. You can not understand my state of mind. Sometimes I feel I should consult a counsellor, but what would I say to him? I cannot reveal my real self. I am struck.

Sushma, said I do not have any remorse for being transgender. My parents, especially my mother, supported me. Although I faced many issues in school, my mother never felt embarrassed about me. After obtaining my basic education, I decided to do a vocational course. I learnt a beautician course. I own a parlour, and my income is decent. Community members have accepted me; many women have come to my parlour. The toughest part was to accept my real identity and withstand

that. I did that, and my mother was my greatest support. I have a partner, and he is good and caring.

I don't have any remorse for my life. I am happy; however, sometimes I feel bad for other transgender people who face humiliation and disrespect from society. Hence, I think lawmakers must provide a decent atmosphere. Sahil, 36 years old, I have female feelings. I tried to hide my feelings, but one day my uncle came to know about it and started blackmailing me. He asked me to come and have sex with him. This continued for many weeks. Out of fear, I never revealed my identity. I was frustrated with repeated abuses. I wanted to commit suicide, but everything was destined. I left my house and met Rama Tai, who told me about the Hijra community. I did not join and still living as a male.

Although I have moved on, still my childhood memories still scare me at night. I don't believe in any god; they have never helped me. I do not want to be transgender at my next birth. He added "*aise zindagi kisko chahiye, koi izzat nahi karta, parivar, samaj koi bhi nahi. Log darte hai humse, dekh kar aise behave karte hai jaise koi bhoot dekh lia ho. Aisa kyu kia bhagwan ne*" (Who wants such a life? Nobody respects us, be it a family or community. People are afraid of them and behave as if they have seen a ghost. Why did God do this?). It is evident from their life stories that they led tough lives with shame, humiliation, and low self-esteem, psychological turbulences. Quite a few took a stand for their real self and led a life as transgender; however, others still lived in a mental penitentiary. Always in fear of rejection, cruelty, and embarrassment. They are psychologically wrecked and need a therapist; however, they cannot even confer their mental trauma due to the fear of rejection. Many who had accepted their real self still faced humiliation and rejection from society and family. Nonetheless, they have made an accord with their destiny since they at least living their true self.

## Conclusion

The above narratives indeed revealed the issues for instance, society's lack of belief in such people's existence, their tabooed status, and mental trauma faced by third-gender people. Their family and community members do not accept them; consequently, they conceal their inner feelings out of fear. Furthermore, social institutions such as the family, community members and media constantly underline the idea of gender-appropriate behaviour, i.e., stereotypes expected from males and females, hence legitimising the violence suffered by the transgender. In India, especially in a rural setting, there are no alternative gender constructs with which transgender people could identify. They can be either a male or a female and do not have a choice to be an identity of their own. In such a situation, they had to choose whether to continue living as a male while internally, they identify as female. So to come out as a transgender individual and begin the transition, changing their biological make-up was a tough phase. They went through humiliation, shame, rejection and violence. The LGBTQIA+ population is increasing among the younger generation due to awareness of transgender rights, and spaces for the LGBTQIA++ population. Therefore, It is imperative to consider the struggle they face in their day-to-day life, whether it is the matter of dignified livelihood, accessing their rights, express their identity, share experiences and opinions, attending gatherings, visiting social places etc.

## References

- Allen B. J. (2011). *Difference matters : communicating social identity*. Waveland Press.
- Beemyn, B. (2003). Serving the needs of transgender college students. *Journal of Gay and Lesbian Issues in Education*, 1(1).
- Bilodeau, B. L., & Renn, K. A. (2005). Analysis of LGBT identity development

models and implications for practice. *New Directions for Student Services*, 11(1).

Cashore, C., & Tuason, Ma. T. (2009). Negotiating the binary: Identity and social justice for bisexual and transgender individuals. *Journal of Gay & Lesbian Social Services*, 21(4).

*Census of India*, (2011). Office of Registrar General & Census Commissioner, Government of India (GoI), India.

Chakrapani V; Newman PA; Shunmugam M; McLuckie A; Melwin F; (n.d.). (2007). *Structural violence against kothi-identified men who have sex with men in Chennai, India: A qualitative investigation*. AIDS education and prevention: official publication of the International Society for AIDS Education, 19 (4).

Danielou, A. (1992). *Gods of Love and Ecstasy: The Tradition of Shiva and Dionysus*. New York, USA: Inner Traditions.

Ekins, R. & King, D. (2006). *The Transgender Phenomenon*. London: Sage Publications: .

Hirschfeld, Magnus. & Gibbs, Jerome. (1940). *Sexual pathology : a study of derangements of the sexual instinct*. New York: Emerson.

Kerala Development Society. (2017). *Study of human rights of transgender as a third gender*. Sponsored by National Human Rights Commission.

Miller, M. S. (2011). *The impact of the gender binary on gender nonconforming females' live lives and psyches over time : An exploratory study*. Masters Thesis, Smith College, Northampton: MA.

Nestle, J. et al. (2002). *Genderqueer :Voices from Beyond the Sexual Binary*. First ed. Alyson Books.

Meyer, M. J. (2004). Looking toward the intersexions: Examining bisexual and transgender identity formation from a dialectical theoretical perspective. *Journal of Bisexuality*, 3(3).

Michelraj, M. (2015). *Historical Evolution of Transgender Community in*

India. *Asian Review of Social Sciences*, 4(3).

People's Union of Civil Liberties-Karnataka. (2003). *Human Rights Violations against the transgender community: A study of kothi and hijra sex workers in Bangalore: India*.

Preston, L.W. (1987). A Right to Exist: Eunuchs and the State in Nineteenth-Century India. *Modern Asian Studies*, 21.

Prince, V. (1971). *How to Be a Woman Through Male*. Chevalier Publications.

Prince, V. (1978). The Transcendents or Trans People. *Transvestia*, 16 (81-92).

Times of India." *Police Harass Transgender most*" April 18, 2006.  
<https://timesofindia.indiatimes.com/city/chennai/police-harass-transgender-most-says-study/article-show/51869919.cms>. assessed on 12/12/2022.

**Annexure I****Other Gender: Where is our place?**

We need a place, anywhere in the space,  
we reserved a special place in historical debates  
Now we are discriminated at every place,  
we face denial in every case.

We are not happy with the duality  
Yes, we have different gender identities.'  
Physically, verbally, and sexually abused,  
marginalized, stigmatized and sometimes misused.

Why gender identity is determined by moral dictates  
Existing stereotypes cannot decide our fate  
For god sake, we need a space  
It is our internal sense of self  
We are different; nothing else  
Understand, accept and kindly respect.

**Dedicated to all my Respondents**

**Dr. Richa Walia**



## **Dog Bites in Northern India: The Prevention of Rabies through Community Engagement**

GAURAV GAUR

### **Abstract**

*The increasing number of stray animals, especially dogs is a crucial issue to deal with for the local governments. With an alarming increase in their population, incidence of dog bites and prevalence of rabies is also an associated concern. The relevant authorities have made a lot of attempts, but no workable solution has been found. The present paper focuses on highlighting the data related to dog bites in the states of Chandigarh, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab and Uttarakhand and the initiatives being taken for the same. The data has been taken from secondary sources. The effective collaboration on part of stakeholders is required to tackle this issue.*

**Keywords:** stray animals, dogs, rabies.

### **Introduction**

Rabies is one of the oldest recognised zoonotic diseases with almost 100% fatality and has evolved into an important public health concern worldwide. The National Guidelines for Rabies have mentioned that it is an acute viral disease that causes fatal encephalomyelitis in all warm-blooded animals, including humans. The virus is found in the wild and in some domestic animals and transmitted to other animals and humans through their saliva. It infects the central nervous system, ultimately affecting the brain and resulting in death. The time lag between the bite of rabies and the onset of symptoms of the disease is usually about a few days to a few months in humans, depending on the site and severity of the exposure. According to some studies, around 174 lakh persons are bitten annually worldwide, and more than 55,000 people die of the disease every year.

The number of human deaths globally due to dog-mediated rabies is estimated to be 59,000 annually, with an associated loss of 3.7 million DALYs. The majority of deaths are estimated to have occurred in Asia (59.6%) and Africa (36.4%) (Table 2), and most DALYs were due to premature death (> 99%). An estimated 35,172 human deaths (59.6% of global deaths) and loss of approximately 2.2 million DALYs occur per year in Asia due to dog-mediated rabies. India accounts for the most deaths in Asia (59.9% of human rabies deaths) and globally (35% of human rabies deaths) (WHO Expert Consultation on Rabies Report, 2018). Despite widespread underreporting and uncertain estimates, rabies is a major burden in Asia, particularly for the rural poor. The sudden rise in cases of dog bites in India has become a cause of concern for all. According to available data through various studies (quoted by India Times), India reported a total of 72,77,523 cases of animal bites in 2019, which dropped to 46,33,493 in 2020 and 17,01,133 a year later. The first seven months of 2022, however, recorded more than 14.5 lakh cases. One of the reasons attributed for such high numbers, is lack of awareness in the population about rabies and its prevention.

About 97% of human rabies cases in India are caused by dogs, with cats coming in second (2%), followed by jackals, mongooses, and other animals (1%). Rabies is almost always fatal for humans if post-exposure prophylaxis is not administered immediately after the bite. The National Rabies Control Programme, a Central Sector Scheme to be executed under the auspices of NHM with two components – Human and Animal Components – was approved to address the issue of rabies in the country during the 12th Five Year Plan (quoted by India Times). When talking about the breeds with highest number of bite cases, mixed-breed dogs and pit bulls were found to have the highest relative risk of biting, as well as the highest average damage per bite. The researchers point out that the circumstances that cause a dog to bite vary and may be influenced by breed behaviour tendencies and the behaviour of the victim, parents, and dog owner and the behaviour such as teasing the dog as a top reason. Along with this, there are factors associated to consider when determining why dog bites are more common in the summer than in any other season.

## Review of Literature

- Khillare R.S., Kaushal M. (2021) in their paper have highlighted on the prevention and control of rabies in India. Effective strategies for the prevention and control of rabies in India are required such as vaccination in humans and animals, animal birth control programme, importance of society awareness and education on rabies, building strategic partnerships between the government agencies and non-government agencies. Several programmes and have also been launched at the national and state level for the prevention and control of rabies.
- Sivagurunathan C., et al. (2021) evaluated the knowledge, attitude, and practise related to animal bites, rabies, and its prevention, as well as the use of health services for this purpose, in their community-based cross-sectional study. It was revealed that 76% of people were aware of rabies. Only 63.5% of them understood it was a fatal illness, only 37.6% were aware that rabies may also be spread by animals other than dogs, and only 37.3% were aware of the proper first aid procedures. Only 37.5% of people who had been bitten by an animal cleaned the wound with soap and water whereas 35% had received a complete series of vaccinations. The participants' varying levels of knowledge were significantly influenced by their educational backgrounds. The elimination of human rabies depends on raising public knowledge, avoiding animal rabies, and providing greater access to effective and affordable human rabies vaccines.
- Masthi N.R., et al. (2019) undertook a cross-sectional study to evaluate public perceptions of the health hazards related to animal exposure as well as public knowledge of rabies as a disease, its transmission, and prevention. They deduced from this investigation that 60.4% of the participants were aware about rabies. Just 0.2% of people possessed in-depth knowledge of rabies. The majority of participants, or 72.0%, believed that rabies was a fatal disease; 77.3% thought there was a high danger of rabies in dogs, as opposed to 41.6% who thought there was little to no risk of rabies in cats. The

percentage of individuals who knew about pre-exposure prophylaxis was 3.7%.

- Gill G.S., et al. (2019) used demographic, clinical, and rabies diagnostic laboratory (RDL) data gathered from suspected rabies cases to estimate the incidence of animal rabies in the state of Punjab. In the chosen area, a total of 41 suspected rabies cases were found. Incidence of laboratory-confirmed rabies (LCR) in strays and household dogs was 2.03/10,000 dog years (0.69, 5.96) and 2.71/10,000 dog years (1.14, 6.43), respectively. The incidence of LCR was 0.19/10,000 buffalo years (0.07, 0.57) and 0.23/10,000 cow years (0.06, 0.88), respectively, in farmed buffalo and cattle. Equine had an LCR incidence of 4.28/10,000 equine years (0.48, 38.10). Incidence of stray cow rabies was 9.49/10,000 cattle years (3.51, 25.67) in the chosen sub-districts. These findings suggested that the incidence of rabies in animals—especially dogs and stray cattle—is substantially higher than previously believed.

From the above mentioned studies, there is data related to rabies is available but let's look at the statistics as well in different states and Union Territories.

### Situation in various States

**Table 1**

#### Population of stray dogs in rural and urban areas

| S.No. | State/Union Territory | Stray Dogs |       |        |
|-------|-----------------------|------------|-------|--------|
|       |                       | Rural      | Urban | Total  |
| 1.    | Chandigarh            | 2316       | 10606 | 12922  |
| 2.    | Haryana               | 379506     | 85072 | 464578 |
| 3.    | Himachal Pradesh      | 71253      | 5680  | 76933  |
| 4.    | Jammu and Kashmir     | 261499     | 47398 | 308897 |
| 5.    | Punjab                | 220703     | 69921 | 290624 |
| 6.    | Uttarakhand           | 52333      | 32126 | 84459  |

(Source: 20<sup>th</sup> Livestock Census Report, 2019)

- **CHANDIGARH**

The Municipal Corporation's sanitation department recorded 8,705 dog bite cases in 2014, which increased to 11,746 in 2018. According to the latest animal census conducted by the UT animal husbandry and fisheries department, the number of stray dogs has reached 12,900 in 2019, up from 7,847 in the last census conducted in 2012. More than 4000 dog bite cases were reported during the period April to June, 2022. The number of dog bite cases in Chandigarh has gone up by 35% in five years amid the municipal corporation failing to find a solution to the rising stray dog population. Even as the civic body held a national conference on dog menace, it has not yet adopted any of the recommendations suggested by experts in its animal birth control programme meant to check stray dog population and bite cases. The experts from Guru AngadDev Veterinary and Animal Sciences University, Ludhiana, and Animal Welfare Board of India advised to focus only on sterilising female dogs and change its dog catching techniques.

Municipal Corporation has sterilised more than 22000 stray dogs since 2015. Currently, they have 2 dog catching vehicles and 4 more added recently. A Dog pound is about to start where injured dogs will be treated and it will have a dog care unit, 300+ kennels, lab, hospital and operation theatre.

**Table 2**  
**Dog bite cases from April to November 2022 in Chandigarh**

| <b>Month</b>     | <b>Strays</b> | <b>Pets</b> |
|------------------|---------------|-------------|
| <b>April</b>     | 369           | 170         |
| <b>May</b>       | 350           | 189         |
| <b>June</b>      | 379           | 175         |
| <b>July</b>      | 475           | 82          |
| <b>August</b>    | 377           | 129         |
| <b>September</b> | 341           | 114         |

|                 |       |       |
|-----------------|-------|-------|
| <b>October</b>  | 420   | 98    |
| <b>November</b> | 351   | 238   |
| <b>Total</b>    | 3,062 | 1,195 |

(Source: The Tribune)

- **HARYANA**

Indicating the gravity of the stray dog menace in Haryana, the data provided by the Health Department reveals that 11,04,887 dog bite cases were reported in 18 districts in the last about 10 years. Besides, nearly 14.60 lakh persons were vaccinated for rabies during the period. The number of persons given anti-rabies vaccine is more than the dog bite cases, which also points at some mismatch in the data available with the government.

A report of the Union Health Ministry revealed that as many as 36328 cases of dog bites surfaced in Haryana in 2021 followed by 31113 in the first 11 months of the year 2022. What statistics depict that on an average more than 3000 people are being bitten by dogs every month. In the case of dog bites, the situation is so serious that Haryana has left behind even neighbouring Punjab and Himachal. As many as 7658 and 9245 cases of dog bites were reported in Himachal Pradesh and Punjab in 2021 followed by 14009 and 14300 cases in first 11 months of 2022 and in the first eleven month of the year 2022 respectively.

The Haryana Government has made the registration of pet dogs mandatory in the state. If a person is found violating the rule, a fine of Rs. 5000 will be imposed. No person will be allowed to keep a dog without a license and for this, the pet owners will have to get themselves registered on the Saral Portal. The government is also planning to introduce a provision for imprisonment for violation of rules. The new rules further state that the owner will be allowed to keep only one dog. Furthermore, the owners will have to put a mask on the dog's mouth so that it will not be able to bite or attack anybody.

- **HIMACHAL PRADESH**

In Himachal Pradesh, on an average, 42 people fell victim to dog bites every day. A total of 14,009 dog bite cases surfaced across the state till November 30, 2022 in comparison to 7,658 in 2021, a rise of nearly 83%. The state witnessed 17,292 cases in 2020 and 36,227 in 2019, according to data shared by Union Ministry of Health. Another source reported that over 2 lakh persons have become a victim of dog bites in Himachal Pradesh in the last three years from 1 April, 2019 to 25 July, 2021.

- **JAMMU AND KASHMIR**

The menace has become grim in Jammu and Kashmir with an average nearly 50 cases of dog bite being reported every day during the last four years. As per data presented by Ministry of Health and Family Welfare, there were 64300 animal bite cases across Jammu and Kashmir from the year 2019 till July 2022. As many as 29263 cases of attacks by stray dogs were reported in 2019 while this number was 18764 in 2020 and 4947 during the year 2021. According to the records from Shri Maharaja Hari Singh Hospital in Srinagar, an average of 30 to 35 cases of dog bites are reported daily to the anti-rabies centre. Shockingly, the Kashmir valley recorded a staggering 6,800 animal bite cases between April 1, 2022 to March 31, 2023, In these more than 80% of them were caused by stray dogs. This is the highest number in the past three years, and it has raised concerns among experts who question the delay in completing the much-awaited animal birth control (ABC) centres in Srinagar city.

- **PUNJAB**

As per the data released by the Ministry of Fisheries in 2019, Animal Husbandry and Dairying, there were about 153 lakh stray dogs in India. Punjab is among the states having reported highest instances of dog bites from January to October 2022 with the number being more than 10,000 cases. Evidently the said number suggests that as many as 1,000 cases are being reported every month which is as many as 30 cases on a daily basis.

Nearly 30% of such dog-bite cases are reported to be among children under 14 years of age. There is an average of 19.62 dog bites per hour were reported in the state till September 2022. The data from the Health and Family Welfare Department states that as many as 1,27,168 cases of dog bites were reported from January till September 2022, which comes down to 470 cases a daily.

Of all the districts, the highest number of cases-25,157 were reported in Jalandhar, followed by 15,079 in Ludhiana and 10,070 in Patiala and Ropar with least cases at 1,483. One of the reasons for the increasing cases of dog bites is the failure of responsibility of Urban Local Bodies to initiate and implement sterilisation of dogs on a regular basis, with regard to specific time period for tender to NGOs, discrepancy in rates, no or minimal infrastructure for sterilisation. With an average of 14,129 cases of dog bites every month in the first nine months of the year, the state has already surpassed the total number of dog bite cases reported in all of 2021 — 1,26,843. The total cases reported in 2020 were comparatively 1,10,478 and 1,34,827 in 2019. The state recorded 1.35 lakh cases of dog bite in 2019. The number could be much higher as these cases don't include the ones which were given treatment in the private sector or those who did not seek treatment anywhere. As per the government report, the total dog population in the state is 4.70 lakh and of them, 3.05 lakh are stray dogs.

- **UTTARAKHAND**

The state has reported 4,66,256 dog bite cases since 2009. Officials at Dehradun Coronation district hospital said 8-10 dog bite cases were a common occurrence everyday, while many cases go unreported as they were recorded with private health centres or other hospitals. The highest number of dog bite cases in 2022 has been reported by Maharashtra (3,46,318). Maharashtra has been followed by Tamil Nadu (3,30,264), Andhra Pradesh (1,69,378) and 1,62,422 cases of dog bite in Uttarakhand.

This is just a glimpse of the data available regarding various northern



states of India but there is need to do a lot of initiatives. There are a certain steps which have been taken by different states and agencies to resolve the problem. Some of them have been given below:

- Recently, Goa has become the first state in the country to completely eliminate rabies in humans with zero cases reported in last five years.
- Animal Birth Control (ABC) Rules, 2023- The government has announced new Animal Birth Control (ABC) Rules 2023, which require strays to be caught, vaccinated, neutered, and released back into the community with an aim to reduce the stray dog population by addressing animal welfare issues. The ABC 2023 rules supersede the Animal Birth Control (Dog) Rules, 2001. The programme for the sterilization and immunization of stray dogs shall be carried out by the respective local bodies, municipalities, municipal corporations, and panchayats, with the help of the Animal Welfare Board of India (AWBI). The local bodies need to implement the ABC and Anti-Rabies Program jointly. In carrying out the ABC program, ‘cruelty to animals’ should be addressed. The Rules transform stray dogs into a new class of “community animals.” Resident welfare associations are responsible for caring for stray dogs and feeding them at fixed intervals, away from children and the elderly. The Rules provide guidelines on how to deal with human and stray dog conflicts without relocating. The Rules prohibit the improper disposal of solid waste and casual feeding of dogs. Local authorities “will be held responsible for any violation [during birth-control procedures] and animal-human conflicts.”
- Animal Welfare Board of India-The Animal Welfare Board of India (AWBI) is the Country’s Apex body for promoting the welfare of animals. According to Section 4 of the Prevention of Cruelty to Animals Act, 1960 (No. 59 of 1960), the Board was founded in 1962. Through its services, the Board makes sure that the nation's animal welfare regulations are strictly adhered to, awards funds to

organisations that promote animal welfare, and offers advice to the Government of India on matters relating to animal welfare. The Board is made up of 28 people, including 6 members of parliament (2 from the Rajya Sabha and 4 from the Lok Sabha), who have not yet been nominated for the current Board. The term of office of Members is for a period of 3 years. Their scope of work includes-

- i. Recognition of Animal Welfare Organisations
  - ii. Financial assistance
  - iii. Animal welfare rules and laws
  - iv. Raising awareness
  - v. Activism
- Ministry of Fisheries Animal Husbandry & Dairying and Ministry of Health & Family Welfare jointly launched 'National Action Plan for Dog Mediated Rabies Elimination (NAPRE) from India by 2030'.
  - The Central Government has launched the National Rabies Control Programme (NRCP) for prevention and control of Rabies. As per information received from National Centre for Disease Control (NCDC), Ministry of Health and Family Welfare, the Strategies of the National Rabies Control Program are as follows:
    - i. provision of rabies vaccine & rabies immunoglobulin through national free drug initiatives
    - ii. training on appropriate animal bite management, prevention and control of rabies, surveillance and intersectoral coordination
    - iii. strengthening surveillance of animal bites and rabies deaths reporting
    - iv. creating awareness about rabies prevention

## Discussion

- No such database on the behalf of Health Departments, National Health Profile, Animal Welfare Board of India is available where information related to dog bites and rabies deaths is available on pan-India basis and state wise basis, therefore it becomes very difficult to conduct researches in the field of animal welfare. For instance, in Chandigarh, the dog sterilisation data with Municipal Corporation Chandigarh accounts for not later than 2017.
- Data in most cases has been provided in response to petitions filed by activists working in the field of animal welfare, which otherwise stands ignored. Regular database should be made available at public domains.
- Besides dogs, sufficient arrangements should be made for providing ambulance facility to other animals too such as- pigs, horses, cattle, etc. in need of medical assistance.
- Celebrities can act as role model for popularising the concept 'Adopt, Don't Shop'. For instance, Madhuri Dixit adopted a stray dog with the help of PETA. Other celebrities such as Randeep Hooda, John Abraham, Hrithik Roshan, M S Dhoni have also taken up the same course. Also, Himachal Pradesh is offering cent per cent concession on garbage collection charges and free parking in corporation slots if people are adopting stray dogs. Advocacy can be done by NGOs and stakeholders in this regard.
- The stray animals not only account for dogs, a number of other animals- cows, bulls, horses, cattle, buffaloes, yaks, sheep, goats, pigs, horses, ponies, mules, donkeys, camels, dogs, rabbit and elephants. 20<sup>th</sup> livestock report, 2019 shows that the data has been counted for stray dogs only but pet dogs are not covered under the report.
- In foreign countries, people are not concerned about buying any specific breed of dogs, but they feel free to take home stray dogs with

them and this has been proved through various studies that keeping dogs as pets can help in stress relief, provide social support, reduce anxiety, etc. among other health benefits to the owners.

- In India, inciting dogs to fight is illegal under the Prevention of Cruelty to Animals Act, 1960. In the northern part of India, games of animal fights are practiced widely. Dog fights are prevalent in Punjab, Haryana and many parts of Rajasthan. This is generally pursued in rural communities and in certain semi-urban pockets in Delhi, NCR as well. Over here, the fights between dogs are fixed by people for both entertainment and gambling. The owner's pride and lots of money are at stake societies. But in countries like India, they are played underground in hidden farms, basements, and garages, known only to a select few, making it much harder to catch and root out.
- In 2018, the first ever 'Dog Park' was inaugurated with various facilities such as training centres where dogs can receive basic trainings from a professional trainer, splash pools where dogs can have some fun pool time, green lawns, vet centre, loo cafe, and amphitheatres, veterinary doctor and free vaccination to pets, and also an enclosure for big and small dogs. The same model has been initiated in cities like- Delhi, Bengaluru and Mumbai.
- The pet friendly cafes are also coming up in cities. For instance, A Café in Chandigarh allows customers to bring their pets along with them. Also, big corporate houses are offering the facility to bring pets along at the workplace.
- Related departments: Local Bodies, Animal Husbandry, and Health need to work in proper coordination so that the action is directed towards the aim of reducing the cases of dog bites and rabies deaths. The successful elimination of human rabies needs a multi-sectoral collaborative approach.
- Awareness can be generated among the general population, specifically in the regional languages, for rabies prevention and

control. Children and elderly should be more cautious about such incidents.

- The lack of trained manpower and infrastructure should be seen as a priority for promoting animal welfare.
- The communities and governments around the world use the group adoption approach to successfully care for and treat stray animals. Community dogs are identified by tags, given vaccinations, and provided with medical care in the event of injuries. The neighbourhood dogs are taken care of, fed, and entertained by the locals.
- Building strategic and sustainable partnerships between the government agencies for human health and animal welfare with non-governmental agencies involved in delivery of services to increase knowledge and promote dog bite wound management practices in vulnerable human population or societies helping with vaccination of stray canines, enhancing rabies surveillance and developing multiple reference laboratories for early diagnosis of rabies are indispensable for long term rabies control.
- As attitudes and practises are closely correlated to knowledge, the government will start KAP surveys to uncover knowledge gaps, cultural beliefs, and behaviour patterns that may pose challenges to controlling the disease. An awareness survey provides baseline information for the planning, implementation, and assessment of national control programmes as well as pertinent public health awareness initiatives.
- Dog sterilisation campaigns to be made a regular feature of the concerned authority's regular work and this should not be affected the existing barriers in the system. Instead of spending money on purchasing the vaccine, the government should try to control the population of stray dogs by giving boost to the sterilisation programme.

- Rabies Control Programme to include skilled and specialised physicians to implement preventive, promotive and curative services, and they are also the first point of contact for animal bites in rural and suburban areas.
- The state governments should take appropriate steps to ensure implementation of the provisions of the Animal Birth Control (Dogs) Rules, 2001.
- Adoption of stray dogs should be promoted.
- Anti-rabies vaccine costs quite high per dose in private hospitals, while the government facilities charge nothing. Instead of spending money on purchasing the vaccine, the government should try to control the population of stray dogs by giving boost to the sterilisation programme. Free vaccines should be made available to injured persons.
- It is the responsibility of Local Bodies, Department of Animal Husbandry, Department of Rural Development and Panchayats to cater to the needs of the needs of animals and to work towards their welfare.

### **Conclusion**

In conclusion, it can be said that since the paper is based on data taken from secondary sources with maximum data extracted from newspapers, there are contradictions between data presented by different newspaper agencies. The numbers vary in aspects related to cases of dog bites, rabies, sterilisation, vaccination of individuals, etc among others. The solution for this can be an updated database provided by reliable stakeholders. Another important aspect is wide circulation of initiatives taken in the field of animal welfare so that same model can be applied in other states also so that the ultimate goal of promoting their welfare can be achieved. Empathy and compassion that we hold for humans should also be extended to the field of animal welfare as the number of cases of violence and abuse are on the rise owing to the minimal punishments being imposed upon the perpetrators, making it a very petty offence to deal with.

## References

- Gill GS, Singh BB, Dhand NK, Aulakh RS, Sandhu BS, Ward MP, Brookes VJ (2019), Estimation of the incidence of animal rabies in Punjab, India, *PLoS One*. Sep 9;14(9):e0222198. doi: 10.1371/journal.pone.0222198.
- Khillare RS, Kaushal M (2021), Prevention and Control of Rabies in India, *The Science World*, 1(5): 57-63.
- Masthi NR, Sanjay TV, Pradeep BS, Anwith HS (2019), Community awareness and risk of rabies associated with exposure to animals in India, *Indian Journal of PublicHealth*,63:S15-19.
- Sivagurunathan C, Umadevi R, Balaji A, Rama R, Gopalakrishnan S (2021), Knowledge, attitude, and practice study on animal bite, rabies, and its prevention in an urban community. *Journal of Family Medicine and Primary Care*, 10:850-8.
- Stray Animals in Punjab: An Issue of Public Health and Safety, CPE Scheme for Enrichment of Research Capabilities.
- WHO Expert Consultation on Rabies Report, 2018.
- 20<sup>th</sup> Livestock Census-All India Report, 2019.
- 1.27 lakh dog-bite cases in 9 months, animal welfare team to visit Punjab: The Tribune India. Retrieved on 20 April, 2023.
- 11,000 bite cases last year, yet MC clueless about dog count: The Tribune India. Retrieved on May 3, 2023.
- 70,000 CASES OF DOG BITE REPORTED IN HARYANA IN 23 MONTHS - The Daily Guardian. Retrieved on May 15, 2023.
- A peek inside the first 'Dog Park' of India in Hyderabad, Hyderabad - Times of India Travel (indiatimes.com). Retrieved on May 17, 2023.
- Animal Welfare Board of India (awbi.gov.in). Retrieved on May 17, 2023.
- Dogs on India's streets can be freer and happier than many pets | Aeon Essays. Retrieved on May 25, 2023.
- File report on steps taken to prevent dog bites, HC tells AWBI, Punjab govt (msn.com). Retrieved on 23 April, 2023.
- Forced to fight or die: The cruel, illegal and underground world of dog fights (millenniumpost.in). Retrieved on May 17, 2023.
- Haryana government makes registration of pet dogs mandatory - India Today. Retrieved on May 16, 2023.

- Himachal Records 83% Rise in Cases of Dog Bite | Chandigarh News - Times of India (indiatimes.com). Retrieved on May 15, 2023.
- How political will turned Goa into India's first rabies-controlled State – One India News. Retrieved on May 17, 2023.
- India Faces Sudden Surge in Rabies with Over 14.5 Lakh Cases Reported in the First Seven Months of 2022 | The Weather Channel. Retrieved on 23April, 2023.
- J&K reports an average 50 dog bite cases per day - The News Now. Retrieved on May 18, 2023.
- ‘Local Authorities in Pb & Hry Ineffective in Dealing with Dog Menace’ | Chandigarh News - Times of India (indiatimes.com). Retrieved on May 6, 2023.
- New study identifies most damaging dog bites by breed (aaha.org). Retrieved on May 19, 2023.
- Open House: What can be done to check rising cases of dog bite in Ludhiana?: The Tribune India. Retrieved on May 6, 2023.
- Over 4.6 lakh dog bite cases in Uttarakhand in past 14 years: RTI | Dehradun News - Times of India (indiatimes.com). Retrieved on May 18, 2023.
- PETA India asks government to crackdown on 'illegal dogfights'- The New Indian Express. Retrieved on May 17, 2023.
- Punjab witnesses 4.7 lakh dog-bite cases in 4 years: The Tribune India. Retrieved on April 20, 2023.
- Rampant Dog Attacks in Kashmir Cause Alarm and Psychological Distress, Children Being the Most Vulnerable | Kashmir Life. Retrieved on May 18, 2023.
- Stray dogs have the run of Himachal: The Tribune India. Retrieved on May 17, 2023.
- Strays rule streets in Haryana, 11 lakh dog bite cases in a decade: The Tribune India. Retrieved on May 15, 2023.
- Which states have reported the highest number of dog bite cases in 2022? | National News | In shorts. Retrieved on May 18, 2023.



## **Socio-emotional Competence through Emotion Regulation in Young Children**

ARISHA SAJID, RICHA MEHTA

### **Abstract**

*Recent Neuroscientific research has highlighted the importance of developing socio-emotional competence during early childhood and how these competencies have a pronounced effect during later years of life in the form of emotion-regulation and self-regulation. It has also focused on the relationship of academic success and school readiness with respect to the development of socio-emotional competence through emotion regulation skills and the factors that affect the development of such skills. Based on this, the present review will describe the relationship between socio-emotional competence and emotion regulation and co-regulation; it will study the role of parents and caregivers in the form of emotion co regulation; and also it will identify and understand factors that govern the regulation of emotions in children. For this, several researches were assessed regarding the regulation of emotion in children in the age group of 2-8 years taking into account different aspects of growth & development and it was concluded that integration of Socio-emotional Learning (SEL) approach as an intervention strategy can prove beneficial for the development of socio-emotional competence and emotion regulation during early childhood as an effective pedagogical as well as individualistic tool.*

**Keywords-** Emotion-regulation, Self-regulation, Competence in early childhood, Socio-emotional competence, School readiness, Socio-emotional learning.

A growing body of research evidence tells us that the architecture of the brain develops the most during the first 6 years of an individual's life & is

crucial in terms of lifelong development of the child. The new National Education Policy (NEP), 2020 also has focused on the foundations of learning & restructured the school education system emphasizing on the preschool years of 3-6 years. In its first paragraph under ECCE, it has highlighted that most of the brain development occurs by the age of 6 and it is important that during these years if we provide the right care and invigoration, it will establish healthy brain development.

The social and emotional experiences have an essential part in the growth of the child's brain on the condition that the development of the brain is a corollary of the relationship between nature and nurture and therefore have a inveterate influence on the child (Housman, 2017; MGIEP- UNESCO, 2022). The reason behind this is that there is a constant interplay of cognitive neural networks & socio-emotional neural networks during the development of the brain. These social relationships, emotional experiences & cognitive opportunities provide the basis for such development & influence its quality and if these are jeopardized the learning that depends on it is also jeopardized.

The brain's plasticity (that it can be moulded) is the flexibility of the brain that permits it to adapt to the changing demands of different contexts & experiences & therefore provides a critical opportunity for education. Neuroplasticity being a power function of the brain during this time allows it to respond to the changing needs & form new circuits & learn new skills. Since the development of the brain is dynamic, it is greatly affected by the kind of environment we live in and the social and emotional bonds we form with people around us, it becomes all the more important to shift our focus on the Socio-emotional development for children beginning from early childhood.

According to NSCDC Report (2004), research has described that the social and emotional experiences are constructed into the framework of the brain's structure when the child is growing. The same social & emotional skills that the child develops during early childhood are crucial

for the development of long term healthy relationships in adulthood whether personal, professional or in community by contributing as a useful member of the society (Berscheid & Reis, 1998; Reis, 2000). In a research conducted by Jones et al. (2015) titled, '*Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness*', it was found that there was statistically significant relationship between socio-emotional skills in kindergarten & essential outcomes across many domains in young adults such as education, mental health, employability etc.

Following these, one of the objectives of ECCE as stated by NCERT is -

*“To help children in expressing, understanding, accepting & controlling their views, feelings & emotions and to develop in children the competence to express their views, feelings simultaneously, clearly & accurately”*

This makes us to emphasize that a strong underpinning in ECCE has the capability & potentiality to facilitate children to thrive throughout their lives both in the educational system as well as in the ecosystem they live in. Moving forward it is also the aim of NEP in the broader context and that it should be achieved no later than 2030 in our country which is also in line with Sustainable Development Goals (Goal 4, Target 7) 2030 Agenda for Sustainable Development. When talking about the development of socio-emotional competencies, the important factor that has a strong influence on it is how the children are able to regulate their emotions.

### **Self Regulation in Early Childhood**

The development of self regulation is considered as an important indicator for later success in life. Many research studies conducted in the area of early childhood has shown evidence of academic outcomes, school readiness, potential to handle stressful situations, reduced risk of maladjustment, feeling of self-worth in later years of life ((McClelland,

Acock, Piccinin, Rhea, & Stallings, 2013; Mischel et al., 2011; Moffitt et al., 2011). Children's ability to regulate themselves is a key developmental task during early childhood (Allan et al., 2014; Robson et al., 2020).

The basis of social competence that unfolds in the initial years of life is associated with emotional well-being of the child and therefore determines the capacity and capability of the child to successfully adjust and adapt in school and also in shaping successful relationships throughout his life (Dunn, 1993; Thompson, 1998; Cassidy & Shaver, 1999; Collins & Laursen, 1999). School readiness or successful adaptation in school is an umbrella term that requires successful acquisition of a number of skills such as emerging literacy and numeracy, social and emotional skills and competencies, school adjustment etc. An intervention study undertaken by Bierman et al. (2008) examining the effect of executive functions on school readiness suggested that school readiness warranted for social and emotional competencies such as emotion regulation skills, prosocial skills and aggression control as well as early numeracy and literacy skills. What also emerged from this study was that children belonging to the economically weaker section who were growing up in poverty and who had poor emotion regulation skills at the starting of the intervention benefitted the most from it and made the most progress following the intervention. However a clear indication on how they defined poverty was not given and remained a point of limitation.

Other research also advocates the importance of emotion regulation skills. In a review of literature by Blair (2002), he concluded that *"self-regulatory skills underlie many of the behaviors and attributes that are associated with successful school adjustment"* (p. 112).

Studies have indicated that there is an interconnection between socio-emotional development and cognitive development and how they interact with each other in the development of the brain circuits (Davidson et al., 2002). The neural circuitry of the brain is synergistic with the emotion regulation in carrying out the "executive functions", for example,

planning, judgment, decision-making, etc (Posner & Rothbart, 2000). With reference to the basic working of the brain, the executive functions are rightly coordinated with help of emotions but restricts this capability if not managed well (Davis, 1992; LeDoux, 1996; Damasio, 1999; Bush, et al., 2000; Shonkoff & Phillips, 2000).

These social and emotional experiences when guided and directed in the form of secure attachments or bonds with a caregiver or a teacher in the school setup, frame brains structure and as a result helps form behavior, improve learning capacity as well as health of the child (NSCDC 2010; Nelson et al. 2013). Age 0 to 5 has been described as an important passage for both learning and teaching, the growth and development of socio-emotional competence through self-regulation therefore becomes an underpinning for the success of the individual which includes health and well-being (Housman, 2017).

With regards to functionalist perspectives on emotion, both positive and negative emotions are crucial for human survival and should be seen as significant to regulate behavior (Frijda, 1986; Barrett & Campos, 1987; Saarni, et al., 2006; Gross & Thompson, 2007). Based on this perspective, it can be said that it is not the experience of negative emotions, but the insufficient and incompetent management of these emotions that becomes the basis for behavioral problems (Aldao, et al., 2010). According to Thompson (1994) emotion regulation can be defined as,

*“All the extrinsic and intrinsic processes responsible for monitoring, evaluating and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goal”.*

Apart from this, there are several influences that determine how emotion regulation works in children. Understanding of these components is crucial to get a clear picture of the interplay between emotion regulation and development of social competence.

### **Factors Affecting emotion regulation in children**

**Gender & Age-** Previous research has suggested that boys usually have low levels of self-regulation than girls of their age (Kochanska et al., 2001; Matthews et al., 2009, 2014; McClelland et al., 2007). However deep analysis of such differences reveal that these differences may be in part because of cultural beliefs of the individuals as well as the environment they live in (von Suchodoletz et al., 2013; Wanless et al., 2016). In a study conducted by Sanchis et al. (2020) on ‘Effects of Age and Gender in Emotion Regulation of Children and Adolescents’, it was revealed that girls use more emotion regulation strategies than their male counterparts when they experience sadness, anger or anxiety. However age had a considerable effect on scores for variables of emotion regulation. Also, the understanding of gender differences in emotion regulation among children can guide parents, caregivers and teachers to identify the signs of internalizing and externalizing issues in boys and girls.

The coping mechanisms of children increase as they grow older. With age, the instrumental action is complemented by planned problem-solving and they become more capable of reflecting on their own emotional states and attending to their emotional needs and also they become dependent on more advanced coping strategies to deal with their emotions (Zimmer-Gembeck and Skinner, 2011). ). In a longitudinal research investigating gender differences in emotion regulation in girls and boys during early childhood by Goldstein (2015), it was found that gender differences were more prominent during the initial years however these differences diminished a little after 3 to 4 years. However, it should be taken into consideration that not just the age and gender of the child but also the specific contexts in which the child is placed should be studied in order to measure a combined effect on emotional behavior.

**Family Context & Parent Socialization** - The social learning theory by Albert Bandura (1969) has clearly focused on how children use

observational learning to build regulation strategies which includes the imitation of behavior in the form of modeling parents behavior of expression, instruction as well as symbolic learning. Therefore the family becomes the first & primary context in which children learn to model & express their emotions, decipher those emotions & learn ways to cope up with & control them as well (Denham, 1998). Moreover, the kind of emotional atmosphere as provided in the home is also due to the emotional expression of parents (Halberstadt, Crisp, & Eaton, 1999) and therefore the children are more likely to represent the emotion regulation strategies of their parents and also find out instances of parents reactions to their negative emotions to regulate emotions in their present context.

Parents have always been a center of focus in terms of psychological investigations regarding socialization of children as they are the primary socializing agents for them. Also, research indicates that parental expression of negative emotions has a direct relation with low emotion regulation in children which in turn is also associated with externalizing problems & low socio-emotional competence (Eisenberg, Gershoff, et al. (2001). Similar research also advocates that parents' expression of emotions is linked to their children's competence in the social environment as parents who show more warmth & positive emotions and are less likely to show negative emotions such as disapproval, anger and unkindness towards their children are likely to have socially competent & well- adapted children who are also experienced in social understanding (Lindahl, 1998; Scaramella, Conger, & Simons, 1999). Halberstadt, et al. (1999) reviewed such studies and came to a conclusion that, 'children in expressive families are themselves emotionally expressive'. It was also associated with the understanding of emotions, individuals' own emotional state, relationships within the family, social competence, self-esteem, adjustment issues & academic achievement.

**Language-** language is also one other important & characteristic feature that affects self-regulation. It has been considered as a “mental tool” to guide children in arranging & classifying their behavior & thoughts

(Vygotsky, 1934/1986). Expressive language is considered particularly important during early childhood as it strengthens the child's ability to understand his/her present state and also adjust and control that state when in a specific situation (Cole et al., 2010). Similarly, the child's early expressive language skills are linked with higher levels of early self-regulation s (Bohlmann, Maier, & Palacios, 2015). These studies indicate that children with higher degree of expressive language skills thrive in self-regulation as compared to children with lower degree of these attributes (APA, 2016).

According to Brannon (2009), *'the development of emotion regulation strategies begins in the third year of life and continues throughout the preschool period'*. With the help of guidance, teaching & experience children can be made to model their emotional expression in line with expected & appropriate societal expression. Many researchers argue that preschool children are not able to take advantage of such cognitive strategies; however some of them advocate that due to the advancement in other domains of development a readiness is developed in children to manifest & carry out intricate self-regulation strategies (Kochanska, Murray, and Coy, 1997). It is important to form a link between the development of emotion regulation and teaching of social and emotional skills so as to cater to the emerging need of competence.

### **Competence & Socio- Emotional Learning (SEL)**

Competency does not just focus on aspects of knowledge but also on behavior & attitude. Socio-emotional learning has now evolved as an effective technique for harnessing the necessary skills, knowledge and competencies required for learning & achieving well-being. The skills learnt through SEL help children in gaining perspective later on in their lives. Various researches in this field have put forward that people who develop good socio-emotional skills are better adapted to handle stressful situations, make informed choices, tackle challenges and also establish healthy and positive relationships throughout their life (CASEL) . The



term SEL can be described taking into account many perspectives; however its importance for young children cannot be denied in any case. In a world that is rapidly changing, people face challenges and this is where socio-emotional skills come into play as they become an advantage for surviving the hurdles with competency. In general words, SEL can help children in making friends, calming themselves when angry, expressing their emotions clearly, developing an understanding of what the person might be feeling just to name a few.

Socio-emotional learning requires an active learning approach in different contexts where opportunities are provided to the children through co-regulation by parents, caregivers, teachers and others. Similar to numeracy & literacy, social and emotional competencies can also be trained with the help of guidance and other activities by teachers in schools and parents and caregivers at home. It is important that social and emotional competencies are promoted at earliest phases of development so the child is able to form healthy relationships with self, with others and with the surroundings.

One other important feature of SEL is that we should be focusing on prevention and intervention rather than focusing on those aspects that reduce risk. The key here is the realization of identification of those aspects that lead to success in place of those that lessen risk (Rethink Learning- MGIEP, 2022). The hypothesis behind the SEL approach as suggested by research is that children start communicating with parents & caregivers through expression of emotions (Tronick, 1989; Vallotton, 2008) and with a healthy child- caregiver relationship child develop the potentiality to positively express, experience and cope with different types of emotions (Cohen, 2017). Housman (2017) explains that the differentiating property of Socio- emotional Learning approach is, *'how the caregiver teaches children these foundational competencies and how to effectively utilize them during heightened states of emotion arousal'*. Therefore, the focus of SEL is to nurture children's capacity to realize and recognize, express, understand and regulate their own emotions and

emotions of others in the evolution of emotional competence and this can be achieved by employing SEL in classroom situations from an early age.

### **SEL in Classroom**

Children are born naturally empathetic and kind and they tend to help people even without being asked. Research in this area points out that empathy and altruism have evolved through a process of change of development and that these skills are not guided by mere obligation. Children's classrooms provide great scope to stimulate and reinforce these inherent traits. Children tend to emulate the behavior of those around them so teachers should ideally practice SEL in their classrooms. According to MGIEP's report on Building Kinder Brains (2021)- '*SEL is experiential and is best learnt when it is embodied in pedagogy & curriculum*'.

Self-regulation stems from co-regulation and therefore intervention in the early years is considered most crucial for the development of self-regulation in children. Studies reveal that when children are taught the interrelatedness between feelings & behavior it provides the foundation for conflict resolution & problem solving which further helps in the development of self-regulation (Jones & Bouffard, 2012). Research by Housman & Colleagues (2018) conducted over a period of three years on children aged 2-6 years demonstrated that children significantly improved over time in constructs of emotionally regulated prosocial skills, empathy, self-regulation, attachment & initiative and surpassed the normative samples on the same constructs. One way of encouraging SEL learning in children is through conversations and interactions with them. Research proposes that through caregiver- child conversations children's language skills are developed which are directly related to their increased knowledge of emotions (Salmon et al., 2013). Interactions involving conversations in and around emotions can help reduce intense emotional arousal states in children, provide relief from distressing situations and contribute to the experience of healthy and positive interactions (Sroufe, 2000). The combination of cognitive skills, social skills and appropriate

emotion regulation during the phase of emotional arousal can further the headway to social and emotional competence (Housman, 2017).

## **Conclusion**

According to Denham (2006),

*“To make the basic structure for social and academic success, young children need to develop emotional competence”.*

Since there is a constant interplay between cognitive & emotional neural networks in the brain which results in decision making & understanding. It is evident in many studies that children’s knowledge and competence to regulate emotion has connection with academic achievement and success (Leerkes et al., 2008; NSCDC, 2004). Therefore, giving as much focus on other domains of development, emotional regulation should become an area of immediate concern because children’s attainment of various goals throughout their life and success in them greatly depends and is affected by their development of social competence in the early years and education if structured taking into account this aspect of growth & development can foster learning in children throughout their life.

## **References**

- Aldao A, Nolen-Hoeksema S, Schweizer S. Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clin Psychol Rev.* Elsevier B.V.; 2010;30: 217–237
- Allan, N. P., Hume, L. E., Allan, D. M., Farrington, A. L., and Lonigan, C. J. (2014). Relations between inhibitory control and the development of academic skills in preschool and kindergarten: a meta-analysis. *Dev. Psychol.* 50, 2368–2379. doi: 10.1037/a0037493
- Bandura, A. (1969). *Principles of Behavior Modification*. New York, NY: Holt, Rinehart & Winston.
- Barrett KC, Campos JJ. Perspectives on emotional development: II. A functionalist approach to emotions. In: Osofsky JD, editor. *Handbook of*

- infant development. 2nd ed. New York: Wiley; 1987. pp. 555–578.
- Berscheid, E., & Reis, H.T. (1998). Attraction and close relationships. In D.T. Gilbert, S.T. Fiske, & G. Lindzey (Eds.), *Handbook of Social Psychology*, Vol. 1, (2nd Ed.). New York: McGraw-Hill. 10.
- Bierman, K.L., Nix, R.L., Greenberg, M.T., Blair, C. & Domitrovich, C.E. (2008) Executive functions and school readiness intervention: Impact, moderation, and mediation in the Head Start REDI program, *Development Psychopathology*, 20, 821 — 843.
- Blair, C. & Razza, R.P., (2007) Relating effortful control, executive function, and false belief understanding to emerging math and literacy abilities in kindergarten, *Child Development*, 78, 647 — 663.
- Blair, C. (2002) School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry, *American Psychologist*, 57, 111 —127.
- Bohlmann, N. L., Maier, M. F., & Palacios, N. (2015). Bidirectionality in self-regulation and expressive vocabulary: Comparisons between monolingual and dual language learners in preschool. *Child Development*, 86, 1094-1111. doi :10.1111/cdev.12375
- Bush, G., Luu, P., & Posner, M.I. (2000). Cognitive and emotional influences in anterior cingulate cortex. *Trends in Cognitive Sciences*, 4(6), 215-222.
- Calkins, S. D., & Perry, N. B. (2016). The development of emotion regulation: Implications for child adjustment. In D. Cicchetti (Ed.), *Developmental psychopathology: Maladaptation and psychopathology* (pp. 187–242). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119125556.devpsy306>
- Cassidy, J. & P.R. Shaver (Eds.) (1999). *Handbook of Attachment: Theory, research, and clinical applications* (pp. 89-111). New York: Guilford.
- Chatterjee Singh, N. and Duraiappah, A. K. (Eds.). (2020). *Rethinking learning: a review of social and emotional learning frameworks for education systems*. New Delhi. UNESCO MGIEP.
- Cohen, S. D. (2017). *Three Principles to Improve Outcomes for Children and Families. Science to Policy and Practice*. Cambridge: Center on the Developing Child, Harvard University.

- Cole, P.M., Armstrong, L.M. & Pemberton, C.K. (2010). The role of language in the development of emotion regulation. In S.D. Calkins & M. Bell (Eds.), *Child development at the intersection of emotion and cognition, Human Brain Development* (p.59-77). Washington DC. US: American Psychological Association.
- Collins, W.A., & Laursen, B. (1999). Relationships as developmental contexts. *The Minnesota Symposia on Child Psychology, Vol. 30*. Mahwah, NJ: Erlbaum.
- Damasio A.R. (1999). *The Feeling of What Happened*. New York: Harcourt Brace.
- Davidson, R.J., Lewis, M., Alloy, L.B., Amaral, D.G., Bush, G., Cohen, J., et al. (2002). Neural and behavioral substrates of mood and mood regulation. *Biological Psychiatry, 52*(6), 478-502.
- Davis, M. (1992). The role of the amygdala in fear and anxiety. *Annual Review of Neuroscience, 15*, 353-375.
- Denham, S. (2006). Social-emotional competence as support for school readiness: What it is and how do we assess it? *Early Education and Development, 17*(1), 57-89. [https://doi.org/10.1207/s15566935eed1701\\_4](https://doi.org/10.1207/s15566935eed1701_4).
- Denham, S. A. (1998). *Emotional development in young children*. New York, NY US: Guilford Press.
- Denham, S. A., Bassett, H. H., Thayer, S. K., Mincic, M. S., Sirotkin, Y. S., & Zinsser, K. (2012a). Observing preschoolers' social-emotional behavior: Structure, foundations, and prediction of early school success. *The Journal of genetic psychology, 173*(3), 246-278.
- Dunn, J. (1993). *Young Children's Close Relationships: Beyond attachment*. Newbury Park, CA: Sage.
- Eisenberg, N., Cumberland, A., Spinrad, T. L., Fabes, R. A., Shepard, S. A., Reiser, M., . . . Guthrie, I. K. (2001). The relations of regulation and emotionality to children's externalizing and internalizing problem behavior. *Child Development, 72*(4), 1112-1134.
- Frijda NH. *The emotions*. Cambridge and New York: Cambridge University Press; 1986.
- Goldstein, S.B. (2015). *Gender Differences in Children's Emotion Regulation*

*from Preschool to School Age*. [Bachelor's Thesis, University of Michigan]. <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/112096/goldssam.pdf?sequence=1&isAllowed=6>

- Gross JJ, Thompson RA. Emotion Regulation: Conceptual Foundations. In: Gross JJ, editor. *Handbook of Emotion Regulation*. New York: Guilford Publications; 2007. pp. 3–24.
- Halberstadt, Crisp, V. W., & Eaton, K. L. (1999). Family expressiveness: A retrospective and new directions for research. In P. Philippot, R. S. Feldman & E. J. Coats (Eds.), *The social context of nonverbal behavior*. (pp. 109-155). New York, NY Paris US France: Cambridge University Press Editions de la Maison des Sciences de l'Homme.
- Housman, D. (2017). The importance of emotional competence and self-regulation from birth: A case for the evidence-based emotional cognitive social early learning approach. *International Journal of Child Care and Education Policy*, 1-19. <https://ijcecep.springeropen.com/articles/10.1186/s40723-017-0038-6>
- Housman, D.K., Denham, S.A. & Cabral, H. (2018). Building Young Children's Emotional Competence and Self[1]Regulation from Birth: The begin to...ECSEL approach. *Journal of Emotional Education*, 10(2), 5-25.
- Jones, D.E., Greenberg, M. & Crowley, M. (2015). Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness. *American Journal of Public Health*, 105(11), 2283-2290.
- Jones, S, & Bouffard, S. (2012). Social and emotional learning in schools: From programs to strategies. *Society for Research in Child Development*, 26(4), 1-33.
- Kochanska, G., Coy, K. C., & Murray, K. T. (2001). The development of self-regulation in the first four years of life. *Child Development*, 72, 1091–1111. doi:10.1111/1467-8624.00336
- Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective.
- Kochanska, G., Murray, K., & Coy, K. C. (1997). Inhibitory control as a contributor to conscience in childhood: From toddler to early school age. *Child Development*, 68(2), 263-277. doi: 10.2307/1131849

- Korucu, I., Ayturk, E., Finders, J., Schnur, G., Bailey, C.S., Tominey, S.L. & Schmitt, S.A. (2022). Self-Regulation in Preschool: Examining its factor structure and associations with Pre-academic skills and social competence. *Front. Psychol.* 10(717317). doi: 10.3389/fpsyg.2021.717317
- LeDoux, J.E. (1996). *The Emotional Brain*. New York: Simon & Schuster.
- Leerkes, E., Paradise, M., O'Brien, M., Calkins, S., & Lange, G. (2008). Emotion and cognition processes in preschool children. *Merrill-Palmer Quarterly*, 54(1), 102–124. <https://doi.org/10.1353/mpq.2008.0009>.
- Lindahl, K. M. (1998). Family process variables and children's disruptive behavior problems. *Journal of Family Psychology*, 12(3), 420-436. doi: 10.1037/0893-3200.12.3.420
- Matthews, J. S., Marulis, L. M., & Williford, A. P. (2014). Gender processes in school functioning and the mediating role of cognitive self-regulation. *Journal of Applied Developmental Psychology*, 35, 128-137. doi:10.1016/j.appdev.2014.02.003
- Matthews, J. S., Ponitz, C. C., & Morrison, F. J. (2009). Early gender differences in self regulation and academic achievement. *Journal of Educational Psychology*, 101, 689–704. doi:10.1037/a0014240
- McClelland, M. M., Cameron, C. E., Connor, C. M., Farris, C. L., Jewkes, A. M., & Morrison, F. J. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. *Dev Psychol*, 43(4), 947.
- Ministry of Human Resource Development. Government of India. (2020). National Education Policy. [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Mischel, W., Ayduk, O., Berman, M. G., Casey, B. J., Gotlib, I. H., Jonides, J., ...Shoda, Y. (2011). “Willpower” over the life span: Decomposing self-regulation. *Social Cognitive and Affective Neuroscience*, 6, 252–256. doi:10.1093/scan/nsq081
- Moffitt T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ...Caspi, A. (2011) A gradient of childhood self-control predicts health, wealth, and public safety. *National Academy of Sciences*, 108(7), 2693-2698.
- Murray, D. W., Rosanbalm, K. D., Christopoulos, C., & Hamoudi, A. (2015).

- Self-regulation and toxic stress: Foundations for understanding self-regulation from an applied developmental perspective. (OPRE Report 2015-21). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Murray, D.W., K. Rosanbalm, C. Chrisopoulos, & A. Hamoudi. 2015. *Self-Regulation and Toxic Stress: Foundations for Understanding Self-Regulation From an Applied Developmental Perspective*. OPRE Report #2015-21. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.
- National Scientific Council on the Developing Child. (2004). *Children's emotional development is built into the architecture of their brains* (Working Paper No. 2). Retrieved from: <https://developingchild.harvard.edu/wp-content/uploads/2004/04/Childrens-Emotional-Development-Is>
- National Scientific Council on the Developing Child. (2010). *Persistent fear and anxiety can affect young children's learning and development* (Working Paper No. 9). Retrieved from <http://www.developingchild.harvard.edu>.
- NCERT. (2008). *Early Childhood Education: An Introduction*. New Delhi. <https://ncert.nic.in/dee/pdf/Earlychildhood.pdf>
- Nelson, H., Kendall, G., & Shields, L. (2013). Children's social/emotional characteristics at entry to school nurses. *The Journal of Child Health Care, 17*, 317–331. <https://doi.org/10.1177/1367493512461458>.
- Posner, M., & Rothbart, M. (2000). Developing mechanisms of self-regulation. *Development and Psychopathology, 12*(3), 427-442.
- Reis, H.T., Collins, W.A., & Berscheid, E. (2000). Relationships in human behavior and development. *Psychological Bulletin, 126*, 844-872.
- Robson, D. A., Allen, M. S., and Howard, S. J. (2020). Self-regulation in childhood as a predictor of future outcomes: a meta-analytic review. *Psychol. Bull. 146*, 324–354. doi: 10.1037/bul0000227
- Saarni C, Campos JJ, Camras LA, Witherington DC. Emotional development: Action, communication, and understanding. In: Damon W, Lerner RM,



- Eisenberg N, editors. Handbook of child psychology: Vol 3 Social, emotional and personality development. 6th ed. New York: Wiley; 2006. pp. 226–299.
- Salmon, K., Evans, I. M., Moskowitz, S., Grouden, M., Parkes, F., & Miller, E. (2013). The components of young children's emotion knowledge: Which are enhanced by adult emotion talk? *Social Development*, 22(1), 94-110.
- Sanchis-Sanchis, A., Grau, M.D., Moliner, A-R. & Morales-Murillo, C.P. (2020). Effects of Age and Gender in Emotion Regulation of Children and Adolescents. *Front. Psychol*, 11(946). doi: 10.3389/fpsyg.2020.00946. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7265134/>
- Scaramella, L. V., Conger, R. D., & Simons, R. L. (1999). Parental protective influences and gender-specific increases in adolescent internalizing and externalizing problems. *Journal of Research on Adolescence*, 9(2), 111-141. doi: 10.1207/s15327795jra0902\_1
- Shonkoff, J.P., & Phillips, D. (Eds.) (2000). *From Neurons to Neighborhoods: The science of early childhood development*. Committee on Integrating the Science of Early Childhood Development. Washington, DC: National Academy Press.
- Singh, N., & Duraiappah, A. K. (2021). *Building Kinder Brains*. New Delhi: UNESCO MGIEP
- Sroufe, L. A. (2000). Early relationships and the development of children. *Infant Mental Health Journal*, 21(1-2), 67-74.
- Thompson RA. Emotion regulation: a theme in search of definition. *Monogr Soc Res Child Dev*. 1994;59: 25–52. pmid:7984164
- Thompson, R.A. (1998). Early sociopersonality development. In W. Damon (Ed.), & N. Eisenberg (Vol. Ed.), *Handbook of Child Psychology, Vol. 3, (5th Ed.), Social, emotional, and personality development* (pp. 25-104). New York: Wiley
- Tronick, E. Z. (1989). Emotions and emotional communication in infants. *American Psychologist*, 44(2), 112- 119.
- UNESCO MGIEP (2022). *Guidelines for Implementing SEL in Schools*. New Delhi: UNESCO MGIEP. DOI: <https://doi.org/10.56383/JAKO4884>
- United Nations. Department of Economic and Social Affairs. Sustainable

- Development. (2016). *2030 Agenda for Sustainable Development*.  
<https://sdgs.un.org/goals>
- Vallotton, C. D. (2008). Signs of emotion: What can preverbal children —say about internal states? *Infant Mental Health*, 29(3), 234-258
- Von Suchodoletz, A., Gestsdottir, S., Wanless, S. B., McClelland, M. M., Birgisdottir, F., Gunzenhauser, C., & Ragnarsdottir, H. (2013). Behavioral self-regulation and relations to emergent academic skills among children in Germany and Iceland. *Early Childhood Research Quarterly*, 28, 62-73. doi:10.1016/j.ecresq.2012.05.003
- Vygotsky, L. S. (1934/1986). *Thought and language* (A. Kozulin, Trans.). Cambridge, MA: The MIT Press.
- Wanless, S. B., Kim, K. H., Zhang, C., Degol, J. L., Chen, J. L., & Chen, F. M. (2016). Trajectories of behavioral regulation for Taiwanese children from 3.5 to 6 years and relations to math and vocabulary outcomes. *Early Childhood Research Quarterly*, 34, 104-114. doi:10.1016/j.ecresq.2015.10.001
- Zimmer-Gembeck, M. J., and Skinner, E. A. (2011). The development of coping across childhood and adolescence: an integrative review and critique of research. *Int. J. Behav. Dev.* 35, 1–17

## **Appraisal of Covid-19's Positive Impact on India**

PRIYA SHARMA, HIMANI PANDEY,  
SHUBHAM KUMAR SANU, VISHWA RAJ SHARMA

### **Abstract**

*Covid-19, one of the deadliest pandemics of world history and the most devastating disaster of the 21st century has literally shattered the life to lifestyle of population all across globe irrespective of the level of development in economic, social-cultural and other forms. India one of the leading economies of the world and the second most populous nation has also faced the adversity of disaster in terms of loss of human resources to shattering down of the economy. Irrespective of the various negative impacts of Covid-19 the disaster has also brought some positive changes to the various spheres of human life. Therefore the objectives of this research work are to look at the pandemic with a positive perspective and aims to highlight the positive impact of Covid-19 on India in terms of international cooperation, boom to digital India campaign, health and hygiene, revolution in the medical sector, healing of the environment, socio-cultural and philosophical changes. For this purpose, various published secondary data from different official sources of the Government of India and its official bodies, newspapers reports, etc., were collected, verified, represented, and analyzed to achieve the objectives of the research work. The study reveals that despite Covid-19's many negative effects on India, the virus has benefited the pharmaceutical sector, boosted public health and hygiene awareness, and paved the way for India's digital transformation. As in the first quarter of 2020, the value of UPI transactions was 6.3 lakh crore which grew to 30.3 lakh crore in the second quarter of 2022 with more than a fivefold increase. Same in the first quarter of 2020, the volume was 3.9 billion, which climbed to 17.4 billion in the second quarter of 2022. Despite of various negative and*

*devastating effect of Covid-19, it has some significant positive aspects too that has ultimately helped India in many ways.*

**Keywords:** Covid-19, Pandemic, Economy, Environment, Social-Cultural, Pharmaceutical Industry, Digital India

## **INTRODUCTION**

Covid-19 pandemic that spread all across globe after its outbreak from the Wuhan inflicted a great social and economic trauma over human society. It was one of the deadliest pandemic of the world history that has totally shattered life and lifestyle of population all across globe. To slow down the spread of Covid-19 and to protect population majority of the countries imposed lockdown (Pathak et al. 2020). In India also there was a long period of lockdown that resulted in the loss of livelihood, unemployment for workers of different sectors from primary to secondary and tertiary to quaternary (Sharma et al. 2022). Worker of all the sectors like the daily wage earners, factory employees, teacher and private college professors, etc. lost their jobs. Majority of the businessmen were also very adversely affected by it (Sanu et al. 2022). The coronavirus disease and the subsequent pandemic led by it have been a real catastrophe for the world in the 21<sup>st</sup> century. But as every problem carries solution in itself, this pandemic also came as a gateway to many opportunities, innovations and the newer ways to approach an unprecedented problem. Apart from many of its ugly faces, it has brighter sides as well. Despite of its incalculable negative aspects there are some positive aspects too. India the emerging country of world had also faced great adversity due to this pandemic but one of the important aspect was that India tried to transform this disaster into an opportunity (*Aapada me Awashar*). This shows a clear cut positive mindset that come up with various fruitful results for the nation too (Rakshit and Mete, 2021). Therefore, this research work highlight Some of the positive impacts of the Covid-19 on different domains concerning humans like Digital India Plan, International Cooperation, Polity, Environment, Philosophy and Psychology, Society and Culture,

Education, Medical Sciences and Medicine, Pharmaceutical Industry, Health and Wellbeing for India as a whole.

## **METHODOLOGY**

This research work is primarily based on secondary data sources that collected from various reliable sources along with some personal interactions with the affected population of India. Based on the extensive literature review of the published works of newspapers, journal articles, books, magazines, television news, Air daily news bulletin, useful website, updates of the various governmental agencies like ministry of health and family welfare, etc. This work has segregated the positive impact of covid-19 under various headings that varies from social to economic and technological to environmental. Further to substantiate the published literature, opinions of the locals and various component of society were also incorporated for this study. Various official data were also represented through graphs and diagrams for clear cut understanding. Overall this study provides a comprehensive outlook about the positive aspect of Covid-19 in India with diverse examples.

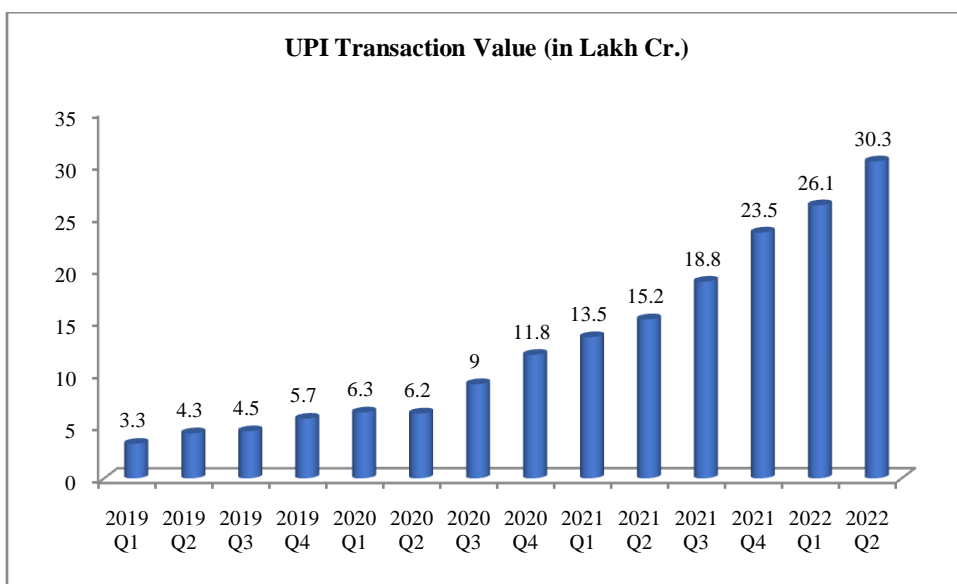
## **RESULT AND DISCUSSION**

### **Positive Impact of Covid-19 on Digital India Plan**

Covid-19 pandemic has been proved as a boon for the India's plan to go digital. Digital India program is a flagship initiative by government of India launched in year 2015 with an aim to empower digital ecosystem of India in order to make digitization a common practice so as to ease out the governing process (Dar and Nagrath, 2022). During covid-19 pandemic, the efficiency and effectiveness of digital India mission could be realized when India was under the shock of lockdown and normal living was hampered. People could not go out and carry on their daily chores as they used to do before the spread of covid-19. People could understand the importance of digital payments and other digital platforms, use of internet and on the go transaction which not only helped India survive the tough

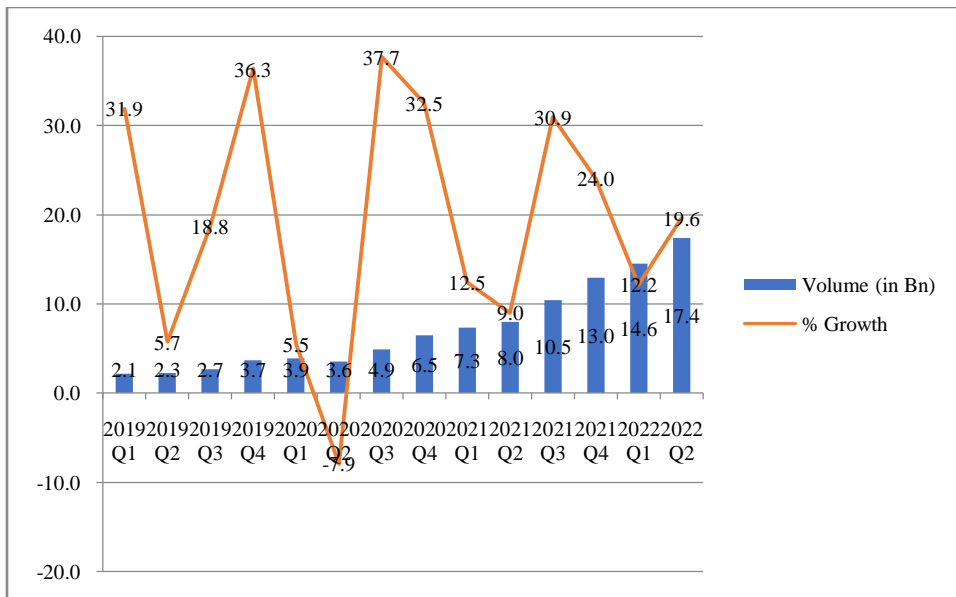
breakdown in economy but also helped Indians gain digital literacy to cope up with the challenges they used to face in handling the digital lifestyle pre pandemic phase (Bhattacharya and Sachdev, 2022). During pandemic cloud computing, use of artificial intelligence has seen a surge. Facial recognition cameras to identify the infected person with high temperature have been used during the pandemic to control the spread is an example of higher technological innovation and usage of digital tools to deal with the disaster (Goel et al. 2021). Due to closedown of the offices and other working institutions, work has shifted to online mode; Saviour of this shift in working style has been the availability of increased digital connectivity. This is a sign of increasing adaptability to digitization plans for India envisioned by government of India. Digital mission has been increasingly accelerated by the youngsters who due to online mode of education has to learn several technicalities leading to greater knowledge about digital learning. This fact can be seen in the data that more than 285 million young learners have suddenly sat back at home due to closure of educational institutions like school, college and universities (Jena, 2020). This has made it compulsory for them to continue their classes and led to a reversal of chalk and board method of teaching to online education method hence bolstering the idea and dream of digitization. With regard to the online transaction of money and payments, usage of digital devices has spiked. In a click of button, the payments have been made in a large amount online through UPI method. To adjust with the need in protocol of covid-19, use of cashless transactions has increased. According to a report, pace of cashless transactions in India have been faster than other markets emerging in the world in terms of digitization (Chaudhari and Kumar, 2021). This step ahead in sphere of digital front has reduced corruption, irregularities in governance model along with benefitting numerous families by transferring benefits of social welfare scheme in accounts with the help of single click and internet connectivity. An interaction with the government authorities have been increased and gap of communication among stakeholders in government and common masses have been

bridged with the help of social media and increased used of smartphones and other devices wherein a complaint can be registered with appropriate knowledge of digital accessibility (Singh et al. 2020). Images of shopkeepers, local vendors, rickshaw pullers using and adapting options of UPI payment method is now common, basis of which was laid down due to the spread of Covid-19 as people had to reduce physical contact and go cashless and paperless as a need for precautionary move. Even the official data of the Unified Payments Interface (UPI) Product Statistics of NPCI shows the robust jump in the uses of digital payment during and post covid-19 period. In the first quarter of the 2020 the value of UPI transaction was 6.3 lakh crore that increased to 30.3 lakh crore in second quarter of 2022 with more than fivefold increase (Fig. 1). In the first quarter of 2020 the volume was 3.9 billion that reached up to 17.4 billion in the second quarter of 2022 (Fig. 2).



**Figure 1: Statistics of UPI transaction in last years**

Source: Unified Payments Interface (UPI) Product Statistics of NPCI, 2022



**Figure 2: UPI Transaction in terms of volume**

Source: Unified Payments Interface (UPI) Product Statistics of NPCI, 2022

Covid-19 has also been a promoter of internet usage as according to report (IANS 2020) internet traffic due to lockdown requirements, increased by around 40%. Also, total numbers of Internet users have increased to 697 million in 2020 from 302 million in 2015. This is a fact representing how covid-19 have been a promoter of digital India plan to allow digitization reach to the masses. Another instance which can be noted in order to find out the positive impact of covid-19 on digital India plan to fulfill objectives laid down in the same is evident in the data that UPI crossed 1 billion transactions in October month of 2020. Along with, there have been hikes in the number of active users on this platform to 100 million. The made in India, Aarogya Setu App and the amount of popularity it gained within a limited period of times along with the level of trust that people have been showing to the app was tremendous and sign of



increased attention to online tools which can act as a barrier to spread of disease. These have been a sincere change being brought by the covid-19 pandemic on the lives and mindset of people regarding the apps and internet usage. To fulfill objective of internet connectivity be made available to almost all level of governance, Covid-19 has been a game changer as due to lockdown, usage of internet and established internet connection is raised to whopping 760 million. Thus, efforts by government in end of 2020 to impose extra 2% tax in budget on delivery and sale of goods through Nonresident stakeholder or player in e-commerce business promotes the efforts by local Indian residents to become a part of digital chain of E-commerce which has reaped benefits as lot of new websites and applications to facilitate online sale and purchase of goods, online services have seen a surge (Agarwal and Srivastava, 2021). The Global Payment report 2021 by Worldpay FIS have reported that in future India's E-commerce industry will grow by 84 percent due to the gains made out of demands created by industry during the Covid-19 pandemic (Business standard 2021).

### **Positive Impact of Covid-19 on International Cooperation**

In terms of international relations, India proved the world again its role as *Vishva Guru Bharatat* global level in the times of deadly pandemic Covid-19. Many countries are expected to experience recession in 2020 in their financial year but India, Indonesia and China will have the growth. China was in turmoil of getting caught in cold war with other countries due to Wuhan, the origin of coronavirus and negligence of China on its spreading, many big multinational companies shifted their work from China to India as they considered India as safe for business (Goel and Khandelwal, 2021). This shifting gave a golden opportunity to many youths and unemployed who lost their job at the times of unannounced lockdown of work from home with good salary to sustain the pandemic. Numerous foreign universities like Harvard University provided suitable circumstances to many Indian students to have free E Certificate courses and internships in many fields which gave Indian students access to big

universities at the times of Covid-19. This way of education gave India a good outcome of stopping Brain Drain which was an immense issue in the educational structure of India. Evacuation program of our country was very effective among all the nations during the times of lockdown. Through Vande Bharat Mission and Operation Samudra Setu by Indian Government, many Indians and foreigners from countries like Bangladesh, South Africa, United States were also evacuated. According to data provided by Ministry of External Affairs, more than 58,000 foreign nationals from different cities of India to 72 countries were made possible by India which definitely impacted global relations in a positive manner. Students who couldn't be evacuated from other nations due to mandatory restrictions on air transportation, in such a situation the Indian government made sure that their basic necessities and food is provided to them. Many infected Indians were also taken care of. Indian embassies provided renewed services of those whose visas had expired (Ariyawardana, 202).

Assistance and foreign aid from India to other countries and vice versa have strengthened foreign relations as countries like Russia, Australia, Thailand, India's Neighbour have helped India with critical medical supplies such as oxygen plants, remdesivir, oxygen cylinders and vaccines. India also played a crucial role which is reflected in India organizing SAARC conference, NAM countries summit in order to invoke spirit of oneness and cooperation during tough times by assuring affordable medical supplies to each one of the members. Countries in south Asian, Indian Ocean, Gulf, Central Asian region have been provided with special consignments of necessary material. International relations took to a new high with countries like Afghanistan, Bhutan, Maldives, Seychelles, Madagascar, Comoros, Ecuador, Burkina Faso and other African states to which India have been a friend in need, providing them with the HCQ tablets and paracetamol which was in high demand to save lives on urgent basis. India's pharmaceutical capacity could be used for establishing a relation based on trust and support with many countries thus strengthening India's image as a reliable and trustworthy ally. Indian

efforts to deploy landing ship, INS Kesari to aid medical teams reaching to Indian ocean region, sending medical officers for rapid response have been a positive impact of Covid-19 which has united the countries all over the world as it is often said in a famous proverb “a friend in need is friend indeed”. Covid-19 has proved the importance of a world order based on compassion and not suspicion. Thus, International relations must be based on mutual respect, trust and accountability has been a key realization and change being witnessed that politics is always secondary to humanity.

### **Positive Impact of Covid-19 on Polity**

Polity refers to a collective group of government and administration which makes an integral part of organized society also referred to as Nation. Polity in India is based on the constitutional ethos which works for the concept of welfare state while upholding democratic principles of country(Arora, 2010). Covid-19 has positively impacted the role of opposition parties in strengthening governance system during pandemic as opposition leaders spoke about the changes required in intensity to deal with the spread of virus. One such example is P. Chidambaram writing about the steps to be taken by Modi government in order to fight the deadly pandemic, thus presenting opposition as mature voice to be heard. This can be termed as a constructive role being played by opposition. Pandemic has also highlighted the emerging roles and capability of chief ministers. Covid-19 has also allowed the chief ministers to lead the pandemic situation which has definitely strengthened the polity at state level along with an improvement in governance at state level, thus promoting the good governance. Covid-19 has strengthened governance as can be seen in number of interactions on daily basis by prime minister to manage crises. Data says at least 150 people were interacted each day during Covid over phone call, video conferencing and other meetings for purpose of reviewing the developments in efforts to curb the spread of pandemic. Covid-19 has led to change in mindset of government from dependent to independent and self- reliant Bharat as seen in the 20-lakh crore package announcements for economic stimulus and a clarion call for

Aatmanirbhar Bharat (self-reliant India) was given at the same time to march on the path of self-reliance. Pandemic has boosted the digital benefit transfer in country for poor's which has changed the way polity took place in India based on the corrupt practices followed by middle men and other stakeholder having responsibility to make available to poor's and marginalized the benefits of welfare schemes announced by government. We could see a change in the efficiency of providing benefits to the people at lowest strata of society. Thus, governance and polity could be seen positively moving from paper and table job to digital job which not only facilitated poor's but also impacted the governance model of India which was more sustainable and easier than before. Policy comprises an important part of polity and government. It has also been impacted in a positive manner during Covid as government has brought many policies to revamp the broken structure of institutional requirement. Tele calling, virtual courts, tele-medicine have made reach of basic amenities and advise to commons easily available. Thus, increased interaction between technology and polity has been a major impact of Covid which enhances the capacity of government (Sharma et al. 2021). Covid-19 impact could also be seen in terms of empowering local leaders to deal with the challenges with the help of center to establish emergency wards and other facilities to deal with the rising cases of pandemic, thus helping bolster the system of decentralized governance in India. Covid-19 has also ensured loyalty and integrity in response of government to deal with pandemic induced food crises, health needs and public safety. Public participation was also an integral part of polity and democracy which could be seen outwardly during Covid. Rather, participation of masse in dealing with the spread of virus and spreading awareness to support the effort of government and institutions have only created a strong bond between the government and citizens. Frontline role of authorities at local level of polity has to be highlighted as an impact of Covid on India where, local government who holds a place close to citizens were shouldering responsibilities by complying to the orders of government, thus reflecting

the capacity to manage the crises situation and also ensuring close coordination among local authorities, representatives and masses. Current crises also bring to our notice the importance of greater civil participation in dealing with the challenges through their role in decision making. Many civic societies and groups emerged during pandemic which paved the way for constructive activities on part of citizens to deal with the challenges of country thus connecting sentiments of citizens with the duties of government.

### **Positive Impact of Covid-19 on Education**

During lockdown all across country the educational system were very adversely affected and to overcome the loss online mode of education come up as one of the important tool to continue the teaching and learning process in developing countries like India (Sanu, et al. 2022). This was Covid-19 and its side effect that has paved the way for the online mode of education in India (Sharma et al. 2022). Some of the positive aspects of it like provided alternative of the traditional mode of teaching and learning, digital education become popular that help students to repeat and lean the lesson at their own pace of learning form the recorded videos to the available contents on YouTube. The concept of backbenchers become obsolete and every student become the front benchers. Saved the travelling time and helped then to do more self-study. Overall the pandemic has boosted to the concept of E-learning in the absence of classroom learning. Every component of the education system from teacher to students and researchers to scientists become familiar with the digital mode of leering. The mobile phone or laptop which was earlier seen as the tool of time pass or chatting or communication or for leisure activities after this situation become an important tool for education. For teacher also the new methods of teaching like use of PPTs, videos, etc. become new normal that ultimately helped them too. For researcher also overall the pandemic was helpful as they got sufficient time to write research papers. The number of papers and citation during pandemic has increased for majority of the researchers. During free time researchers have produced many research

works that helped the nation and subject knowledge (Yaseen and Joshi, 2021). Overall it brought different innovations in the education sectors that very positively become helpful for the education community at whole.

### **Positive Impact of Covid -19 on Medical Sciences and Medicine**

The medical sciences, although faltered first at the onset of the pandemic but later found it as an opportunity to strengthen itself. Many new medical explorations with regard to finding effective vaccine and medicines have been done. It has expedited the progression of medical sciences. Had it not been the pandemic the innovations would have not been so swift. The entire world acted as a community to find cure against the virus. Collection of data and study of several pandemic and lethal viruses have led to extensively understand the Corona Virus. Virus as a whole is itself a complicated microbe to understand as it cannot be clearly categorized living or dead organism. Therefore, it led to thorough research and study regarding the nature of the Virus. Better medical practices all across the globe were also shared. The pandemic also exposed of the inefficiencies in the medical system. And this led to reformation of medical infrastructure and system as a whole. Physicians' work experience and employability has increased during the pandemic and they have been exposed to new learning (Van Leeuwen et al. 2021). Innovations in medical sciences has been remarkable aspect of the Covid pandemic. The country's potential in this field was realized when India began the "Vaccine Maitri" program and helped to avail vaccines to other countries. Drugs like Remdesivir were exported to other countries as well. Global solidarity and cooperation in making databases of different variants and mutations of the virus, and strategy sharing to deal with the infection brought out best medical practices. GAVI, the Global alliance for vaccine and immunization has also done well to collaborate with nations to avail the vaccines to poor and underdeveloped nations. Patent waiver on the vaccines has been agreed upon by many nations and this shows that nations can come together and help each other in times of need, keeping aside their profit motives. Third world countries also did several useful medical innovations. Indigenous

medicinal practices gave confidence and relief to the people at times when not much medicines were available for the virus (Lee and Haupt, 2021).

Medicinal syrups like *Kadha* and warm water with lemon juice were widely relied on. Herbs like *Giloy*, Aloe vera were much appreciated. The indigenous medicine developed by Patanjali although not approved by ICMR have been trusted by the public. This also led to the revival of public faith in other traditional medicines and cure techniques. Local mask-making PPE kit stitching work was boosted and many people especially women generated income through it. India registered FDIs in the medical fields and has benefitted through the export of medicines, drugs, vaccines, and other equipment like PPE kits, oximeters, etc. Also, the pandemic encouraged the collaboration of the traditional medical wisdom of India with modern medical innovations. Therefore, there has been a surge in the opening up of many ayurvedic universities and research centers. Ayurveda has been highly acclaimed during Covid times not only in India but worldwide. Just like Yoga, India has the potential to lead the world through its indigenous medical wisdom and Ayurveda. Yoga has been therapeutic. During Covid times people also got the opportunity to learn and implement Yoga in their daily lives. Yoga ensures the mental and physical well-being of the people and has been highly therapeutic. Ancient Indian medical books like the *Atharva Veda* which stresses all the wisdom has been referred by a great medical practitioner to find a cure for the virus. Therefore, the pandemic has been a landmark in the reformation of the discipline of medicine (Umesh et al. 2021). It stimulated the rapid emergence of the ideas and also encouraged to revisit the ancient wisdom.

In a very short period of time, India has successfully developed two reliable vaccines Covishield and Covaxine. Covishield was co-developed by the University of Oxford and British-Swedish company AstraZeneca, manufactured by Serum Institute of India. The Indigenous two-dose vaccine Covaxin was developed by Hyderabad based Bharat Biotech in collaboration with the Indian Council of Medical Research and the

National Institute of Virology (The Economic Times, Dec 2021). Mainly these two vaccines have saved the lives of millions in India. That clearly shows the efficiency of the Indian medical system and positive attitude of India in dealing with Covid-19 pandemic. The health infrastructure of the country has greatly improved during the pandemic. Before the pandemic, the availability of ICU beds, PPE kits, Oxygen Cylinders, etc. were very rarely available at district hospitals in rural India. But during the pandemic to manage Covid-19 effectively the upgraded medical infrastructure has reached at the grassroots level which will ultimately help in the proper management of other diseases. Further, with the availability of upgraded medical infrastructure at district level will reduce the rate of migration of patients towards big cities. Also during the period of covid-19 the consumption of anti-bacterial drugs and related equipment like diagnostic tests, Personal Protective Equipment (PPE), masks, gloves, oxygen canisters, etc. has increased many fold and helped in robust growth of pharmaceutical industry in India.

### **Positive Impact of Covid-19 on Philosophy and Psychology**

Psychologically, the pandemic has transformed the human thoughts and actions. If not for ever then for at least during the peaks of the first and the second waves people really got to understand the fragility of life. When there occurred a shortage of medicines, drugs, oxygen cylinder and the ICU beds, everyone be it the rich or the poor realized the limitations of money as nothing could buy life at that point in time. So, it came as a realization that life is temporary and except for the supreme mighty nothing can control life and death. All the big forces became dwarf and helpless before the tiny virus and it also came up with a lesson that humans are not the sole owner of this planet. It just shares this life sustaining earth with millions of other organisms. Human is in no sense supreme; it is only a fraction of many other life bearing forces. The limitation of the so-called development is that the entire human fraternity became helpless before the tiny virus. The pandemic also acted as something which directly hit the ego of everyone, be it the individuals or



the nations. From the major global powers and the organizations to the economically rich and affluent individuals, the virus didn't spare anybody (Sanu, et al. 2022). People came to recognize the role of everyone and everything just to mitigate the havoc. A strange sense of helplessness coupled with cooperation was noticed during the times when the pandemic started showing its ugly face. Militarily big powers came to cooperate and identify the role of every nation and individuals in order to find the way out of the pandemic. Countries like the US sought India's assistance when it faced the deficiency of a drug called Hydroxychloroquine (HCQ) in its country. Therefore, the pandemic kind of put everyone on single platform as each one was equally apprehensive to its ill impacts. The horrific images of death and destruction offered people the opportunity to appreciate what they are and what they have. The appreciation for the healthy life and a life as a whole was never ever witnessed at this scale. There was a surge in the sense of gratitude amongst people. Those who survived the horrific first and second waves came to appreciate that nothing is more precious than life and along with that observed that this life too is very fragile (Nosrati, 2022). Hence one must be contented with what one has and should always be grateful for the same. A huge sense of camaraderie was also noticed during the peak times of the pandemic as many people came forward on their own to support and help each other. In some cases, this led to the spread of infection to even those who were involved in such charity works and, in some instances, they too lost their lives. Also, the inherent human nature of pity and compassion was seen through the works of many NGOs, Gurudwaras, local people etc. Trust in humanity and human values was widely seen during those trying times. For many people it was a life changing event as they learnt that nothing is permanent and whatever has been achieved through incessant hard work can be eroded in flick of a second. This also gave the lesson that small efforts collectively materialize to big outcomes. The importance of Resident Welfare Associations (RWAs) was also understood as many of them worked well in imposing the lockdown rules and containing the

infection. Meditation, mindfulness journaling came as widely used ways to find solace and connect to oneself and to others. There has been surge in the lessons of mindfulness and journaling. Many peace messages to world through meditations and Yoga were sent. Several spiritual forums organized collective *Havans* to send positive vibrations to the environment. This virtually united the world psychologically.

### **Positive Impact of Covid -19 on Society and Culture**

The corona virus and the pandemic were same for everyone but the manner they were dealt was determined by the socio-cultural prospects of that particular community. For instance, lockdown was most prevalent method to contain pandemic but there were differences in its implementation strategies. Like some countries went for complete lockdown whereas some relied on containment zones rather than complete shutdown. Also, these methods were manifestations of the socio-cultural conditions of different societies. But amidst all differences, the pandemic came as binding force for different cultures. It made all societies to come and unite together against a common enemy called the corona virus (Koh, 2020). Lockdown gave people time to interact with each other. It also taught the importance of solidarity and family. People also came for each other's help in any manner they were capable of. Like, food was distributed through funds collected by the local people. NGOs, student organizations, and several other institutions came forward for many such actions. Traditional and indigenous means to cope with the pandemic were also invoked. Like in India people heavily resorted to indigenous medicines and herbs like the use of aloe Vera for the treatment of Covid symptoms. Since the world was shut during the peak of the pandemic in the first two waves, people got to understand their traditions and cultures. When many generations cohabited during the lockdown, the memoirs of the local traditions of the family were opened by the older parents at home. Many youngsters got time to understand their family and their real identities during the pandemic itself. The smaller kids interacted with their grandparents and discovered what their actual cultures are. The eating,

cooking, dining and dressing habits were explored. In the early phase of the lockdown, people explored cooking dishes at home, and this led to the innovation of many dishes. Many innovative and hobby-building activities took toll when offices were converted to work from home. Pursuance of the hobby came as a present from the epidemic. Numerous stories of the people restoring their hobbies after a long break, they never thought they would ever get time to do the same. Intercultural dialogue has been crucial to tackling and finding a viable solution to the pandemic. Countries across the globe with diverse cultures, traditions, and practices with all their means and method have come up and collaborated get to out the pandemic. Cross-cultural dialogue has risen immensely and solidarity among the communities has increased since the onset of the pandemic. Cross-cultural dialogue has been one of the methods to trace and treat the virus (passion following during covid-19). Communities within the country have also collaborated to tackle the pandemic. Hence Covid acted as an adhesive to bind different cultures and collectively find a way out. The promotion of cross-cultural, inter-group solidarity, creative arts-based approaches to intercultural learning, and the organization of local government interventions to support vulnerable communities and enhanced engagement in anti-racist activism were some of the prominent endeavors promoted by the Covid led pandemic. Sending message of faith online was very visible form of showing solidarity. Many religious leaders collaborated and came together for spreading messages of hope and faith through virtual sessions. For instance, an NGO named Religions for Peace held virtual interfaith exchanges and did Facebook sessions to spread positive messages. Many NGOs also did sessions to ensure world solidarity and spread the message that the world stands united in the face of this pandemic. Online spaces have been thoroughly and very well utilized to spread the message of solidarity and to also popularize the guidelines by the World Health Organization. It also helped to reach out to the very marginalized sections of the societies. Also, social media platforms became one of the most prominent means to educate people

about the pandemic and the guidelines to be followed to tackle the same. People themselves created groups to disseminate the information regarding the availability of hospital beds, oxygen cylinders, etc., and also assisted those who were self-isolating through social media platforms. International academic collaboration has been one of the prominent outcomes of the pandemic. Creative arts and intercultural learning have also been promoted to maintain interconnection and inter cultural learning.

This pandemic also gave rise to new emerging leaders and leadership roles. As many people aspired to come along and stand with their peers in the trying times but very few could materialize. This exposes the need for leadership qualities. Also, many youngsters learnt leadership qualities by mobilizing and collaborating with several organizations to make life easier for others. Although people were asked to maintain physical distancing, psychologically a great sense of compassion was witnessed. NGOs and many other small and big organizations did remarkable work in social assistance in diverse domains from distribution of food to assisting each other mentally and psychologically. Hence this was the time of the revival of compassion and camaraderie. People took out time to be with each other, and appreciate and acknowledge the presence of human sentiments and virtues (Roy and Ayalon, 2021). Those who haven't earlier spoken to each other came as sharing the joys and griefs during the pandemic. Many new friendships were created. Had it not been for the pandemic online things would have not normalized so soon and so easily. People pursued several courses of their choice from the universities they wanted and this led to a significant rise in the talents of the people who could afford the courses online. Many people have become multitalented due to the learning they did during the lockdown. Lockdown came with an opportunity to interact and share (Mathivanan et al. 2021). People found time to share and they became more sympathetic and compassionate. Theretofore nurturing of such intrinsic values was done by the pandemic. As lockdown shut many activities people found time to explore themselves. Many discovered new hobbies and got to know themselves and people around them in better way.

## **Positive Impact of Covid-19 on Environment**

Globally the nature revived and restored itself. Everywhere from a small town to overcrowd and over polluted metropolis the reviving impact could be seen. Almost all the elements of the earth from air and water to sky and soil were replenished in their own ways. Everywhere the clear sky, green plants and clear water could be noticed. Nature rejuvenated itself in an appreciable way. In one way it acted as a measure to portray how deeply the daily human actions have impacted the environment. The clearness of sky and water became manifestations of human activities that have disturbed nature and how cessation of material human acts can help nature in replenishing itself. Cities like Delhi and Wuhan registered good air quality after a long time. India's central pollution control board says 85 Indian cities noted an improvement in air quality during the first week of the lockdown. This was led due to reduction in traffic and transportation, construction works etc. that contributed in managing the pollution levels (Yao et al. 2021). And this also acted as reassurance and reminder that control and wise management of pollution causing activities can be a method to contain the negative impacts of human caused pollution and its subsequent outcomes like the global warming, climate change, etc. The pollution in water was also contained due to the cessation of industrial and manufacturing activities. As in most of the cases the affluent from factories are directly drained into water bodies leading to pollution of water bodies and harming their biodiversity. Because of the disruption in the supply chain, global water transport also saw some halt and this has significantly reduced the oil spillage in oceans and the subsequent marine pollution caused by it. The less oil polluted water can be linked to better soil health as oil contamination free soil is better for irrigation and soil too. As per an organization called oil care, "1 liter of oil cab easily contaminates 1 million liters of water". Also, several water species of the plants (phytoplankton) and that of animal (zooplankton) which were erstwhile very rarely noticed emerged, when the pollution levels went down. Many plant and animal species were also observed during the

pandemic. In many places the images of the gharials and dolphins coming out of the water were widely circulated and were acclaimed as a mark of environmental restoration. The improvement in surface water quality in terms of suspended particulate matter (SPM) in the Vembanad Lake, the longest freshwater lake in India is one such example of reduced pollution in water bodies. The SPM concentration during the lockdown period decreased by 15.9% on average as compared with the pre-lockdown period (Yunus et al. 2020). Water became more fresh and its availability also increased due to consumption of less water in resorts and hostels, sports/ health clubs' closure etc. It is found that people are water efficient at homes than at these places. Due to reduced pollution in the air, the sky could be watched clearly and therefore there was a jump in the activists of the sky gaze and astrophotography. There are evidences that there has been a significant increase in the sky gaze as a hobby and also the sale of telescopes increased (Winchester et al. 2021). Hence, the environment and nature as a whole healed itself and the pandemic-induced lockdown taught that men must also understand that to save and conserve nature they need to be very judicious in overusing the natural resources.

like Digital India Plan, International Cooperation, Polity, Environment, Philosophy and Psychology, Society and Culture, Education, Medical Sciences and Medicine, Pharmaceutical Industry, Health and Wellbeing for India as a whole

## **CONCLUSION**

Despite of various negative aspects of Covid-19, there were many positive aspects of the pandemic too that has greatly changed the life of human beings all across the globe and even in India as well. In the context of India, the pandemic comes up as a boon for the digital India campaign. Before the pandemic when the government was talking about digital payment and digitization of the nation at that time majority of the population was not ready to accept and in favour of such campaigns due to various reasons. But with the arrival of Covid-19, digital payment and

online mode of transactions became the new normal in the country. Digital literacy of the population has increased many folds. Internet users have also increased exponentially. At the political and institutional levels all the states, central government and various agencies came together and fight back against the pandemic in a united manner that busted India's spirit of unity in diversity. India's global initiatives and help to needy nations have also increased the reputation of the nation. The traditional mode of education was very effectively supported by the online mode of teaching and learning which has various brought positive changes for the nation and its population. India's effective health infrastructure has penetrated up to districts hospitals, which can be helpful for the locals and also check the migration of patients towards big cities. Globally, India emerged as one of the leading and reliable medical equipment suppliers. Majority of the human beings at their individual level learnt the value of life and society during the pandemic. The condition of environment has also improved and the natural system has rejuvenated itself.

## References

- "8 Vaccines, 4 Treatments in India's COVID-19 Arsenal." *The Economic Times*, 28 Dec. 2021. *The Economic Times - The Times of India*, <https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/8-vaccines-4-treatments-in-indias-covid-19-arsenal/articleshow/88548629.cms>.
- Agarwal, Sulabh, and Shekhar Srivastava. (2021), "CHANGING BUSINESS PATTERN OF E-COMMERCE INDUSTRY OF INDIA: A COVID 19 EFFECT." *Proceedings on Engineering*, vol. 3, no. 3, pp. 247–54.
- Ariyawardana, Nisayuru. (2022) "India's Vaccine Diplomacy and Changing Geopolitics in the Global South." *Journal of Social Sciences and Humanities Review*, vol. 7, Oct.
- Arora, Balveer. (2010) "Republic of India in Diversity and Unity in Federal Countries." *In Diversity and Unity in Federal Countries*, McGill –Queen's University Press.

- Bhattacharya, Ce Dr Sumanta, and Bhavneet Sachdev. (2021)“Can India Be Successful in Achieving a Digital Economy and Its Vision of Digital India : A Case Study.” *International Journal of Innovative Research in Science, Engineering and Technology*, vol. 10, no. 11, p. 14516. *Research Gate*, <https://doi.org/10.15680/IJRSET.2021.1011077>].
- Chaudhari, C., and A. Kumar. (2021) “Study of Impact of The Covid-19 Outbreak on Digital Payment in India.” *Vidyabharati International Interdisciplinary Research Journal*, vol. 12, no. 02, pp. 99–102.
- Dar, Showkat, and Dolly Nagrath. (2022) “DIGITAL INDIA WHERE KNOWLEDGE IS STRENGTH -AND EMPOWERS THE PEOPLE.” *American Journal of Interdisciplinary Research and Development*, vol. 05, June, pp. 259–69.
- Goel, Isha, et al. (2021) “Effects of the COVID-19 Pandemic in India: An Analysis of Policy and Technological Interventions.” *Health Policy and Technology*, vol. 10, no. 1, Mar., pp. 151–64. *Science Direct*, <https://doi.org/10.1016/j.hlpt.2020.12.001>.
- Goel, Mr, and Shilpi Khandelwal. (2021) “FDI in India during COVID 19.” *Turkish Online Journal of Qualitative Inquiry*, vol. Volume 12, July, pp. 919–27.
- Jena, Pravat Kumar. (2020) “Online Learning during Lockdown Period for Covid-19 in India.” *International Journal of Multidisciplinary Educational Research (IJMER)*, vol. 9.
- Koh, David. (2020) “COVID-19 Lockdowns throughout the World.” *Occupational Medicine*, vol. 70, no. 5, pp. 322–322.
- Lee, Jenny J., and John P. Haupt. (2021) “Scientific Globalism during a Global Crisis: Research Collaboration and Open Access Publications on COVID-19.” *Higher Education*, vol. 81, no. 5, pp. 949–66.
- Mathivanan, Sandeep Kumar, et al. (2021) “Adoption of E-Learning during Lockdown in India.” *International Journal of System Assurance Engineering and Management*, pp. 1–10.
- Nosrati, Elias. (2022) “A History Lesson.” *Nordisk Välfärdsforskning | Nordic Welfare Research*, vol. 7, no. 1, May, pp. 68–71. *idunn.no (Atypon)*, <https://doi.org/10.18261/nwr.7.1.5>.
- Pathak, Praveen Kumar, et al. (2022) “Assessing Socioeconomic Vulnerabilities Related to COVID-19 Risk in India: A State-Level Analysis.” *Disaster*



*Medicine and Public Health Preparedness*, vol. 16, no. 2, pp. 590–603.

Rakshit, Somdyuti, and Jayanta Mete. (2021) *POSITIVE IMPACT OF COVID-19*. June, pp. 201–06.

Reporter, B. S. (2021) *Indian E-Commerce to Grow 84% in 4 Years, Helped by Covid-19 Impact: Study*. 10 Mar., [https://www.business-standard.com/article/economy-policy/indian-e-commerce-to-grow-84-in-4-years-helped-by-covid-19-impact-study-121031000846\\_1.html](https://www.business-standard.com/article/economy-policy/indian-e-commerce-to-grow-84-in-4-years-helped-by-covid-19-impact-study-121031000846_1.html).

Ritwattanavanich, N., et al. (2021) “Performance of the Innovation-Passion Model for Post Covid-19.” *Utopía y Praxis Latinoamericana: Revista Internacional de Filosofía Iberoamericana y Teoría Social*, no. 2, pp. 123–36.

Roy, Senjooti, and Liat Ayalon. (2021) “‘Goodness and Kindness’: Long-Distance Caregiving through Volunteers during the COVID-19 Lockdown in India.” *The Journals of Gerontology: Series B*, vol. 76, no. 7, pp. e281–89.

Sanu, Shubham, et al. (2022) “छात्रों पर कोरोना महामारी का मनोवैज्ञानिक प्रभाव” *The New Era of Education Psychology*, Rachnakar Publishing House, pp. 150–59.

Sharma, Maharshi, et al. *Impact of Information and Technology on Economy and Polity: A Covid-19 Perspective*.

Sharma, P., Sanu, S. K., Sharma, V., & Anand, O. (2022). Impact Assessment of Covid-19 on Higher Education: A Case Study of the University of Delhi, India. *Towards Excellence*, 14(3), 1343–1355.

Umesh, Chikkanna, et al. (2021) “Role of Ayurveda and Yoga-Based Lifestyle in the COVID-19 Pandemic—A Narrative Review.” *Journal of Ayurveda and Integrative Medicine*.

*Unified Payments Interface (UPI) Product Statistics | NPCI*. <https://www.npci.org.in/what-we-do/upi/product-statistics>. Accessed 28 Oct. 2022.

van Leeuwen, Evelien H., et al. (2021) “Positive Impact of the COVID-19 Pandemic? A Longitudinal Study on the Impact of the COVID-19 Pandemic on Physicians’ Work Experiences and Employability.” *BMJ Open*, vol. 11, no. 12, p. e050962.

*Welcome To IANS - India’s Largest Independent News Service*. <https://ians.in/>.

Accessed 28 Oct. 2022.

- Winchester, Alyse K., et al. (2021) "Impact of COVID-19 Social Distancing Policies on Traffic Congestion, Mobility, and NO<sub>2</sub> Pollution." *Sustainability*, vol. 13, no. 13, p. 7275.
- Yao, Ye, et al. (2021) "Ambient Nitrogen Dioxide Pollution and Spread ability of COVID-19 in Chinese Cities." *Ecotoxicology and Environmental Safety*, vol. 208, p. 111421.
- Yaseen, Saima Firdaus Mohammed, and Smt. Shubhada Ramesh Joshi. (2021) "Positive Impact of Covid-19 on Education." *International Research Journal on Advanced Science Hub*, vol. 03, no. 06S, pp. 182–85.
- Yunus, Ali P., et al. (2020) "COVID-19 and Surface Water Quality: Improved Lake Water Quality during the Lockdown." *Science of the Total Environment*, vol. 731, p. 139012.

## **Mapping the Spatio-Temporal Dynamics of COVID 19 Outbreak in Chandigarh (U.T.), Using Geospatial Techniques**

RAHUL, RAVINDER KAUR

### **Abstract**

*COVID-19, a severe acute respiratory syndrome exposed the vulnerability of the human race in recent times. COVID-19 had not only health implications but also severe impacts on the global economy. The severity of the disease lies in the fact that the WHO declared it a pandemic. India was one of the worst affected countries by COVID-19. According to the data released by the Ministry of Health and Family Welfare, Government of India, there were 42.9 million positive cases of COVID-19, along with 0.51 million deaths. Million-plus cities in India, like Delhi and Mumbai etc. were worst affected by the pandemic. Chandigarh (U.T.) is no exception. The Union territory faced three major waves of the COVID-19 outbreak and experienced peaks: the first in the months of August and September 2020, the second in the months of April and May 2021 and the third in January 2022. The U.T. witnessed a total of 88504 COVID-19 cases and a death toll of 1165 people due to COVID-19 infection until February 2022. Despite having a vigorous health infrastructure, the U.T. found itself incapable of curbing the spread of the pandemic. In this regard, this becomes a pertinent question to examine as to why the outbreak followed a particular trajectory. This research paper aims to examine the spatio-temporal pattern of COVID-19 in Chandigarh (U.T.) through mapping and identifying the COVID-19 hotspots using geospatial techniques. This study has made use of secondary data collected from the Directorate of Health, Union Territory of Chandigarh. Month-wise data from March 2020 to February 2022 was analysed at the sector level to study the trajectory of the outbreak of COVID-19 in Chandigarh (U.T.) and identify COVID-19 hotspots in the GIS environment. This study*

*revealed that the unplanned settlement of the planned city was a major hotspot like Mani Majra and sector 45 (Burail). The significance of this study lies in the fact that it will help health professionals and authorities to identify the major spread areas of the pandemic in the city and take appropriate steps in real-time to control the pandemic in the Union Territory, Chandigarh in the future.*

**Keywords:** COVID-19, spatio-temporal, hotspot, geospatial, pandemic

## **Introduction**

A number of undiagnosed phenomena were reported in Wuhan, China, in December 2019. The WHO announced "COVID-19" as the name of this new disease on February 11, 2020. COVID-19 first appeared in Wuhan City, Hubei Province, China, in December 2019. The disease is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) (Naming the coronavirus disease, COVID-19). On January 30, 2020, the World Health Organisation labelled the outbreak a Public Health Emergency of International Concern (Statement on the Second Meeting of the International Health Regulations). COVID-19 was declared a pandemic on March 11, 2020. At that time, there were more than 118,000 cases in 114 countries, and 4,291 persons had lost their lives (WHO Director-General's opening remarks at the media briefing on COVID-19). The disease outbreak caused significant harm and raised concerns in practically all countries around the world, as the rate of infection and fatality were rapidly rising and transmission was significant even with asymptomatic behaviours (Bai, Yan, et al.). COVID-19 was a global concern (Liu, Ying, et al.). Countries tried a variety of strategies to curb COVID's growth, including banning gathering, closing schools, halting transit, locking towns, enforcing curfews, and sealing off areas, but they failed to curb the diseases (Kumar). Several factors influenced the outbreak and trajectory of the diseases. These factors encompass vaccine efficiency over time, human behaviour, infection control strategies, mutations to the coronavirus itself, and the vulnerability of people who failed to gain some immunity, whether by natural infection or vaccination

(Andrews). So far, the world has faced three major waves of the COVID-19 pandemic. All the waves have followed the same pattern, with initial increases in new cases followed by reductions.

India's first COVID-19 case was reported on January 27, 2020 in Thrissur, Kerala. The patient arrived in Kerala on January 23, 2020, from Wuhan, China, due to a COVID-19 outbreak there (Andrews). This was the onset of the COVID-19 case in India and gradually it spread all over the nation. As an outcome, no cases were reported between February 4 and March 1, 2020. Cases began to rise throughout various Indian states on March 2, 2020 (Jahan, Nuzrath, et al.). To halt the COVID-19 pandemic The Government of India imposed a nationwide lockdown for 21 days on March 24, 2020, as a preventive precaution against the COVID-19 pandemic in India (COVID-19: Lockdown across India, in line with WHO guidance). The Government of India decided to end the lockdown in the country phase wise on and from June 1st, 2020 (Saha, Jay, and Chouhan). As India is a huge country with diverse physio-geographical and environmental conditions, estimating the COVID-19 spread at the regional level was quite difficult (Devi, Rani, et al.). India, with a population of over 1.34 billion people and the world's second-largest population, faced challenges in preventing the spread of the severe acute respiratory syndrome coronavirus among its people. With such a large population, India's healthcare system was woefully inadequate (Kumar, S. Udhaya, et al.). But The Government of India was continuously taking aggressive actions to respond to the COVID pandemic, and bolster the health system's capability to cope with all elements of COVID-19 management. During the epidemic, India maintained the lowest positive and death rates, as well as one of the highest recovery rates in the world (*Effective Response in the face of a Pandemic*).

Till February 2022, India faced three waves of the COVID-19 pandemic. According to the data released by the Ministry of Health and Family Welfare, Government of India, there were 42.9 million positive cases of COVID-19, along with 0.51 million deaths. Maharashtra remained the worst-affected state, with the highest number of COVID cases, followed

by Kerala, Karnataka, Tamil Nadu and Andhra Pradesh (*List of Coronavirus Affected Districts and Cities in India*). The million-plus cities of India, like Delhi and Mumbai etc. were also worst affected by the pandemic. COVID-19 invariably exposes vulnerability in urban and rural areas. Chandigarh was no exception. In Chandigarh, the first confirmed case of COVID-19 was reported on March 18, 2020 (Integrated Disease Surveillance Project). Chandigarh (U.T.) witnessed three major waves of the COVID-19 outbreak. Despite having a vigorous health infrastructure, the U.T. found itself incapable of curbing the spread of the pandemic. In this regard, this becomes a pertinent question to examine as to why the outbreak followed a particular trajectory despite a robust health infrastructure in the planned city.

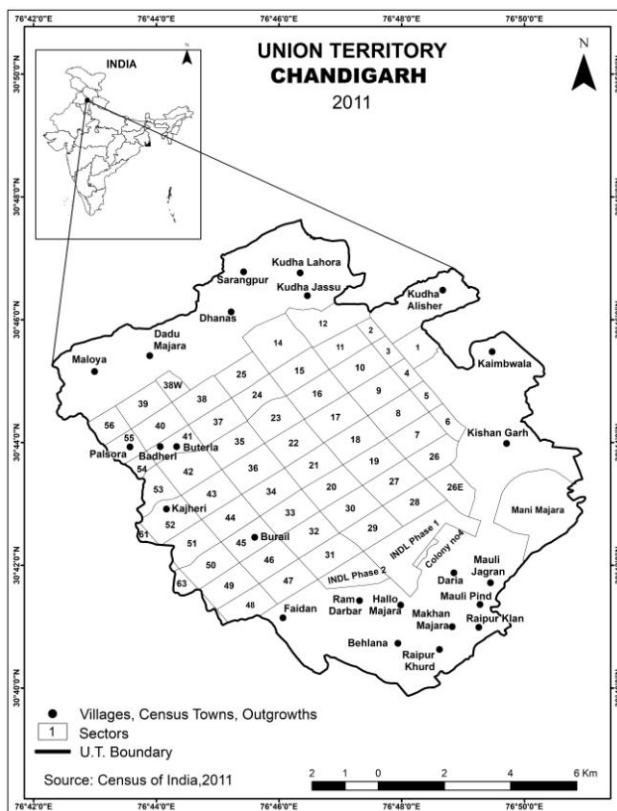
### **Significance**

The spread of COVID-19 has drawn the attention of scholars around the world. A number of studies have been conducted to study various aspects of the pandemic. The role of emerging technologies in the mitigation and monitoring of pandemics is one of the highlighted themes of research. In the domain of research studies, identifying the spatio-temporal spread of COVID-19 has a significant place. But the use of geospatial techniques in the identification of the spread and hotspots of COVID-19 at the city level is limited. This research paper aims at analysing the spatio-temporal trends of COVID-19 in Chandigarh (U.T.) through mapping and identifying the hotspots using geospatial techniques. The significance of this study lies in the fact that it will help health professionals and authorities identify the major spread areas of the pandemic in the city and take appropriate steps in real time to control the pandemic in the planned city of Chandigarh.

### **Study Area**

The study area is Union Territory Chandigarh, which is located in the foothills of the Sivalik range of the Himalayas in northwest India. Chandigarh is a single District Union Territory. Chandigarh is the "joint

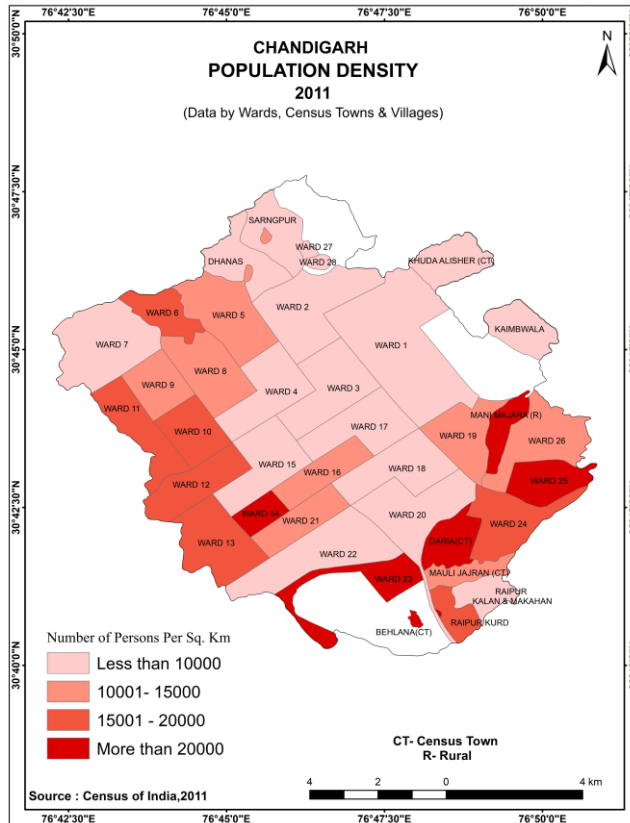
capital" of both Punjab and Haryana. Chandigarh is at an altitude of 304-365 meters above MSL and lies between 30°44'14 North latitude and 76°47'14 East longitude. It has an area of 114 sq. kms. It is surrounded by Punjab from three sides (North, South and West) and by Haryana from the fourth side (East).



**Map 1: Study area Chandigarh Union Territory**

Chandigarh was inhabited by 1,055,450 persons in the 2011 Census, conveying a density of 9,258 persons per sq. km. Out of the total population, 1,026,459 persons (97.3%) reside in urban areas, while the remaining 28,991 (2.7 %) live in rural areas. Chandigarh is mostly urbanised, having a 109.53 Km<sup>2</sup> urban area while the rural area is only 4.47 Km<sup>2</sup>. Chandigarh falls under Koeppen's CWG category, i.e., it has a cold dry winter, hot summer and sub-tropical monsoon. In the past, there

were 24 villages within the administrative extent of Chandigarh. Out of 24 villages at present, 12 villages are included in the municipal boundary. 5 were added to the census town list by the census of India and 2 were recorded as out grown town (OGs). In the present scenario, there are only 5 villages in Chandigarh (Directorate of Census Operations, Chandigarh UT, Census, 2011).



**Map 2: Population density of Chandigarh**

In 2011, the overall population density of the Chandigarh district was 9,258 persons per square kilometre, up from 7,900 persons per square kilometre in 2001. After the National Capital Territory of Delhi, Chandigarh (9,258) has been identified as the second most densely populated city in the country.



The map shows the distribution of population density in Chandigarh. The areas shown with dark colours have the highest density, like wards 14, 25, 23, census town Daria and Behlana and Mani Majara.

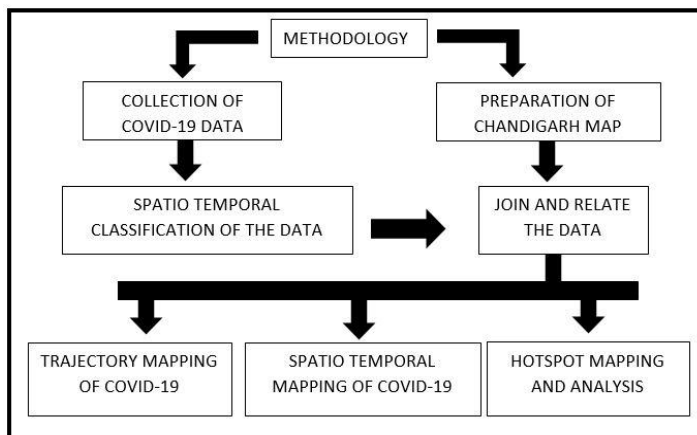
**Objectives**

The following objectives have been defined for the present research endeavour:

1. To examine the trajectory of COVID-19 cases in U.T Chandigarh.
2. To explore the spatio temporal dynamics of COVID-19 cases in Chandigarh U.T.
3. To find out the COVID 19 hotspots in the Chandigarh U.T.

**Data Base and Methodology**

The COVID-19 infection data for Chandigarh was obtained from the Directorate of Health Services Chandigarh (DHSC). For the analysis of the data from 86 locations for the period of March 2020 to February 2022, data was collected on a daily scale and converted to a monthly scale. The COVID-19 spread's trajectory was depicted as an onset map, with the first day of cases confirmed or reported in various parts of Chandigarh mapped. The spatial-temporal dynamic study of COVID-19 in Chandigarh was done with the use of GIS tools and geo-spatial mapping. The hotspot analysis was carried out with the help of GIS tools.



**Flow chart of methodology**

### Hot spot analysis (Getis-Ord $G_i^*$ statistics)

The present study makes use of hot spot analysis. A hotspot is considered as a region with a higher concentration of occurrences compared to expect given a random distribution of events (Osei, Frank B., and Alfred A. Duker). The term "hotspot" refers to a type of concentration in a spatial distribution (Bhunia, Gouri Sankar, et al.). The Hot Spot Analysis tool calculates the Getis-Ord  $G_i^*$  statistic (pronounced G-i-star) for each feature in a dataset (*How Hot Spot Analysis (Getis-Ord  $G_i^*$ ) works*). Hotspot calculates z-scores and p-values. A considerable hotspot is characterized by a high z-score and a low p value, whereas a significant cold spot is represented by a negative and low z-score. Getis-Ord  $G_i^*$  ( $G_i$ ) was utilized in this work to differentiate clusters of high values (hotspots) from clusters of low values (cold spots) (Parvin, Farhana, et al.). The Getis-Ord  $G_i^*$  statistics are written as follows:

$$G_i^* = \frac{\sum_{l=1}^n W_{l,k} y_k - \bar{Y} \sum_{l=1}^n W_{l,k}}{s \sqrt{\frac{\pi \sum_{l=1}^n W_{l,k}^2 - (\sum_{l=1}^n W_{l,k})^2}{n-1}}}$$

Where  $y_k$  is the attribute value of the feature  $k$ ,  $W_{l,k}$  is the spatial weight of  $l$  and  $k$ ,  $n$  is the total number of features, and;

$$\bar{X} = \frac{\sum_{k=1}^n y_k}{n}$$

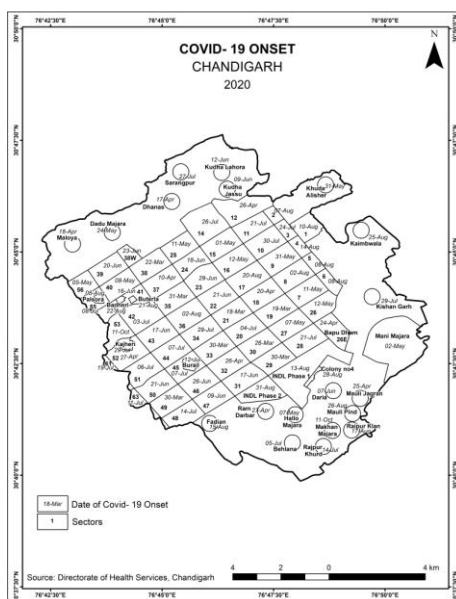
$$S = \sqrt{\frac{\sum_{k=1}^n y_k^2}{n} - (\bar{X})^2}$$

The result indicates the computed  $G_i^*$ 's high z-score and low p value, which represent the statistical importance of spatial clusters.  $G_i^*$  was used in this study to detect the COVID-19's vulnerable areas by representing hotspots.

## Results and Discussion

### Onset of COVID-19 in Chandigarh

On March 18, 2020, the first case was reported in Chandigarh, U.T. The COVID-19 case in Chandigarh was first reported from sector 21. A 23-year-old woman, who returned from London on March 15, 2020 was found infected. Following that, the infection progressively spread throughout Chandigarh. COVID-19 cases were recorded from Sectors 21, 19, 38, 30, 29, 33, 49, and 35 during the month of March. In the month of April, it covers sectors 37, 12, 32, 52, 18, Dhanas, Maloya, Babu Dham, Mauli Jagran, and Ram Darbar. With the exception of Sector 53 and Makhana Majara, COVID-19 spread slowly and progressively throughout Chandigarh and it engulfed all the rural and urban areas by August 2020.

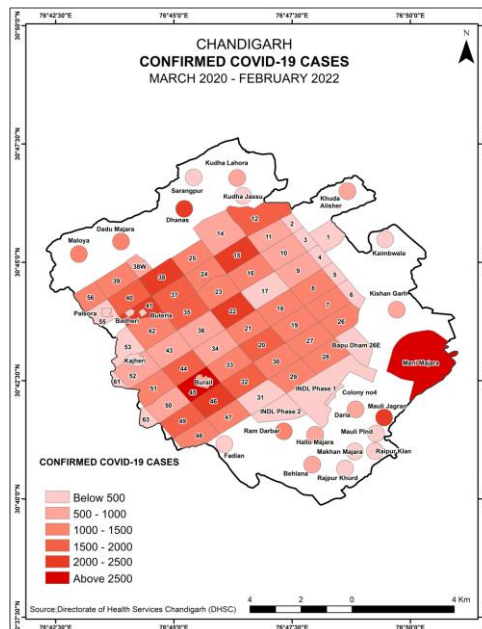


**Map 3: Date of onset (1st positive case reported) of COVID-19 in Chandigarh.**

### Spatial and Temporal distribution of COVID-19

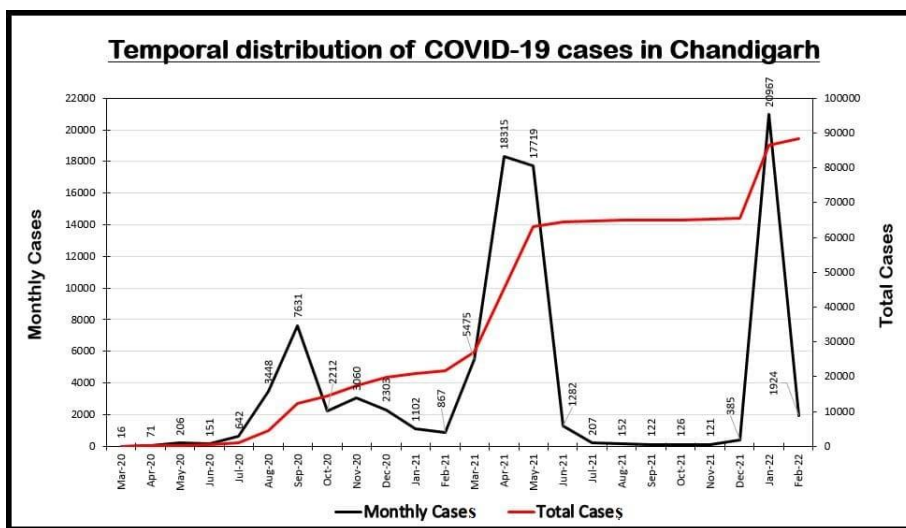
The spatial distribution study was conducted to examine how total COVID-19 cases were distributed throughout all areas of Chandigarh. The

spatial distribution maps were divided into six categories based on the total number of COVID-19 cases: below 500, 500-1000, 1000-1500, 1500-2000, 2000-2500, and more than 2500. The map depicts the sector, town, and village-level distribution of COVID-19 as of February 2022. The colours represent the number of confirmed positive COVID-19 cases in each area of Chandigarh. It was discovered that sectors 45 and Mani Majra had the highest number of cases when compared to other localities. Mani Majra had the highest number of cases (7142), followed by Sector 45 (2591) positive COVID-19 cases. Sectors 15, 22, 38, 41, 46, Dhanas, and MauliJagran were among the many additional sectors where the number of cases was also high and fell between the ranges of 2000 – 2500 range. All the other areas where the number of cases was below 2000. The monthly new positive cases (primary y-axis) recorded for the period March 2020 to February 2022 are presented in the figure, together with the cumulative positive cases of COVID-19 in Chandigarh.



**Map 4: Spatial Distribution of COVID-19 cases  
(March 2020 to February 2022)**

The monthly new positive cases (primary y-axis) recorded for the period March 2020 to February 2022 are presented in the figure, together with the cumulative positive cases of COVID-19 in Chandigarh. The graph depicts the three COVID-19 waves in Chandigarh. The first wave of COVID-19 in Chandigarh began in March 2020 and lasted until February 2021. The total number of COVID-19-positive patients recorded during the first wave was 21709. In August and September of 2020, the first wave reached its peak. In November, the number of positive COVID-19 cases grew once more, albeit not to the levels seen during the peak months. The monthly positive instances of COVID-19 fell to the lowest level in the last seven months in February 2021.



**Fig 1: Temporal Distribution of COVID-19 case from March 2020 to February 2022**

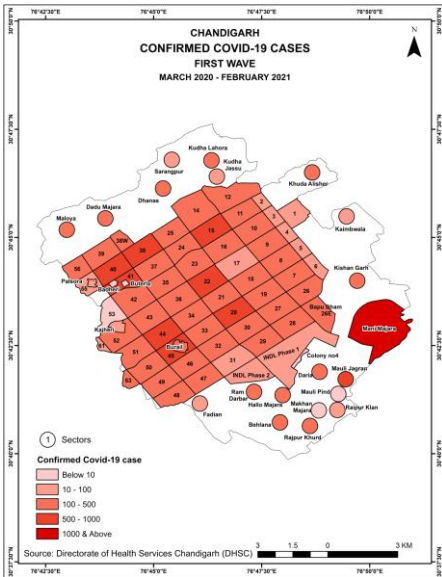
In the month of March 2021, the second wave of COVID-19 kicked off. The commencement of the second wave was more catastrophic than the beginning of the first wave. In the second wave, a total of 43519 positive COVID-19 cases were reported. More than 5000 cases of COVID-19 were recorded in the month of March (the first month of the second wave). The following two months saw the climax of the second wave of COVID-19 in

Chandigarh. More than 35 thousand positive COVID-19 cases were recorded in April and May 2021. After the month of May 2021, there was a decrease in positive COVID-19 cases, and in November 2021, monthly COVID-19 instances were once again at their lowest level. COVID-19's second wave persisted until November 2021.

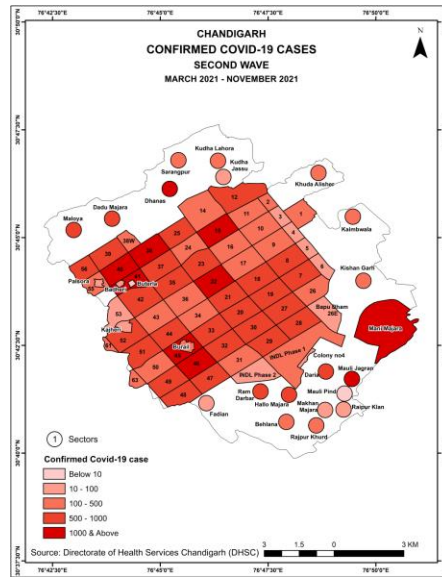
In December, the third wave of COVID-19 struck Chandigarh, with monthly positive COVID-19 cases on the rise. The total number of positive COVID-19 cases recorded in the third wave was 23276. Positive cases of COVID-19 surged dramatically in January 2022, and this month was the peak month for the third wave. The highest monthly positive COVID-19 case from March 2020 occurred in January 2022. In this month, more than 20,000 cases were reported. Cases fell to less than 2,000 in the next month, February. Until the end of February 2022, Chandigarh had reported 88504 total positive COVID-19 cases.

### **Wave wise spatial distribution of COVID-19 cases in Chandigarh**

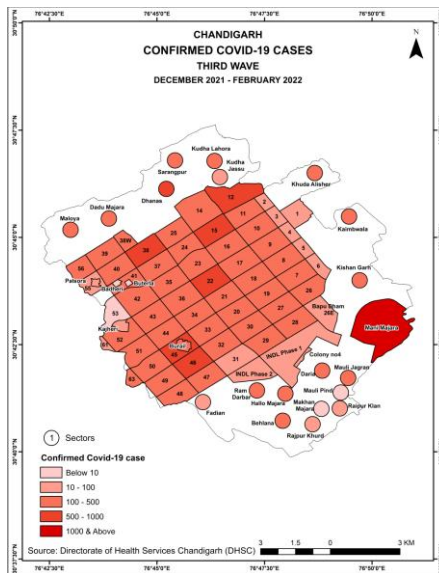
The spatial distribution of COVID-19 cases was classified into three waves: the first wave, the second wave, and the third wave. The first wave period covered cases from March 2020 to February 2021, the second from March 2021 to November 2021, and the third from December 2021 to February 2020. The wave wise spatial distribution maps were divided into five categories based on the total number of COVID-19 cases: below 10, 10-100, 100-500, 500 -1000 and above 1000. In the first wave, the number of COVID-19 cases more than 1000 were recorded from the Mani Majra. Subsequently, in the second wave the number of areas with more than 1000 cases increased from 1 in the first wave to 10 in the second wave. The areas with more than a thousand cases in the second wave were namely Mani Majara, Dhanas, MauliJagran and sectors 15, 22, 38, 40, 41, 45 and 46. In the third wave again, only Mani Majara had more than 1000 cases. The highest total cases of COVID-19 were in Mani Majara with 1887, 3422 and 1833 COVID-19 cases in the first, second, and third waves, respectively.



Map 5



Map 6

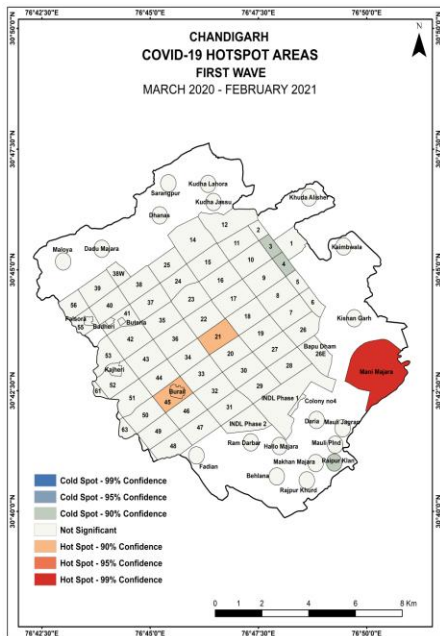


Map 7

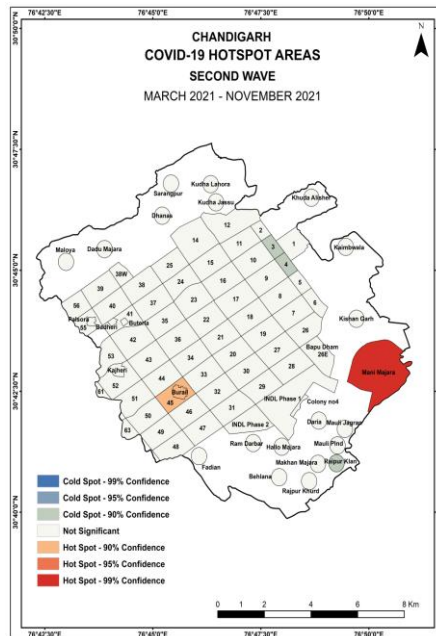
Map 5,6,7: Confirmed COVID-19 Cases

### COVID-19 Hotspots

To determine the wave wise and over-all COVID-19 hotspots in Chandigarh, the Getis-Ord  $G_i^*$  statistic was used and the findings are shown in Fig. Mani Majara's clustering of high values (hot spots) is proved with a confidence level of 99 percent in all three waves distinctly as well as for all three waves aggregately. The cluster of hot spots had a 90 percent confidence level in the first wave for sectors 45 and 21, in the second wave for sectors 45, and in the third wave for sectors 15 and 37. The hot spot cluster has a confidence level of 90% for all three waves aggregated for sectors 37 and 45. The indicator detected clustering of low values (cold spots) for sectors 3, 4 and Raipur Klan with a confidence level of 90% in the first and second waves, in the third wave for sectors 3 and Raipur Klan and for all three waves aggregately for sectors 3, 4 and Raipur Klan.



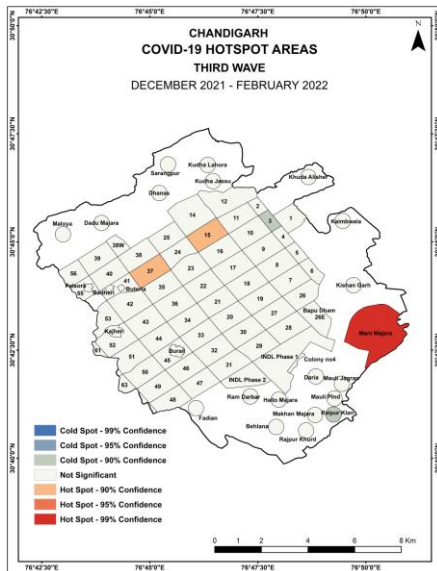
Map 8



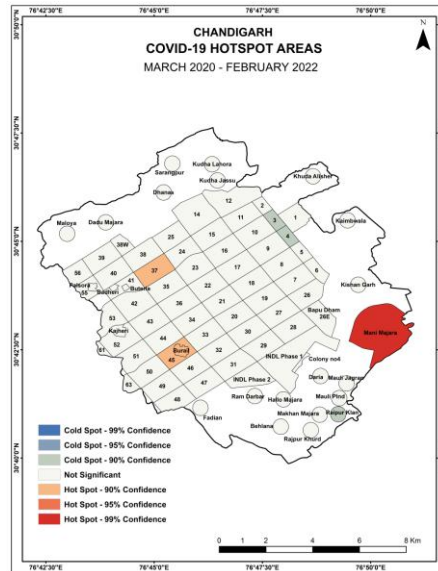
Map9

Map 8,9 :COVID-19 Hotspots for first and second wave





Map 10



Map 11

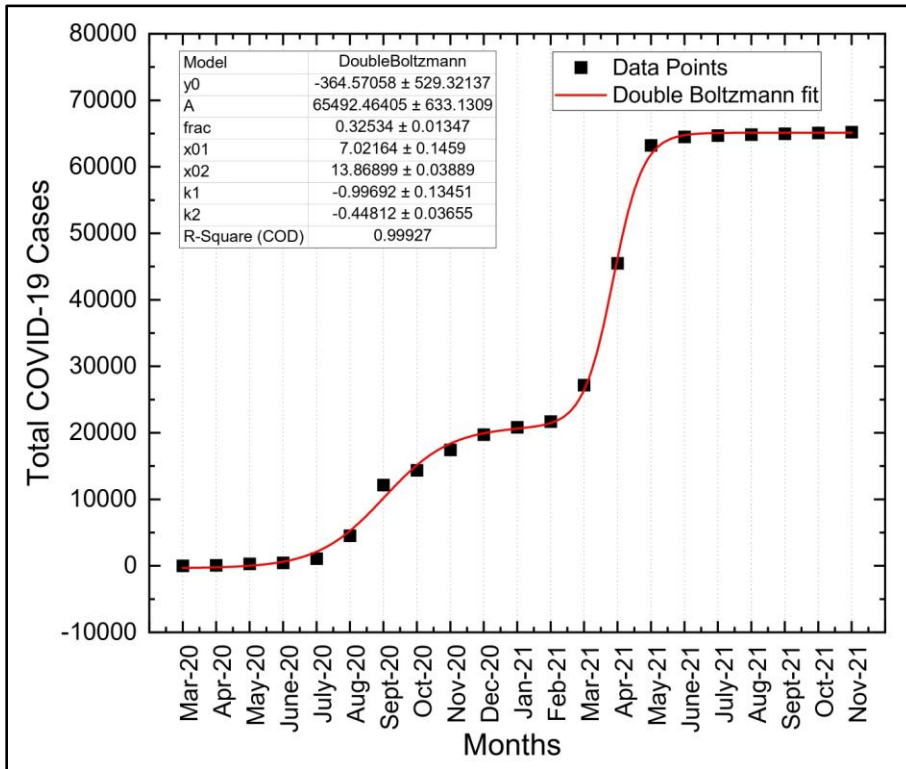
Map 10,11: COVID-19 Hotspots for third wave and all three waves

**Analysis of COVID-19 cases with Double Boltzmann Fit**

The cumulative monthly data of two consecutive COVID-19 waves are fitted using a standard double Boltzmann function given by:

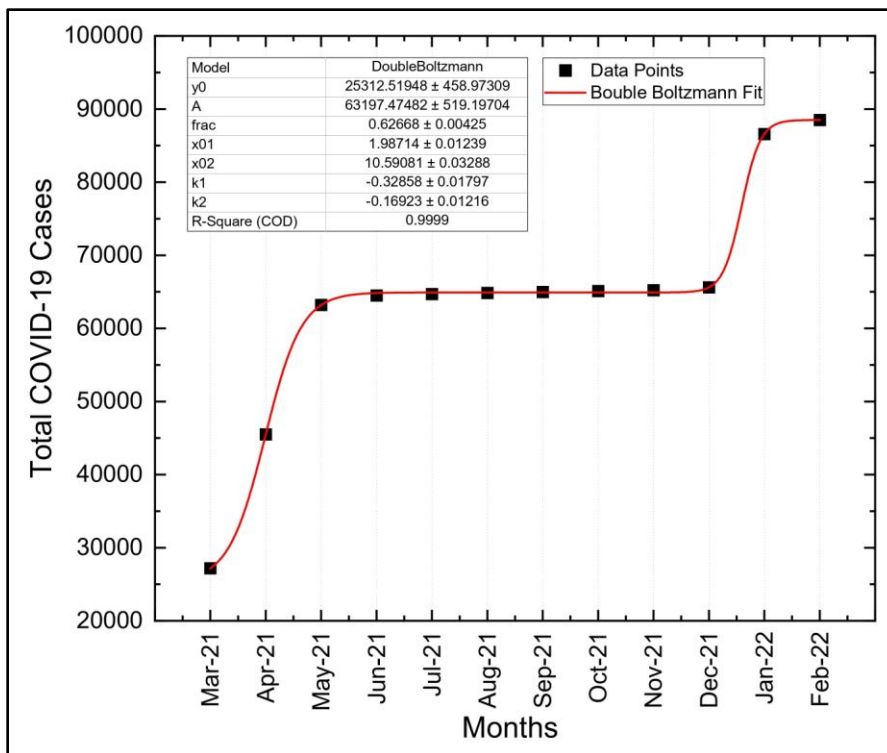
$$y = y_0 + A \left[ \frac{p}{1 + e^{\frac{x-x_{01}}{k_1}}} + \frac{1-p}{1 + e^{\frac{x-x_{02}}{k_2}}} \right]$$

This function consists of 7 free parameters, which are obtained by fitting the data. These parameters are  $y_0$ ,  $A$ ,  $p$ ,  $x_{01}$ ,  $x_{02}$ ,  $k_1$  and  $k_2$ .  $Y_0$  is the offset from the origin of the axis.  $p$  is the relative fraction of the two growths (steps).  $k_1$  and  $k_2$  are slope factors of the two slopes in the curve with centres  $x_{01}$  and  $x_{02}$  respectively. The concerned parameters for understanding the trend of COVID-19 cases in the three waves are  $x_{01}$ ,  $x_{02}$ ,  $k_1$  and  $k_2$ . A higher value of the slope factor corresponds to a flatter curve indicating slow rise and lower value of  $k$  indicates sharp growth.



**Fig: 2**

The cumulative COVID-19 cases in Chandigarh from March 2020 to November 2021 are shown in figure 2. The fitted values of  $k_1$  and  $k_2$  are  $-0.996 \pm 0.13$  and  $-0.4481 \pm 0.036$  indicating that the initial rise in cases during the second wave is sharper than the first wave. There is a sharp rise in COVID cases in the first wave from June 2020 until September 2020. After September 2020, the COVID cases in Chandigarh started decreasing. The second wave has an onset in March 2021 with an average rise in cases of 18000 per month in the months of April and May 2021. After May 2021, the number of COVID cases again decreased to 150 per month until November 2021.



**Fig: 3**

Figure: 3 represents the cumulative COVID-19 cases in Chandigarh from March 2021 to February 2022 (second and third waves). The data is also fitted using the double Boltzmann function. The values of  $k_1$  and  $k_2$  obtained after fitting are  $-0.328 \pm 0.0179$  and  $-0.169 \pm 0.0121$  which indicate that the initial rise in cases in the third wave is sharper than the second wave. The second wave has an onset in March 2021 and the cases rise very sharply from March 2021 to May 2021, with an average case of 13800 per month. After May 2021, the monthly cases were reduced to about 150 per month until November 2021. The third COVID-19 wave starts in the month of December 2021, with a further rise in cases to 385. January-2022 has the highest number of COVID-19 cases (20967) in the whole time period under study. After January 2022, the cases again decreased to 1924 in the month of February 2022.

## Conclusions

COVID-19 spread from sector 21, where the first positive case was reported, to other parts of Chandigarh. Mani Majra and sector 45 were the major hotspots of COVID-19, where the number of active cases was 7000 and 2591 respectively. Sectors 15, 22, 38, 41 and 46 were the other major hotspots of COVID-19 in Chandigarh. August and September 2020 were the months with the highest number of cases during the first wave of COVID-19. April and May 2022 were the months with the highest number of cases during the second wave of COVID-9. January 2022 was the month with the highest number of cases during the first wave of COVID 19. Mani Majra reported the highest number of positive cases of COVID-19 during all three waves. In the planned city of Chandigarh, the unplanned settlements are the major hotspots for the spread of COVID-19. Overlay analysis of population density and COVID-19 cases shows that the highest number of cases were reported in areas of high population density.

## Reference

- “COVID-19: Lockdown across India, in line with WHO guidance.” *United Nation*, 24, Mar. 2020, <https://news.un.org/en/story/2020/03/1060132>. Press release.
- “Naming the coronavirus disease (COVID-19) and the virus that causes it.” *WHO*, 11, Feb. 2019, [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it). Press release.
- “Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV).” *WHO*, 30, Jan. 2020, [https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)). Press release.
- “WHO Director-General's opening remarks at the media briefing on COVID-19 -

- 11 March 2020." *WHO*, 11, Mar. 2020, <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>. Press release.
- Andrews, M. A., et al. (2020) "First confirmed case of COVID-19 infection in India: A case report." *The Indian journal of medical research* 151.5: 490.
- Bai, Yan, et al. (2020) "Presumed asymptomatic carrier transmission of COVID-19." *Jama* 323.14: 1406-1407.
- Bhunias, Gouri Sankar, et al. (2013) "Spatial and temporal variation and hotspot detection of kala-azar disease in Vaishali district (Bihar), India." *BMC infectious diseases* 13.1: 1-12.
- Devi, Rani, et al. (2020) "Analyzing Spatio-Temporal Spread of Covid19 in India." *Case Studies & Opinions* 01.04: 57-67
- Directorate of Census Operations, Chandigarh UT. "*Census of India 2011 - Chandigarh UT - Series 05 - Part XII A - District Census Handbook, Chandigarh.*" 2011
- Effective Response in the face of a Pandemic: Measures Adopted by the Government of India to Combat COVID-19.* Ministry of Health and Family Welfare, 24, Dec. 2021, <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/dec/doc2021122421.pdf>
- How Hot Spot Analysis (Getis-Ord Gi\*) works.* ESRI, <https://pro.arcgis.com/en/pro-app/2.8/tool-reference/spatial-statistics/h-how-hot-spot-analysis-getis-ord-gi-spatial-stati.htm> Integrated Disease Surveillance Project, Chandigarh.
- Jahan, Nuzrath, et al. (2021) "Entry and initial spread of COVID-19 in India: epidemiological analysis of media surveillance data, India, 2020." *Clinical epidemiology and global health* 9: 347-354.
- Kumar, Ankush. (2020) "Modeling geographical spread of COVID-19 in India using network-based approach." *Medrxiv*.
- Kumar, S. Udhaya, et al. (2020) "The rise and impact of COVID-19 in India." *Frontiers in medicine* 7: 250.
- List of Coronavirus Affected Districts and Cities in India.* Oneindia, <https://www.oneindia.com/coronavirus-affected-cities-districts-in-india.html>

- Liu, Ying, et al. (2020) "The reproductive number of COVID-19 is higher compared to SARS coronavirus." *Journal of travel medicine*.
- Maragakis, Lisa. *Coronavirus Second Wave, Third Wave and Beyond: What Causes a COVID Surge*. Health, 21, Oct. 2021, <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/first-and-second-waves-of-coronavirus>
- Osei, Frank B., and Alfred A. Duker. (2008) "Spatial and demographic patterns of cholera in Ashanti region-Ghana." *International Journal of Health Geographics* 7.1: 1-10.
- Parvin, Farhana, et al. (2021) "Spatial prediction and mapping of the COVID-19 hotspot in India using geostatistical technique." *Spatial Information Research* 29.4: 479-494.
- Saha, Jay, and Pradip Chouhan. (2021) "Lockdown and unlock for the COVID-19 pandemic and associated residential mobility in India." *International Journal of Infectious Diseases* 104: 382-389.

## **Street vending, vulnerability and exclusion during the COVID-19 pandemic: The case of Chandigarh**

MANJINDER KAUR

### **Abstract**

*The global Covid-19 pandemic posed unprecedented economic challenges to everyone across the world. The pandemic has disproportionately impacted the world's poor population in terms of livelihood and survival. The street vendors were among the hardest hit, suffering in the most unexpected ways as their livelihood was shattered. This study explored how street vendors survived the pandemic, as well as what obstacles and problems they faced. The study aimed to analyze the issues faced by the street vendors during and after the lockdown (post lockdown) and the schemes and laws passed for the street vendors, that have helped them in any form during this period of uncertainty. The roadside vendors in Chandigarh city were deliberately chosen for this unique survey due to their agricultural backwardness, large outmigration of rural poor to cities and high incidence of poverty and hunger. A mixed research approach was used in the present study i.e., both quantitative and qualitative approaches were used. The Primary data was collected from 50 street vendors of Chandigarh using interview schedule and five case studies. The exploratory study concluded that most street vendors are uneducated with low and insecure income, with lack of awareness of government-sponsored schemes, and highly dissatisfied with the business even after removal of lockdown. The study highlighted the need for promotion and creating awareness of all government schemes.*

**Keywords:** Pandemic, Covid-19, street vendors, low and insecure income, awareness of government schemes, lockdown.

## **Introduction**

The strong roots of street vending as an occupation are embedded deep in our society. Amongst the plethora of problems which plague them, indifference affects them the most. For most people, it is a mere economic exchange, one that does not evoke concern which was particularly evident during the global pandemic. With surging unemployment and poverty, they migrate in search of a better life. Belonging to the lower rungs of the society, these vendors do not have the opportunity, education or skill to work in the formal sector and thus end up operating in the informal economy with no job security and perpetual uncertainty. Street vendors form a prominent role in the supply chain by providing convenient and inexpensive goods and services to everyone and therefore contributing to India's economic progress. Undertaking the welfare of the street vendors is integral to the achievement of two UN Sustainable Development Goals (SDGs) namely, SDG 1 that focuses on poverty alleviation and SDG 8 which fulfils the objective of decent work and economic growth.

An age-old profession, street vending is intrinsic to the livelihood of a large proportion of India's population. The diverse workforce of street vendors visibly occupies public spaces, thus, catering to the essential consumer demand of the country. A street vendor is broadly defined as a person who offers goods for sale to the public at large without having a permanent built-up structure from which to sell. Street vendors may be stationary in the sense that they occupy space on the pavements or other public/private spaces or, they may be mobile in the sense that they move from place to place by carrying their wares on pushcarts or in baskets on their heads(National Association of Street Vendors of India, n.d.-b).

Street vending or hawking constitutes a critical component of the informal economy in India, catering largely to the urban demand for affordable goods and services. Despite their contribution to the urban economy, vendors are often considered antisocial, anti-developmental, dirty,



unaesthetic, and unhygienic. They are frequently targeted, harassed, and evicted by government officials. Even the Supreme Court has taken note of how vendors are a ‘harassed lot and are constantly victimized by the officials of the local authorities, the police, etc.’. Roever argues that economies with ambiguous laws and the absence of constraints on state power encourage the low-level harassment of vendors through the unofficial payment of hafta, merchandise confiscations, and periodic evictions. The lack of clarity on the rights and obligations of street vendors encourages local authorities to benefit from flourishing channels of rent-seeking. (Centre for Civil Society, 2019)

### **Covid-19 before and aftermath**

Before Covid-19, the informal sector was suffering from the impact of demonetization and GST (Goods and Services Tax). The unorganized sector or the informal sector consists of two parts. They are informal employment and informal sector enterprises.

1. Informal employment consists of daily wage labourers, self-employed individuals, street vendors etc. The absence of regular pay and social security is the norm.
2. Informal sector enterprises consist of small shops, stalls, restaurants. The entire business revolves around the owners. They may or may not have an organizational structure, lack proper inventory, and skilled workers, minimum wage rules are often not followed, as the employers themselves earn very little profit. Another striking feature of the unorganized sector is the strong presence of employed women. According to NCEUS (National Commission for Enterprises in the Unorganized Sector), 98% of the agricultural sector, 75% in the industrial sector and 72% in the services sector are engaged in informal employment. Improvement of the unorganized sector is necessary for better wages, living conditions and livelihood of those employed in it.

Though the Central Government of India has passed a Bill for the welfare of street vendors, it has not been operationalized yet. The local authorities as well as the State Government is not seriously concerned either to improve the working conditions of this particular category or to take steps to provide social protection measures to this vulnerable group. They purposefully are not prepared to acknowledge the valuable services provided by this section to the public. They act only when these traders pose a problem to pedestrian or vehicular traffic or become a nuisance to the local people. India announced the world's largest lockdown on 23 March, 2020 to contain the spread of COVID-19-induced pandemic. An unprecedented shutdown of economic activities for about months across the country led to a huge loss of employment and income. The unemployment rate at the national-level was at its peak (24%) during the periods of May and June 2020 (CMIE 2020) and the estimated economic growth was negative (23%) in the first quarter of the year (National Statistical Survey Office 2021; RBI 2021). Informal workers and migrant labourers were the worst affected by the closure of construction and other business activities, which led to a mass movement of labour back to their native places (Srivastava 2020). Although the centre and various state governments were prompt to provide free food grains, deposit cash transfers under the flagship programs—the Pradhan Mantri Garib Kalyan Yojana (PMGKY) and initiate other relief measures to the poor, the crises were beyond comprehension. Various non-governmental organizations, religious institutions and individuals also came forward to extend all possible help to the affected people. But the poor seems to have borne the maximum brunt of an overall contraction in their wages and income.

Bhowmik (2011) brought to light some of the most pressing issues surrounding credit availability for street vendors. The research was carried out using both primary and secondary data sources. The findings of the study revealed that the financial inclusion program has paid little or no attention to street vendors because it is aimed at the urban poor. The

National policy for street vendors proposed addressing the issues of street vendor's financial inclusion through the establishment of SHGs, Associations, and microfinance institutions but it failed due to lack of proper implementation.

Nitya Maniktala (2020) discussed in detail the policies introduced in the past two decades with an emphasis on the Street Vendors Act 2014 and the PM SVANidhi Scheme 2020. While the street vendors act brought to light the disparity in its execution among the states, the PM SVANidhi scheme 2020 aims at measures to organize the street vendor sector are being hampered by a deteriorating health problem. The findings of the paper revealed that the credit system only prolongs their troubles by giving them credit and not direct relief in such distress times and improvements must be made to digital and financial literacy

Literature on the impact of pandemic-induced lockdown is limited. But it provides evidence on the agony and hardships that COVID-19 has inflicted on people in terms of physical and psychological health, inequality in access to medical and educational facilities, and expenditure exceeding their income. Singh et al (2021) reported that 59% households faced loss in income, 38% lost jobs, 83% had difficulties in accessing healthcare and 28% reduced consumption of fruits and vegetables. Among others, Mathias (2020) and Modak et al (2020) reported that the COVID-19-induced lockdown not only reduced the income, consumption and food security of households but also severely affected their mental state. The lockdown along with the social distancing norms dried up jobs and posed serious challenges of meeting day-to-day expenditures and ensuring adequate nutrition and health (Khanna 2020). As per government estimates, street-vending accounts for 14 percent of the total urban informal employment, and there are around 10 million street vendors in India. Most of them are informally skilled with low incomes. These necessity-entrepreneurs travel from rural to urban areas searching for

economic opportunities. Thus, street vendors are an integral part of India's retail market.

### **The present study**

Though workers in the unorganized sector constitute the vast majority of labourers in India, they are also the most neglected sector of labour in India. The government has failed to give adequate importance for the upliftment of workers in the informal sector. The trade unions have failed to mobilize the unorganized labour in India. In the rural areas the informal sector workers are scattered and unskilled. The workers are uneducated and politically less conscious. In the urban areas they are comparatively more organized. There is a huge scope and urgent need for the improvement of the informal sector workers. This study collected data with focus on the problems of street vendors of Chandigarh in this sector. This study focused on the marginalized state of the street vendors and how COVID-19 has led to further reinstate their marginalized status. The aim of this study was to highlight the socio-economic and working conditions of the street vendors mainly focusing on problems faced by them during and after pandemic period in Chandigarh. The roadside vendors in Chandigarh city were deliberately chosen for this unique survey due to their agricultural backwardness, large outmigration of rural poor to cities and high incidence of poverty and hunger.

### **Objectives**

1. To examine the socio-economic profile and the livelihood of the street vendors sustainable livelihood frame work.
2. To identify the issues / challenges of street vendors during the period of lockdown and after lockdown.
3. To study and highlight the need for promotion and creating awareness of all government schemes.

## **Methodology**

The unit of analysis of the study is the street vendors in Chandigarh. A mixed research approach was used in the present study i.e., both quantitative and qualitative approaches were used to collect the data. The study was conducted in Chandigarh. A roadside vendor in this study has been defined as one who earns his/her living by selling products and services on the streets. The respondents were interviewed from different sectors of Chandigarh (as the number of roadside vendors had not documented) for collection of primary data. Personal interviews with 50 street vendors were conducted for an understanding of common issues. Qualitative data were collected through five case studies. For secondary data different reports available on the Ministry of Labour and Employment, the National Association of Street Vendors of India, journals and articles has been used.

## **Findings**

Most of the roadside vendors interviewed at Chandigarh belonged to Uttar Pradesh while very few were from other states like Himachal Pradesh, Uttaranchal, Punjab and Rajasthan. The data show that majority of the respondents were married, only one percent were un-married and rest 5 percent was widower/widow. There were more married respondents found in age category of 36-50 years while 10 respondents were unmarried in 15-25 age category. Only 8 percent respondents found in age category of 51 and above and in this category only 6 percent were married, while only 1 respondent was widower. Data indicate that a majority of respondents were aged between 36-50 years were married.

The study also focused on the association between caste and occupation. Data reveal that majority of street vendors belonged to Ravidasia caste (67 percent). One third street vendors came from Uttar Pradesh and Chandigarh respectively that can be attributed to the fact that Chandigarh is quite accessible for the street vendors from Uttar Pradesh and other

states of India. In the study, respondents argued that the common public perception was that the street vending occupation is followed only people who were regarded as having a low social status. They were also upset at the impolite treatment they received at the hands of their customers. Those who had a certain level of educational attainment felt that their education level was not suited for street vending work. They hoped that improved educational levels would lead to more livelihood opportunities and remove the stigma of caste.

Gender and caste disparity has been a major issue in India for achieving the goal of universal elementary education. The data indicate that as compared to females, higher percentage of males were more educated. Findings showed that street vendors belonged to the marginalized section of the society where males are deprived of their basic right to get education due to poverty, inequality, deprivation, vulnerability and so on. Majority of street vendors were illiterate; 28 percent had studied up to middle and only 9 percent had gone to senior secondary level respectively. The reasons for this lack of education appear to be poor economic condition of the families, non-availability of suitable facilities near their residences, and the reluctance of the family and community to allow them to travel long distances to school. The study showed that the educational status has improved with each succeeding generation, and that relationships with peers from other caste groups have improved. The street vendors, like most underprivileged groups, have a tradition of struggle and hard work in order to overcome barriers for an education that will help them to attain their goals. The uneducated respondents had shown positive intent and interest in getting an education, but were denied the opportunity due to family and social hurdles.

The study found that uneven development and scarcity of work at their native places were the main reasons for the migration of the respondents to Chandigarh. Findings show that nearly eighty seven percent workers have

been living here for the past three and more decades. During the course of study, it was also observed that there were families which had been living here for over forty years when the city was taking shape and they are mainly from Uttar Pradesh, probably due to its close proximity to Chandigarh. 41 percent were permanently settled in Chandigarh with their families while 59 percent workers reside in Chandigarh on a temporary basis and visit their native place because their families are back at home. It was found that majority of them are landless or possess very small landholdings in addition to that they plough land on lease also. They use to visit their native place at the time of sowing and harvesting season.

During the course of study, it was found that most of the roadside vendors came to Chandigarh in search of greener pastures and some preferred their families to come along with them and some preferred to leave their families back home. 55.5% roadside vendors have migrated with family in search of better livelihood and rest 44.5% reached here alone earning behind their families. Majority of them have come due to small land holdings, large family size, some came to pay debt taken for various reasons and some were invited to Chandigarh by their relatives or village friends.

### **Living Conditions of the Roadside Vendors**

In most developed nations of the world, housing, sanitation, electricity, water, etc. are considered givens of social life. In the developing world, however, these 'basic amenities' are a luxury of life for most citizens, who get by in hovels constructed out of anything they can lay their hands upon, without electricity, water or even basic sanitation. For the study purpose, houses are classified into four types namely pucca, kutcha, shacks and tin shed houses.

The standard of living has direct bearing on the income and size of the family and in the present study it was found that out of the total respondents, 87 percent have a place to live while the remaining were

having shacks or living in tin shed houses respectively. They had migrated to Chandigarh to support their family income but still prefer to live as such to save more money. Among the total workers, one fourth had two earners, 54 percent workers survived on the earning of the sole bread winner while 13 percent workers had three earning hands in their family. Street vendors who came in early 70's and 80's had small shacks in various colonies of Chandigarh and they were allotted small plots or rehabilitated houses at very nominal price by Chandigarh Administration in compensation of demolition of their shacks. Many of them have sold their houses in thousands of rupees for their greed and started living in shacks but now the value of same houses is in lakhs. From the responses, it was clear that living in Chandigarh posed several difficulties because of which the migrants spent their entire life in specific pockets of the city.

The data further show that inspite of varied earning levels of workers, the incidence of those still living in rented accommodation was on the higher side. The type of the house in which a person lives and socializes is likely to have significant impact on his beliefs, health, and quality of life. These factors play a crucial role in molding his (or her) personality. The majority of families 63 percent were living in rented accommodation while 37 percent owned a house. It was also found that 54 percent families had one earning hand while 30 percent families had two earning members in their family. Only 15 percent had more than two earning members in their families.

The roadside vendors who stayed in rented room are shared by two to five members in order to save on individual rent. The roadside vendors who were not permanent settlers of Chandigarh stayed in rented accommodation as they are still in touch with their place of origin. These migratory workers were mostly landless or had small land holdings at their place of origin. Whenever they visit to their native place to meet their families and to look after their agricultural land, they call their siblings or



relative to look after their site work who are also doing the same occupation in Chandigarh. In the study it was found that majority of street vendors (87 percent) had pucca houses and almost all were having drinking water facility inside their house. The respondents who had tin shed houses were dependent upon public source of drinking water.

The data reveal that 88 percent respondents who resided in pucca houses had toilet facility inside their houses. The few respondents who were living in kutchra houses or tin shed houses were using public toilets or open space for defecation. These public toilets were reported as unclean, and thus hazardous to the health of respondents due to insanitary conditions. Street vendors have poor social protection and their working conditions on the streets expose them to a variety of safety and health issues. A study by SNTD Women University in collaboration with International Labour Organization on street vendors in Mumbai found that around 85 percent of the street vendors complained of stress related diseases-migraine, hyper acidity, hypertension and high blood pressure. The lack of toilets has an adverse effect on women's health and many suffer from urinary tract infections and kidney ailments. The mobile women street vendors face security issues also.

There were 39 percent workers who had been allotted houses by the Chandigarh administration. Out of them, only 2 percent respondents were still paying monthly instalments while 37 percent were not paying anything since, they had cleared their instalments. These people had been living in Chandigarh for more than 2 to 3 decades and had paid their dues to the authorities who provided cheap housing on easy finance. On the other hand, more than half of the respondents (61 percent) had rented accommodation in Chandigarh. More than one third respondents were living in pucca houses in which majority were using LPG cylinders (95 percent while very few were using kerosene oil and wood as source for cooking their food. The same thing was observed in different nature of

settlements i.e., 72 percent respondents have LPG connections for cooking purpose.

The average time of working hours per day for the street vendors varies from eight to twelve hours. Although a significant proportion of the street vendor community has progressed socio-economically, the majority continue to be poor. But, in times of difficulty, when the government should be providing direct support to the vendors, they are giving out credit facilities. Availing loans during these times may not provide relief to the street vendors due to the social distancing measures that are placed in the public spheres to contain the Corona virus pandemic. This has led to a substantial decrease in their customer base with most people preferring online transactions. Therefore, this credit scheme mayor may not guarantee profitable returns on their investments in such volatile times especially when they have limited access to health care with no medical insurance and financial safety net. This could also lead to the defaulting of the interest payments and even the principal amount. Thus, it can be concluded that although the scheme in itself has taken incredible steps towards helping the street vendors, we are still far behind. This credit scheme only prolongs their troubles by giving them credit and not a direct relief in such distressing times. Improvement in digital and financial literacy should also be given due attention. Execution of the Scheme and the irregular and improper data of surveys is where this scheme falls short.

### **Case Studies**

1) Kamal Singh, aged 60, married, belongs to Aligarh district in Uttar Pradesh. About 2 years ago, one of his uncles invited him to Chandigarh and since then he comes every year for 6-7 months and earns his livelihood by selling sugar candies. He has a large family to support which includes 4 daughters and two sons. He has a small piece of land of about 1 ½ big has which is taken care of his wife and daughter back home while both of his sons are working with him in Chandigarh for the past 4-5 years

and do the same trade. The lack of earning opportunities back home as the primary reasons for his annual sojourn to Chandigarh. Ever since he developed some respiratory problem, he thinks this city is not good to live.

Kamal Singh (60) revealed his problems and COVID-19 experiences to the researcher and said: ‘Corona ne sabh kuch badal ke ragh diya hai. Pehle wala time yaad aata hai. Garib banda pet bhar ke kha pee leta tha par ab toh kamane ke aur khane ke laale par gaye hai. Meri bhateezi ki shaadi thi gaon mein.... mein toh us chakar mein fuss gaya gaon mein.... Mujhe kya pata tha ke lockdown lag jayega..... sade saat mahine gaon mein hi rehna pada. Pariwaar ka guzara karna bada mushkil ho gaya tha. Sarkar ki taraf se to sirf 5 kg anaaz milta tha....baki to khud karna padta tha. Chori shipe gaon mein diyari bhi ki... 250 rupai milte the....karza bhi liya..... pariwaar ko bhuka nahi maar sakte. Mochi ke licence ke bhi Rs. 608 dene padte hai har mahine... agar dus tareekh se pehle de diye toh theek hai nahi toh rozka 10 rupae harzarna dena padta hai.

2) Mangla Devi, aged 46, married, belongs to Almora district in Uttaranchal and she has 3 sons and 1 daughter. Her husband works with her to run the tea-stall and does the entire field work, i.e., to purchase stuff and to distribute and serve tea. Mangla Devi and her husband used to work as domestic help in Delhi and later shifted to the same owner’s house Sector 5, Chandigarh. Soon after reaching Chandigarh, the couple started their tea-stall and since then it has been running successfully. Apart from the natural hardships like rainfall, cold and heat, other hardships the couple encounters are frequent penalties by Municipal Corporation enforcement staff.

She revealed her problems and COVID-19 experiences to the researcher and said:

Corona ke baad toh har garib banda soch vichar mein pad gayahai. Ghar ka pariwaar ka guzara karna kathin ho gaya hai. Maihgaae ne to garib insaan ki kamar hi tor di hai....kamaae kam hai kharche jeyada. Corona se

pehle toh 600-700 rupaye dihari ho jaati thi, par ab toh 250-300 se upar jaati hi nahi. Aap hi bataeye itne mein kya hota hai. ..do waqt ki roti bhi chalani mushkil ho rahi hai. Logon ke paas paisa kham ho gaya hai.... sarkaar garib ke muh ki taraf kab dekhti hai. Sarkaar ki taraf se koi paisa nahi aaya mere khate mein. Inki taraf se toh koi sahara nahi hai... khud kamao khud khao. Sab kuch bhagwaan bharose hai.

3) Suresh, aged 26, married, belongs to Rampur district in Uttar Pradesh. He started his career as a casual labour and after spending 20 years at his native place, he was asked by his friends to work in Chandigarh. Suresh was married by then but looking at a bright future in Chandigarh as compared to his village, he opted to come to Chandigarh, Initially Suresh came alone and worked as a waiter in a tent house. He used to barely make Rs. 2000-2500 in a month and soon started looking for better avenues. He learnt how to make food on tandoor within 6 months from one of his friends and then started his own business. As per Suresh this is a very tough job and he had to get up every morning at 4 a.m. to start for his days' work. He has to go to local vegetables market to purchase the raw material, then purchase wood and coal, the primary ingredients in tandoor. Apart from natural hardships like rainfall, extreme cold and heat, his other problem areas are frequent raids by Municipal Corporation, occasional police harassment and sometimes rowdy behavior of customers.

Suresh (26) revealed his problems and COVID-19 experiences to the researcher and said: Corona mein sarkaar samajik doori banaye ko kehti rahi....par unse koi pucho hamara toh kaam hi logon se juda hua hai. Paise waale log samajik doori kar sakte hai aur apne gharon mein baith sakte hai.... par jis bande ne roz kamana hai aur roz khana hai who kaise ghar baith jaaye. Biwi bachon ko bhukha toh nahi rakha jaata. Jitna paisa bacha kar rakha tha who bhi kharach ho gaya corona mein. Meri biwi ko bade saalon se heart ki problem hai ...uska private doctor ke paas ilaaz

chal raha hai....fees itni hai ki jaane se pehle do baar sochna padta hai... lockdown mein saare sarkari hospital band ho gaye the...mazboori mein private ilaaz karwana pada.

4) Ram Mohan, aged 45, married, migrated to Chandigarh 20 years ago. First of all, he got a job in an office of Sector 22, Chandigarh and worked there for 2 years and used to earn Rs. 2000 per month. Then he left that job and started working in nickel factory in Industrial Area of Chandigarh. He did that work for 3 years and then started selling fruit juice as a vendor. He started selling juice near Bajwara Market in Sector 22 of Chandigarh and stayed in the premises of PWD office of Sector 22, Chandigarh. But Ram Mohan left Sector 22, Chandigarh because there were many juice sellers in that area and earning was less and then he shifted to Sector 41 market. He narrated that sometimes police officials drink juice without paying him anything. Also there is lot of harassment by Municipal Corporation enforcement wing.

Ram Mohan (41) revealed his problems and COVID-19 experiences to the researcher and said:

Itne saal maine apne guzaar diye is shehar mein.... Mere ghar ke bahut saare rishtedaar bhi kaam ke chakar mein aaye par kisne socha tha ki corona bhi aayega aur sabhko rula dega. Pehle banda befiqra ho kar kamata tha aur jo kuch bhi bachta tha wo apne biwi bachon ko bhej deta tha....par ab toh ek hi waqt sabzi bana lete hai aur usi se guzara chalana padta hai. Mein toh kache makaan mein rehta hun maloya nursery mein.... Mere kamre mein 4 bande aur rehte hai.... Akela karma lene ki himmat nahi hai mujh mein... akele kiraya de sakun itni kamaee hi nahi corona ke baad. Lockdown mein kamre ke andar hi baithna pada. Bahar toh police dande maarti thi. Udhar gaon mein maa, biwi aur bachon ko paise ki zarrorat padti thi...jo kuch bhi tha wo sabh roti paani mein lag gaya...biwi ne toh Rs. 50,000 karza bhi liya. Ab mujhe din raat mehnat karke dena pada. Raaton ki neend haraam ho gayi. Kis paas apna dukhra

gayen sab ka bura haal hai.

5) Bhimsen, a bachelor of 20 years of age hails from Aligarh district of U.P. As per him his father owns about 10 bighas of land in his native village. After finishing his middle school, Bhimsen was invited by one of his cousins to spend a few days in Chandigarh. After coming here Bhimsen decided to do something here only and thus left his studies. Since then, Bhimsen comes to Chandigarh every year for about 3-4 months, stays in Maloya in a shared room and sells sugar candy. His father is a farmer and mother works as daily wager in local village school He has 2 young brothers and an elder sister who is married. His younger siblings are studying and according to him, the big city dreams lured him to come to Chandigarh and now it has become a sort of habit to spend 3-4 months every year in Chandigarh.

Bhimsen (20) revealed his problems and COVID-19 experiences to the researcher and said: Candy bechne se pehle meine che mahine Chandigarh ki sadakon par rickshaw bhi chalaya... uske baad meine yeh kaam shurukiya... corona ke baad bahut mandi cha gayee hai...logon ne apne kharche ghata diye hai. School band ho gaye the.... Hamara toh kaam bachon ke saath jura hua hai...bache school nahi jaayenge toh hum kya kamainge. Jaise hamare paas kammae kumhai log bhi isi duwidha mein fasain hue hai. Petrol, gas, diesel, ration, cylinder har cheez ko aag lagi hui hai. Corona ne garib ko bahut peeche kar diyahai... corona mein hamare paas bahut baar roti hoti thi kai baar subzi nahi.... Doodh ki shakal nahi dekhi kayi mahine....langar mein kha kar guzara kiya.

#### **Street vendors expectations from the government:**

- Loans should have options of daily repayment by automatic deduction from banks
- Loans should be given at a low rate of interest so that repaying will be easy

- monetary loans for children's education
- better loan schemes with a small amount of EMI can be repaid for a long time

### **Suggestions given by Street vendors:**

- Make it easy to apply for application in schemes.
- Given the rising cost of living government provide for support for meeting daily needs.
- Create awareness about schemes, so that it is easy for people to apply for the schemes.
- Vending areas need to be provided for safe and peaceful working.
- Street vending licenses need to be provided for a wave of peace and non-disturbing in the business.
- Help people living in slums. 1) use methods to spread awareness. 2) make it an easy process to apply for any schemes and loans. 3) time management, government process is very time-consuming.

### **Discussion**

The existences of informal workers are not only about a section of poor people trying to earn for their livelihood in the informal sector, but also about the provision of valuable services to the urban population. Thus, it is the duty of the State to protect the right of this segment of the population to earn for their livelihood since Article 39 (a) of the Indian Constitution states that "any citizens, men and women, have equal right to an adequate means of livelihood" (NPUSV, 2006, p. 10). However, the ground reality is that they are largely considered as unlawful entities and eyesores and the absence of legalization is the main problem of this occupation. Hence, their job becomes uncertain and insecure. In addition to work and income security, the street vendors face other forms of vulnerability at workplaces.

Street vending is usually related with low and insecure income. As far as professional hardships are concerned, insecurity of space is the main problem of roadside vendors in selling their stuff. Their work is full of insecurity and uncertainty, since they work at the roadside and accidents may occur at any time. Even in this study, it was found that they work for very long hours (averaging 8-10 hours daily) under the extremes of climate, amidst high levels of air and noise pollution, which result in several forms of ailments like hypertension, hyperacidity, or even diseases related to the heart and kidney. Often, many of these diseases are related to stress due to uncertainty of income. Hence, it is seen that this street vending work lacks any security and safety conditions that result in increased vulnerability among them.

The risk of infection for street vendors has been increased by Covid-19 and the lack of awareness about the Covid-19 infection makes the situation of workers even more vulnerable. During the current time of COVID-19, the risk of life for the street vendors is higher than before. The deadly Corona viruses taking the lives of thousands of people, on the other hand, the workers continue doing their jobs as there is no replacement for them. They enter into deathbeds only to earn a living but in return take along with them hazardous health problems to the home. India has a mixed healthcare system with both public and private sectors playing vital roles. The current capacity of hospital accommodation is saturated with the influx of COVID-19 patients, leaving no space and healthcare facilities for routine care. The health hazards faced by them call for an emergency in healthcare centers but because of the COVID-19 pandemic, their chances of getting admitted and treated seem negligible making them more vulnerable yet prone to death as the cost related to COVID-19 treatment is much higher than their daily wages. The inability to implement laws and the prevalence of seasonal employment without permanent employment or decent wages has led to the amplification of their marginalization in India. They work from very early hours of



morning until sunset without any protective gear. It has rendered this particular section of the society extremely vulnerable in the times of COVID-19. Lack of education resulting in a lack of awareness is one of the key reasons for their crisis. Therefore, ways and means to educate them and their children should and must form the pinnacle of the ideology of the government and civil society. Proper education can result in their proper emancipation.

### **Policy Interventions**

Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 is an Act of the Parliament of India enacted to regulate street vendors in public areas and protect their rights. It was introduced in the Lok Sabha (Lower House of the Parliament of India) on September 6, 2012 by then Union Minister of Housing and Urban Poverty Alleviation, Kumari Selja. The Bill was passed in the Lok Sabha on 6 September 2013 and by the Rajya Sabha (upper house) on 19 February 2014. The Bill received the assent of the President of India on 4 March 2014. The Act came into force from 1 May 2014.

Over the years the street vendors have organized themselves into trade unions and associations. Numerous NGO's have started working for them. The National Association of Street Vendors of India (NASVI), based in Delhi, is a federation of 715 street vendor organizations, trade unions and non-governmental organizations (NGOs).

### **PM SVANIDHI - Prime minister's street vendors atmanirbhar Nidhi**

This central scheme is fully funded by the Ministry of Housing and Urban Affairs. Its objectives include facilitating working capital loans up to Rs 10,000 with a 7% interest subsidy; Rewarding digital transactions through cash back amounts of Rs 50-100. The Svanidhi se samrudhi component of the scheme aims to provide social security cushion to street vendors and their families. Through Svanidhi se samrudhi, eligible beneficiaries of the

vendor's family members are linked to other central sector schemes for pension, insurance, PDS, etc. The scheme helps identify and record street vendors at the block level. Marketing assistance is also provided by connecting them to platform food aggregators Zomato and Swiggy.

### **Conclusion**

The activities of street vendors in India characterize the flow of its urban life. Their contribution to economic transactions cannot be taken lightly even if their operation is within the expanding boundaries of the informal sector. Lack of quality education, a dearth of jobs and relative ease of entering this profession make it a common choice for a large proportion of the Indian populace. Yet, such a choice does not guarantee acceptance and inclusion in the realm of urban development. Over the years, the civil society has echoed the need for regulations that protect the rights and the livelihood of street vendors which eventually led to the enactment of state policies like the Street Vendors Act, 2014. However, an overview of the various policies and legislation in the past two decades have revealed a stark difference in the holistic objective and its disparate implementation of the same. Minimizing this gap is the only resort that the government and the civil society can take to ensure that the rights of the street vendors are never trifled with. Accountability on part of the government is the first step in that regard. The arrival of COVID-19 exacerbated the problems which the street vendors were facing. With the nationwide lockdown in place, their sales have plummeted. Most of these street vendors now have a hand-to-mouth existence and don't have enough savings for their survival without practicing their livelihoods. The PM SVANidhi scheme is an attempt to counter such uncertain times. The credit-based scheme aims to revive their livelihoods. But, given the face pace of infections and no medical safeguard in place, the street vendors are forced to assume normalcy and earn their bread by putting their health at risk. In normalcy or during a pandemic, it is vital for the beneficiaries to be aware of the

safeguards they are provided by the state. However, there is a growing need for the intricacies of laws and schemes to be simplified for its beneficiaries so that they can have optimal access to the incentives that such public policies entail.

### References:

1. Balbuena, P., & Skinner, C. “For World’s Street Vendors, Life May Never be the Same after COVID-19” (2020, June 7). <https://www.wiego.org/blog/worlds-street-vendors-life-may-never-be-same-after-covid-19> .assessed on 15/7/2023.
2. Bandyopadhyay, R. “A Critique of the National Policy on Urban Street Vendors in India, 2009”(2020, February 24). <https://casi.sas.upenn.edu/iit/bandyopadhyay>. assessed on November 3, 2022.
3. Centre for Civil Society. (n.d.).“Street Vendors Act, 2014: Matrix of State Rules” [http://imgcdn.ccs.in/svm\\_matrix/SVA\\_Rules\\_Matrix.html](http://imgcdn.ccs.in/svm_matrix/SVA_Rules_Matrix.html). assessed on 31/12/ 2022.
4. Correspondent, S. “COVID-19 leaves street vendors in distress” June 21, 2020. <https://www.thehindu.com/news/cities/chennai/covid-19-leaves-street-vendors-in-distress/article31884289.ece>.assessed on 7/11/2022 .
5. Ministry of Housing and Urban Affairs. “PM Street Vendor’s Atma Nirbhar Nidhi (PM SVANidhi)” June,2020.
6. National Association of Street Vendors of India. (n.d.-b).“Overview of Street Vendors – A Little History | National Association of Street Vendors of India – NASVI”.<http://nasvinet.org/overview-of-street-vendors-a-little-history>.assessed 1/12/2022.
7. UNIVERSITY OF OXFORD. “COVID-19: Government Response Stringency Index. Our World in Data 2020.<https://ourworldindata.org/grapher/covid-stringency-index?tab=chart&time=earliest..latest&country=%7EIND>.assessed on 12/1/2023.
8. Mohapatra, Kamala Kanta. (2012).Women Workers in Informal Sector in India: Understanding the Occupational Vulnerability, Economic and Political Weekly, 2 (21).
9. Mint e-paper, Thursday, 24 February, 2022.
10. Nitya Maniktala, T. J. (2020). State of street vendors in India: Pre and post

COVID-19 Analysis. International journal of policy sciences and law , 542-560.

11. National Association of Street Vendors of India. “Annual Report 2018-19:National Association of Street Vendors of India” 2019. <http://nasvinet.org/wp-content/uploads/2019/09/Annual-Report-English.pdf>. assessed on 5/4/2023.
12. “National Policy on Urban Street Vendors” 2006, May. <http://dcmsme.gov.in/Street%20Vendors%20policy.pdf>.assessed on 17/5/2023.
13. Online, F. E. “Modi government’s answer to migrant workers, street vendors crisis too little, too late; this issue remains” The Financial Express.(2020, May 14). <https://www.financialexpress.com/economy/modi-govts-answer-to-migrant-workers-street-vendors-crisis-too-little-too-late-this-issue-remains-amid-economic-relief-package-2-0/1959318/>. assessed on 6/6/2023.
14. Sharit K. Bhowmik, D. S. (2011). Financial accessibility of the street vendors in India: Cases of inclusion and exclusion . Mumbai : School of management and labour studies .

## **Mid-Day Meal Scheme-Satisfaction and Health Improvements among Rural Students**

RAMA GOYAL

### **Abstract**

*The present research paper is an attempt to describes Indian government scheme that is, Mid-Day-Meal that aims at fulfilling the daily nutrition requirements of children in government schools. It is rightly said that Children of a country are the assets to nation and bearing the burden of development falls on their shoulder for taking the country forward on the path of success. In the words of late Prime Minister Jawaharlal Nehru, "If we neglect our children and do not look after them today, we will be creating many more difficult problems for ourselves in the near future". Thus, the responsibility of fulfilling the daily nutritional requirement of children lies on the nation in case of parents is unable to carry out their responsibility due to any reason. The major reason of poor nutrition among children is poverty and families living under the poverty line may not be able to fulfil nutritional requirements of their children and thus fall short to furnish their basic educational requirement as well. Beside of all the odds, if the children manage to get themselves enrolled in the schools, the acute poverty and hunger do not allow them to pursue their studies. Hence, the researcher took up the study to find out the ground reality of mid-day-meal scheme. The researcher selected district Hisar of State Haryana, from which two villages namely Shahpur and Ludas from Hisar-II were purposively selected for the present study because Hisar-II is less developed and maximum population belongs to lower strata and labour class. An equal number of students were selected through simple random sampling technique from two schools in order to draw generalisation. The findings of the research study highlighted that the quantity of the meals served under this scheme, was not sufficient to fulfil the needs of the students as many students did not find the meals sufficient to fill their appetite and were less satisfied with the quality of food.*

**Keywords:** Mid -day meal, children, poverty, nutrition, quality of food.

## Introduction

To combat the problem of undernourishment, the National Programme of Mid-Day Meal in schools was started in 1995 and is the largest school feeding program in the world. It aims at supply of one supplementary meal as the home diets of enrolled children (poor children belonging to disadvantaged sections of the society) lacks nutrition as prescribed by Ministry of home affairs under nutrition norms per child/day. The aim of providing mid-day meal in government schools is not only to perk up the nutritional status of children but also to get poor children enrolled to nearby school and maintain their interest in learning as it is hard for a malnourished child to concentrate on studies and therefore, hampers the process of his/her learning. It is true that a child with an empty stomach will not be able to concentrate on studies and hence will devote most of his/her attention to food. Keeping the objectives of Mid-day meal scheme in mind, it becomes essential to know whether or not the program is being implemented properly and achieving the goal of improving the nutritional status of school children.

It was highlighted by many researchers that the benefits of various government schemes are enjoyed by the upper classes and the lower classes are still waiting to avail the benefits. Govinda and Bandyopadhyay, 2010; PROBE 1999; Sedwal and Kamat, 2008 have disclosed through their research studies that benefits of social development are disseminated according to inequality of status in Indian social structure which implies that those who are in relatively higher status are benefitted more of social development and as a result, there exists a huge gap, in terms of educational and nutritional development among different social groups and this gap is widening by each passing day. One of the foremost reasons for this developmental gap is *“resilience of social structures”*. The term, Social structure refers to the hierarchical division of society based on various aspects such as caste, class and gender of the individuals in Indian society. “Resilience of social structure” refers to the continuation of social

inequalities inherited by individuals through the hierarchical division of society. Therefore, programmes for social development carried out by the government agencies end up in benefiting advantaged sections of society, and hence, continue inequality. The results of the social inequality are poverty, high levels of undernourishment and low levels of education among socially excluded/backward group. The situation of the children amid social inequalities in India is even alarming and has aptly been described as a '*silent emergency*'. The worst indicators of child well-being in the whole world are the level of education and health in India. It was reported that nearly half of all Indian children are undernourished, in the terms of weight-for-age or height-for-age criterion (D 'Souza, 1990).

The food norms per child/day is given below which are provided by the Ministry of Human Resource and Development, 2017-2018.

**Table 1.1**  
**Food norms per child per day**

| Sr. No. | Ingredients                | Quantity/day           |                                  |
|---------|----------------------------|------------------------|----------------------------------|
|         |                            | Primary<br>(Class I-V) | Upper Primary<br>(Class VI-VIII) |
| 1.      | Food grains                | 100 grams              | 150 grams                        |
| 2.      | Pulses                     | 20 grams               | 30 grams                         |
| 3.      | Vegetables<br>(leafy also) | 50 grams               | 75 grams                         |
| 4.      | Oil& fat                   | 5 grams                | 7.5 grams                        |
| 5.      | Salt & condiments          | As per need            | As per need                      |

*Source:* Ministry of Human Resource and Development (2017-18).

The Food, Nutritional and Calorific norms under Mid-Day Meal Scheme is mentioned below:

**Table 1.2**  
**Nutrition norms per child per day**

| <b>Sr. No.</b> | <b>Items</b>    | <b>Primary</b>  | <b>Upper primary</b> |
|----------------|-----------------|-----------------|----------------------|
| <b>1.</b>      | <b>Calories</b> | <b>450</b>      | <b>700</b>           |
| <b>2.</b>      | <b>Protein</b>  | <b>12 grams</b> | <b>20 grams</b>      |

*Source:* Ministry of Human Resource and Development (2017-18).

It is imperative to check whether or not children in school are getting nutritional food as per norms decided by the Human Resource and Development (2017-18).

Therefore, the present research study an attempt to know whether or not the mid-day meal program is able to achieve its objective of eradication nutritional deficit and to improve the nutritional status of school children by providing minimum calories needs and sufficient nutrients in order to make students healthy who are able to focus on their studies.

### **Review of Literature**

A comprehensive review of literature formulates a base line for any research. In the words of Best, “ *A familiarity with the literature in any problem area helps the researcher to discover what is already known, what others have attempt to find out , what methods have been promising and disappointing and what problems remain to be solved*”. The researcher has reviewed the previous literature in the concerned field from journals, research studies, articles, thesis and proposal.

The good quality food increased the output of students within the school and regularity of attendance was found in school. The enrolment of children in school showed marked signs of progress. The Scheme has played a very important role in reducing the drop-out rate, largely girls and children from poor families. (National Institute of Public Cooperation



and Child Development, Indore, Madhya Pradesh, 2007; Gupta, 2009; Modi, 2010). Mid-day meals have a lot of to add to the overall well-being and way forward for Indian young minds. Though, Mid-day meal programmes have several shortcomings and the quality of food is still to be worked upon; however, the way to look is forward and not backward. With sufficient resources and superiority safeguards, mid-day meals will definitely play a chief role in refining school attendance, and promoting social equity, eradicating room hunger. Further, suggestion was created too like safe potable water to be provided and also the proper hygienic kitchen as per the orders of Supreme Court (Jean dreze and Aparajita Goyal, 2003; Jyotsna Jain and Mihir Shah, 2005; Pratichi trust of Prof. Amartya Kumar Sen. ,2010).

Abig majority of teachers disclosed that Mid-Day Meal Scheme is helping to accomplish the goal of universalization of primary education in Himachal Pradesh. Further, it was also revealed that no progress was noticed in students with respect to their academic achievement after the introduction of the Mid-Day Meal Scheme in school (Gupta, 2006). Teachers were left exhausted after cooking and distributing the meals to students and moreover teaching time is consumed in the preparation and maintenance of accounts and buying of food grains and other ingredients. Teachers reported wastage of teaching time as a result of implementation of Mid-Day Meal Scheme in schools. There was lack of interest among teachers for Mid-day meal scheme (Gupta, 2006; Anima Rani Si and Naresh Kumar Sharma, 2008; Kumar 2008; Gupta, 2009).

Mid-day meal program controlled the percentage of stunting to a little extent among Mid-day meal receiving adolescents, but they were still susceptible to energy, protein, and micronutrient deficiencies and possible reason could be less amount of Mid-Day Meal, poor quality of food items in Mid-Day Meal (Patel et al., 2016; Alim et al., 2012).

### **Objectives of the Study**

The present study was undertaken with the focus on the following objectives:

- To find out the satisfaction level of students for Mid-Day Meal scheme
- To assess the quantity and quality of Mid-Day Meal provided in the selected area
- To check the effects of Mid-Day Meal (MDM) scheme in the improvement of health of the rural children

### **Research Methodology**

#### **Sample**

The study was carried out in two villages of Hisar district of Haryana State. These villages were purposively chosen from a list of villages which are headed by Gram Panchayat and have the Mid-Day Meal Scheme in their respective schools.

A total of 80 students were selected through random sampling technique as samples by taking 20 students from each class making it 40 from each school, questioned on the programme of Mid-Day Meal. As the main objective of the study was to find out the nutritional intake of the students through Mid-Day Meal Scheme, an equal number of students were selected from selected two schools in order to facilitate drawing generalisation.

#### **Tools and Techniques of Data Collection**

Primary and Secondary (census handbook, village directory) data was collected by the researcher for the present study. The data was collected by using Interview Schedule. Interview schedule was framed keeping in mind the respondent's level of understanding. The questions in the

interview schedule consisted open ended and close ended questions. Further questions were asked on the basis of simple yes or no choices and complemented with various choice answers.



**Figure 1**  
**Sample Distribution**

Collected raw data were processed in simple arithmetical calculation. The processed data was represented in the form of simple frequency tables with percentage keeping in mind the objectives of the study. The tables were interpreted with respect to the overall information and observation received from the respondents, fields and documents and conclusions were drawn.

## **Results and Discussions**

The results are tabulated and discussed below;

### **Objective-1**

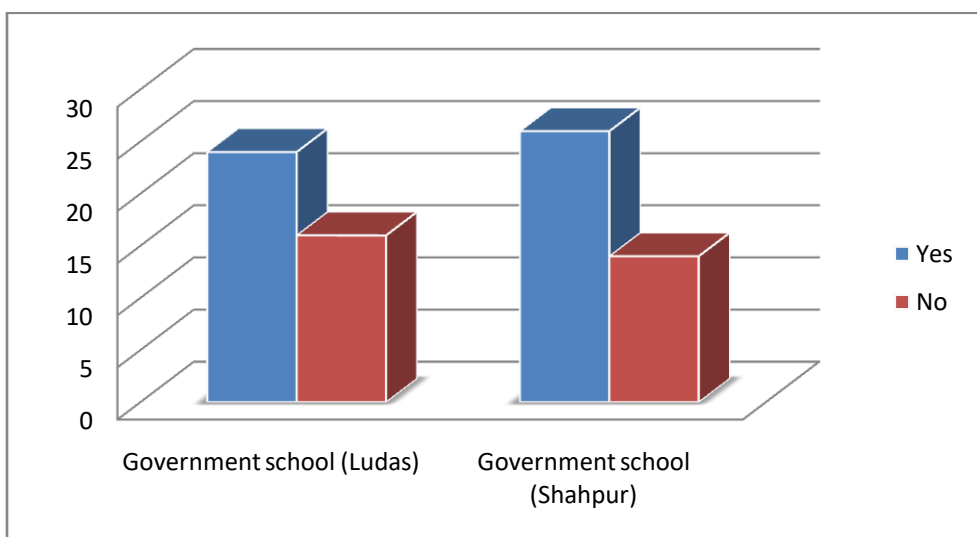
#### **To see the satisfaction level of students for Mid-Day Meal scheme**

The satisfaction from the meal served under the **Mid-day-Meal** scheme is most vital aspect as it determines the taste of students towards the meal, does the portion of meal served to the students gratify their appetite.

**Table 1.3**  
**Distribution of the respondents on the basis of their satisfaction from cooked meal**

| Sr. No. | Satisfaction from cooked meal | Government school (Ludas) | Government school (Shahpur) | Total              |
|---------|-------------------------------|---------------------------|-----------------------------|--------------------|
| 1.      | Yes                           | 24 (60.00)                | 26 (65.00)                  | 50 (62.50)         |
| 2.      | No                            | 16 (40.00)                | 14 (35.00)                  | 30 (37.50)         |
|         | <b>Total</b>                  | <b>40 (100.00)</b>        | <b>40 (100.00)</b>          | <b>80 (100.00)</b> |

\*Figures in bracket represent percentages.



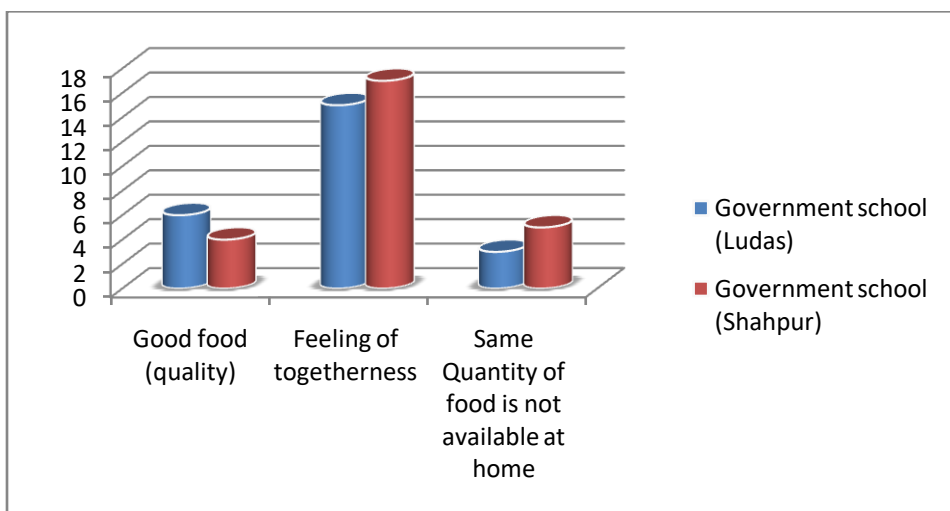
**Figure 2**  
**Distribution of the respondents on the basis of their satisfaction from cooked meal**

Table 1.3 and Figure 2 show that out of the sampled respondents, which is, 80 in both the schools majority of the respondents 50 (62.50%) were found to be satisfied with the cooked meal followed by 30 students (37.50%) who were not satisfied with the cooked meal from both the schools.

**Table 1.3.1**  
**Distribution of the respondents on the basis of reasons of being satisfied from the cooked meal**

| Sr. No. | Responses for satisfaction                     | Government school (Ludas) | Government school (Shahpur) | Total              |
|---------|--|---------------------------|-----------------------------|--------------------|
| 1.      | Good food (quality)                            | 6 (25.00)                 | 4 (15.38)                   | 10 (20.00)         |
| 2.      | Feeling of togetherness                        | 15 (62.50)                | 17 (65.38)                  | 32 (64.00)         |
| 3.      | Same Quantity of food is not available at home | 3 (12.50)                 | 5 (19.23)                   | 8 (16.00)          |
|         | <b>Total</b>                                   | <b>24 (100.00)</b>        | <b>26 (100.00)</b>          | <b>50 (100.00)</b> |

\*Figures in bracket represent percentages.



**Figure 3**

**Distribution of the respondents on the basis of reasons of being satisfied from the cooked meal**

Table 1.3.1 and Figure 3 reveal that 15 respondents (62.50%) from Ludas school and 17 (65.38%) respondents from Shahpur school said they had feeling of togetherness while eating the meal, followed by 6 (25.00%) respondents from Ludas school and 4 (15.38%) respondents from Shahpur

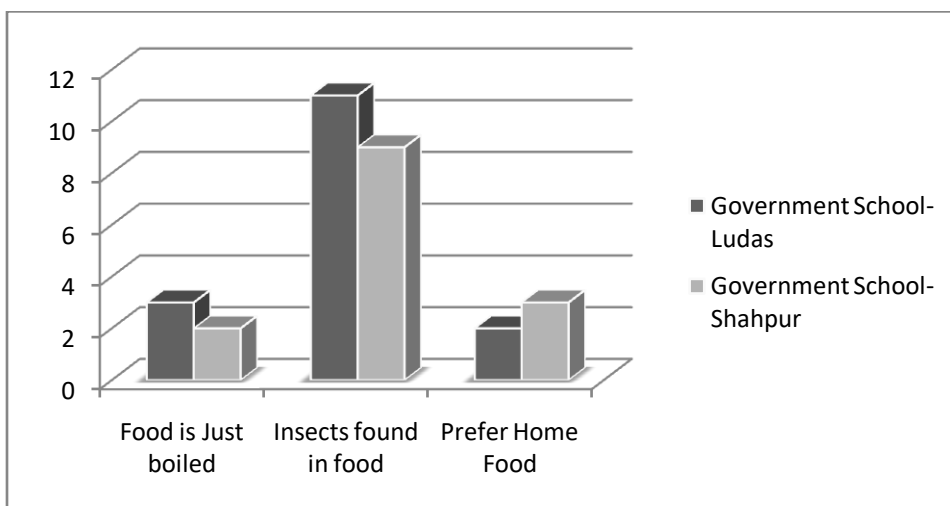
school who liked the food quality and only 3 (12.50%) respondents Ludas school and 5 (19.23%) respondents from Shahpur school said the same quantity of food is not available at home.

**Table 1.3.2**

**Distribution of respondents on the basis of reasons for not being satisfied with the cooked meal**

| Sr. No. | Reasons for not being satisfied      | Government school (Ludas) | Government school (Shahpur) | Total              |
|---------|--------------------------------------|---------------------------|-----------------------------|--------------------|
| 1.      | Food is Just boiled                  | 3 (18.75)                 | 2 (14.28)                   | 5 (16.66)          |
| 2.      | Insects found in food (poor quality) | 11 (68.75)                | 9 (64.28)                   | 20 (66.66)         |
| 3.      | Prefer Home food                     | 2 (12.50)                 | 3 (21.42)                   | 5 (16.66)          |
|         | <b>Total</b>                         | <b>16 (100.00)</b>        | <b>14 (100.00)</b>          | <b>30 (100.00)</b> |

\*Figures in bracket represent percentages.



**Figure 4**

**Distribution of respondents on the basis of reasons for not being satisfied with the cooked meal**

Table 1.3.2 and Figure 4 show 16 (100.00%) responses of no from Ludas school, most of the respondents, that is, 11 (68.75%) and in Shahpur school, out of total 14 (100.00%) responses of no, most of them 9 (64.28%) did not like the quality of food as there were insects in their meal while eating, 3 (18.75%) respondents from Ludas school and 2 (12.50%) respondents from Shahpur school said food is just boiled they do not add vegetables and salt whereas from Ludas school, 2 (12.50%) and in Shahpur school 3 (21.42%) respondents liked home food more as they get good quality of food.

*“THODA MILTA HAI LEKIN SAAF KHAANA HOTA HAI KEEDAY NAHI HOTEY”*

*“GHAR KA KHAANA SWADH HOTA HAI”*

### **Matrix Summing up Objective-1**

| <b>Table No.</b> | <b>Dimensions</b>                                    | <b>Results</b>   |
|------------------|--|--|
| 1.3              | Satisfaction level of Students from cooked meal      | More than 50 percent respondents were satisfied with the mid-day-meal served in the school |
| 1.3.1            | Reasons of being satisfied from the cooked meal      | Feeling of togetherness, quality and quantity of food                                      |
| 1.3.2            | Reasons for not being satisfied with the cooked meal | Low quality of food and not properly cooked  |

### **Objective-2**

**To assess the quantity and quality of Mid-Day Meal provided in the selected area**

#### **Quality and Quantity of Meal**

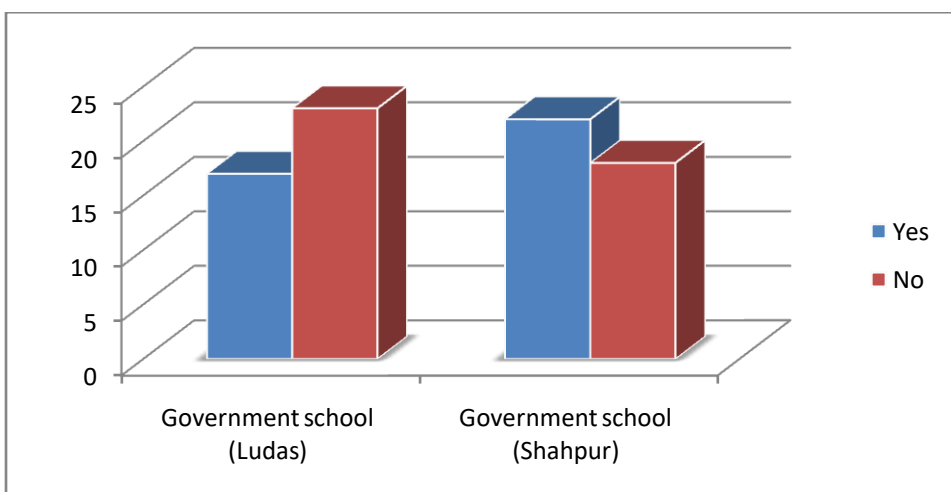
It is the duty of the Head and Mid-Day-Meal in-charge of the school to make sure the quality and quantity of food and he/she has to taste and check the Mid-Day Meal himself/herself before serving same to the

students. There is provision to maintain a tasting roster register in every school. Teachers and parents are also required to sign on this register. Beneficiaries' opinions were required on the quality and quantity of mid-day-meal and to see whether or not they were satisfied with the meals served.

**Table 1.4**  
**Distribution of the respondents on the basis of whether they are satisfied with quality and quantity of meal**

| Sr. No. | Quality and Quantity | Government school (Ludas) | Government school (Shahpur) | Total              |
|---------|----------------------|---------------------------|-----------------------------|--------------------|
| 1.      | Yes                  | 17 (42.50)                | 22 (55.00)                  | 39 (48.75)         |
| 2.      | No                   | 23 (57.50)                | 18 (45.00)                  | 41 (51.25)         |
|         | <b>Total</b>         | <b>40 (100.00)</b>        | <b>40 (100.00)</b>          | <b>80 (100.00)</b> |

\*Figures in bracket represent percentages.



**Figure 5**  
**Distribution of the respondents on the basis of whether they are satisfied with quality and quantity of meal**



It can be observed from table 1.4 and Figure 5 that in Ludas 23 (57.50%), that is, majority of students disclosed that they are not satisfied owing to average and poor quality of food and moreover, when they ask for more food and same is not provided as quantity of food is less. A few number of respondents i.e. 17 (42.50%) respondents liked the meal being served. On the other hand in Shahpur school, a little more than half 22 (55.00%) respondents were found to be satisfied with the quality and quantity of food being served to them whereas 18 (45.00%) respondents said that they were not satisfied. It is clearly seen from the above mentioned table, approximately fifty percent of respondents i.e. 41 (51.25%) from both the schools were not satisfied with the quantity and quality of meal provided to them in school.

### **Weekly Menu and Preference of Meals**

The schools are required to serve cooked food as per menu decided by the government. The menu is not decided on the basis of days of the week. The researcher found that a total number of 13 recipes are served to the students which included rice based 6 recipes and 7 are wheat based recipes. All the school heads/principals and Mid-Day-Meal in-charge are directed to prepare one of the recipes from these and are required not to repeat any recipe in a week. Meals served to the students included locally available ingredients like vegetables and pulses. Hence, it is imperative to know the students' preference of meals.

**Table 1.4.1**

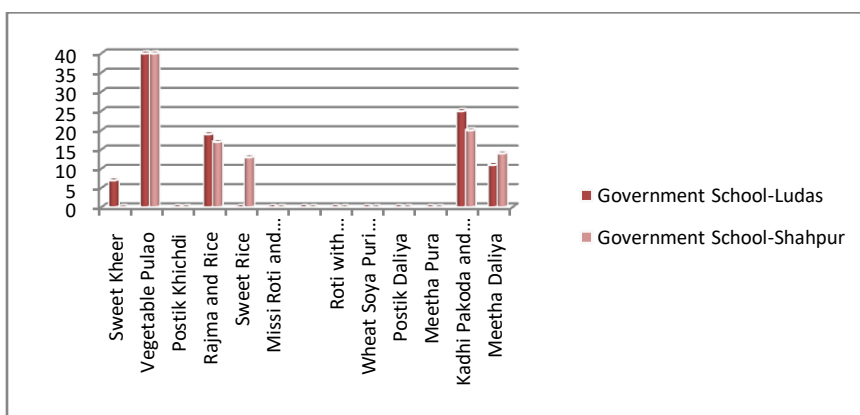
**Distribution of respondents on the basis of the preference of meal**

| <b>Sr. No.</b> | <b>Meal Provided</b>          | <b>Government school (Ludas)</b> | <b>Government school (Shahpur)</b> | <b>Total</b>      |
|----------------|-------------------------------|----------------------------------|------------------------------------|-------------------|
| <b>1.</b>      | <b>Sweet <i>Kheer</i></b>     | <b>7 (6.86)</b>                  | <b>0 (0.00)</b>                    | <b>7 (3.39)</b>   |
| <b>2.</b>      | <b>Vegetable <i>Pulao</i></b> | <b>40 (39.21)</b>                | <b>40 (38.46)</b>                  | <b>80 (38.83)</b> |
| <b>3.</b>      | <b><i>PostikKhichdi</i></b>   | <b>0 (0.00)</b>                  | <b>0 (0.00)</b>                    | <b>0 (0.00)</b>   |
| <b>4.</b>      | <b><i>Rajma and Rice</i></b>  | <b>19 (18.62)</b>                | <b>17(16.34)</b>                   | <b>34 (16.50)</b> |

|     |   |                      |                      |                      |
|-----|---|----------------------|----------------------|----------------------|
| 5.  | <b><i>KadhiPakoda and Rice</i></b>              | <b>25 (24.50)</b>    | <b>20 (19.23)</b>    | <b>45 (21.84)</b>    |
| 6.  | <b>Sweet Rice</b>                               | <b>0 (0.00)</b>      | <b>13 (12.50)</b>    | <b>14 (13.46)</b>    |
| 7.  | <b><i>Missi Roti and Seasonal Vegetable</i></b> | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      |
| 8.  | <b><i>Halwa with Black Chana</i></b>            | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      |
| 9.  | <b><i>Roti with DaalGhiya/Kaddu</i></b>         | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      |
| 10. | <b><i>MeethaDaliya</i></b>                      | <b>11 (10.78)</b>    | <b>14 (13.46)</b>    | <b>26 (12.62)</b>    |
| 11. | <b>Wheat Soya Puri with Green Vegetable</b>     | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      |
| 12. | <b><i>PostikDaliya</i></b>                      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      |
| 13. | <b><i>MeethaPura</i></b>                        | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      | <b>0 (0.00)</b>      |
|     | <b>Total</b>                                    | <b>102* (100.00)</b> | <b>104* (100.00)</b> | <b>206* (100.00)</b> |

\*Figures in bracket represent percentages.

\*Multiple responses



**Figure 6**

**Distribution of respondents on the basis of the preference of meal**

According to table 1.4.1 and Figure 6, in both the schools, a large percentage, 40 (39.21%) in Ludas and 40 (38.46%) Shahpur students' preferred meal was Vegetable *Pulao* followed by *Kadhi Pakoda* and rice 25(24.50%) Ludas and 20 (19.23%) Shahpur. Further, the students preferred *Rajma Rice* 19 (18.62%) in Ludas and 17 (16.34%) in Shahpur; 11(10.78%) in Ludas and 14 (13.46%) in Shahpur responded that they prefer *Meetha Daliya*, sweet rice was preferred in Shahpur 13 (12.50%) and same is not served in Ludas. Only 7 (6.86%) in Ludas preferred Sweet *Kheer* while it was not served in Shahpur. It was disclosed by the respondents that *Postik Khichdi*, *Missi Roti* and Seasonal Vegetable, *Halwa* with *Black Chana*, *Roti* with *Daal Ghiya/Kaddu*, *Wheat Soya Puri* with Green Vegetable, *Postik Daliya* and *Meetha Pura* was not served in both the schools.

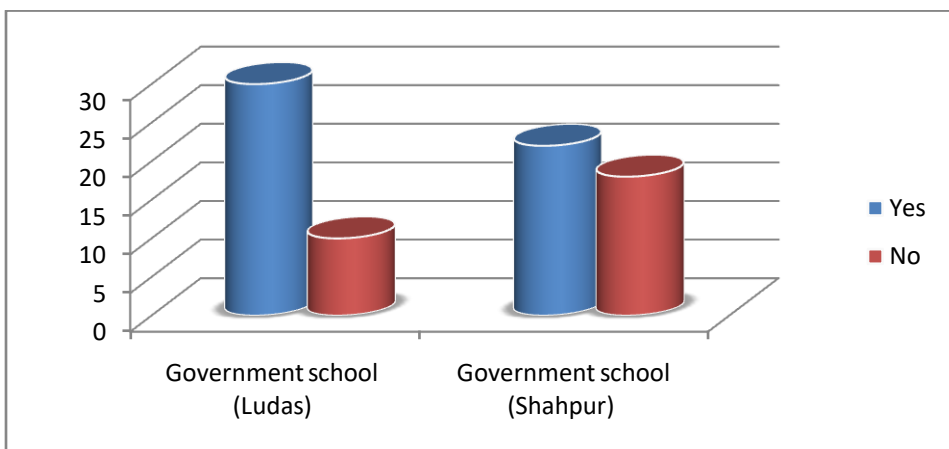
### Menu Remains Same Daily

**Table 1.4.2**

**Distribution of respondents on the basis of whether they get same meal every day**

| Sr. No | Same meal    | Government school (Ludas) | Government school (Shahpur) | Total              |
|--------|--------------|---------------------------|-----------------------------|--------------------|
| 1.     | Yes          | 30 (75.00)                | 22 (55.00)                  | 52 (65.00)         |
| 2.     | No           | 10 (25.00)                | 18 (45.00)                  | 28 (35.00)         |
|        | <b>Total</b> | <b>40 (100.00)</b>        | <b>40 (100.00)</b>          | <b>80 (100.00)</b> |

\*Figures in bracket represent percentages.



**Figure 7**

**Distribution of respondents on the basis of whether they get same meal every day**

Table 1.4.2 and figure 1.3.2 show the opinion about the views on the daily menu for the meal being served in both the schools. Three quarter of the respondents 30 (75.00%) in Ludas and 22 (55.00%) in Shahpur responded that the menu remain the same. They disclosed that three days in a week they get vegetable *Pulao* and in the other three days Sweet Rice and *Khichdi* was served. Only 10 (25.00%) respondents Ludas and 18 (45.00%) in Shahpur mentioned that the menu does not remain the same.

**Matrix Summing Up Objective-2**

| Table No. | Dimension                                      | Results  |
|-----------|--|--|
| 1.4       | Satisfaction with quality and quantity of meal | More than fifty percent respondents from both the schools were not satisfied with the quantity and quality of meal provided to them in school. |

|       |                     |  |
|-------|---------------------|--|
| 1.4.1 | Preference of meal  | In both the schools, most of the students 80 (38.83%) had preference for meal Vegetable <i>Pulao</i> .           |
| 1.4.2 | Same meal every day | From total 80 respondents more than half 52 (65.00%) respondents responded that the menu remains the same daily. |

### Objective-3

To check the effects of Mid-Day Meal (MDM) scheme in the improvement of health of the rural children

#### Hygienic Food

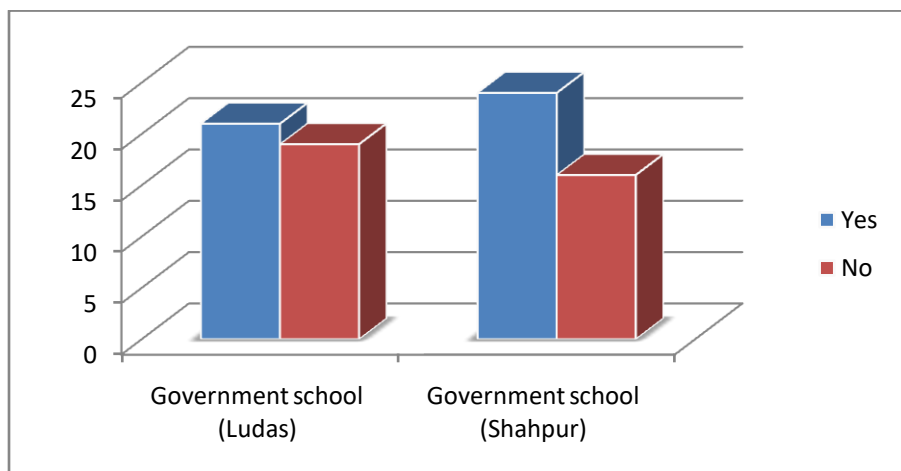
The guidelines on food safety and hygienic conditions for school level kitchen, the states and UTs are required to focus on the hygiene aspects of food preparation, serving, storage, waste disposal as well as for cooks who are involved in cooking and serving of meal to students.

**Table 1.5**

**Distribution of the respondents on the basis of the visibility of insects in the meal**

| Sr. No. | Insects in meal | Government school (Ludas) | Government school (Shahpur) | Total              |
|---------|-----------------|---------------------------|-----------------------------|--------------------|
| 1.      | Yes             | 21 (52.50)                | 24 (60.00)                  | 45 (56.25)         |
| 2.      | No              | 19 (47.50)                | 16 (40.00)                  | 35 (43.75)         |
|         | <b>Total</b>    | <b>40 (100.00)</b>        | <b>40 (100.00)</b>          | <b>80 (100.00)</b> |

\*Figures in bracket represent percentages.

**Table 8**

**Distribution of the respondents on the basis of the visibility of insects in the meal**

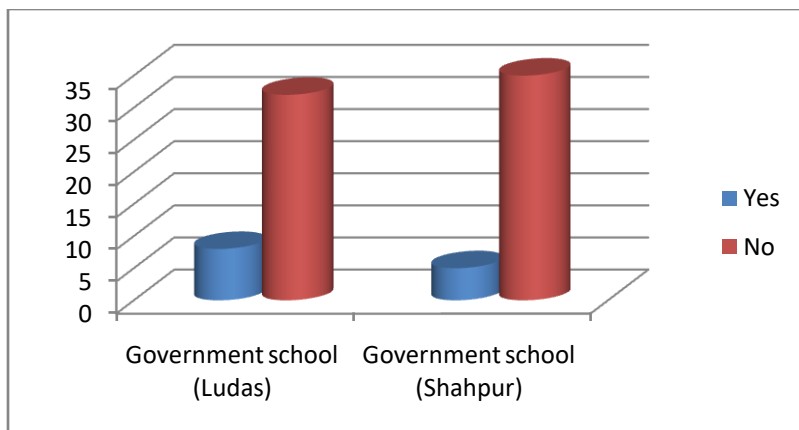
Table 1.5 and Figure 8 show the responses of the respondents on whether or not they have seen insects in their meal. 21 (52.50%) students from Ludas and 24 (60.00%) students from Shahpur responded that they have seen insects in the meal as well as near the meal. Only 19 (47.50%) students from Ludas and 16 (40.00%) students from Shahpur stated that they have not seen any insects in the meal.

**Table 1.5.1**

**Distribution of the respondents on basis of whether they have been sick after eating the school meal**

| Sr. No. | Sick after eating Mid-day meals | Government school (Ludas) | Government school (Shahpur) | Total              |
|---------|---------------------------------|---------------------------|-----------------------------|--------------------|
| 1.      | Yes                             | 8 (20.00)                 | 5 (12.50)                   | 13 (16.25)         |
| 2.      | No                              | 32 (80.00)                | 35 (87.50)                  | 67 (83.75)         |
|         | <b>Total</b>                    | <b>40 (100.00)</b>        | <b>40 (100.00)</b>          | <b>80 (100.00)</b> |

\*Figures in bracket represent percentages.



**Figure 9**

**Distribution of the respondents on basis of whether they have been sick after eating the school meal**

The researchers asked the respondents whether they have been sick after eating the Mid-Day-Meal in school. The table 1.5.1 and Figure 9 mentioned above show that majority of respondents from both the schools 32 (80.00%) Ludas and 35 (87.50%) Shahpur stated that they never felt sick after taking the meal.

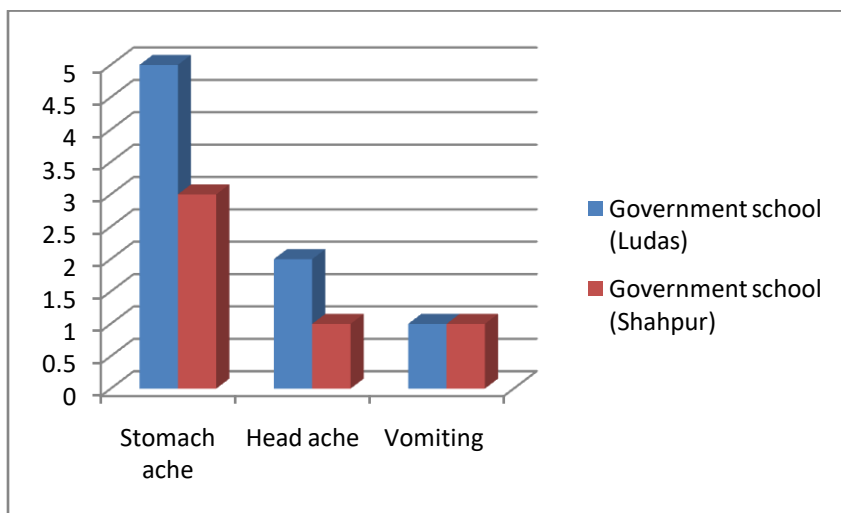
Only 8 (20.00%) students in Ludas and 5 (12.50%) students in Shahpur revealed that they have fallen sick after taking the meal. Therefore, it is clear that most of the respondents 67 (83.75%) have claimed that they have never been sick after eating the meal in both the school.

**Table 1.5.2**

**Distribution of the respondents on the basis of what kind of illness they face after eating the meals**

| S. No. | Illness      | Government school (Ludas) | Government school (Shahpur) | Total             |
|--------|--------------|---------------------------|-----------------------------|-------------------|
| 1.     | Stomach ache | 5 (62.50)                 | 3 (60.00)                   | 8 (61.53)         |
| 2.     | Head ache    | 2 (25.00)                 | 1 (20.00)                   | 3 (23.07)         |
| 3.     | Vomiting     | 1 (12.50)                 | 1 (20.00)                   | 2 (15.38)         |
|        | <b>Total</b> | <b>8 (100.00)</b>         | <b>5 (100.00)</b>           | <b>13(100.00)</b> |

\*Figures in bracket represent percentages.



**Figure 10**

**Distribution of the respondents on the basis of what kind of illness they face after eating the meals**

Table 1.5.2 and figure 1.4.2 show the responses of those respondents who said they have been sick after eating the meal in the school and the types of sickness they had faced after eating the meal. In Ludas 5 (62.50%) students and in Shahpur 3 (60.00%) respondents disclosed that they had stomach ache after taking the meal, as followed by 2 (25.00%) from Ludas and 1 (20.00%) from Shahpur who revealed that they suffered from head ache after eating the meal while 1 (12.50%) from Ludas and 1 (20.00%) from Shahpur disclosed that they had vomiting after taking meal. One respondent from Ludas School suffered from stomach ache and was admitted in hospital (drip) after eating sweet *daliya*. In Shahpur one respondent revealed that after eating vegetable *pulao* he started vomiting due to too much of salt present in the vegetable pulao. It is clear from above table and figure that few students felt sick after eating the mid-day meal in school and also felt unwell from time to time after eating the mid-day meal.



### Matrix Summing Up Objective-3

| Table No. | Dimension   | Results   |
|-----------|---|---|
| 1.5       | Insects in the meal   | More than 50 percent respondents reported that they noticed insects in the mid-day-meal.  |
| 1.5.1     | Number of students who fell sick after eating the school meal | 13 (16.25%) students claimed they fell sick after consuming mid-day-meal in the school.   |
| 1.5.2     | Illness faced by students after eating the meals              | Few students felt sick after eating the mid- day meal in school and also felt unwell from time to time after eating the mid-day meal. |

### Conclusion

In the light of above mentioned results and discussion it can be said that children are the focal point of the scheme and their satisfaction for quantity and quality of the mid-day-meal should be top most priority of this scheme. It is evident from the tables and figures discussed above that the students from both the schools (Ludas and Shahpur) are happy with this scheme but not with the quality and quantity of food provided. They were not even satisfied with the meal provided as their stomach is not completely filled after taking the mid-day-meal in school. The menu remains the same and most of the times vegetable *pulao* is served. Many students i.e., 45 (56.25%) from both schools have seen insects in their meals. Few students fall sick after consuming the mid-day-meal. It can be concluded that this scheme has achieved higher enrolment and less dropout rate but needs to work upon the quantity and quality of food for the overall development of the children.

### References

- Alim, F., Khalil, S., Mirz, I., & Khan, Z. (2012). Impact of Mid- Day Meal Scheme on the Nutritional Status and Academic Achievement of School Children in Aligarh City. *Indian Journal of Science and Research*, 3(2), 85-90.

- Afridi, F. (2005). Mid-day meals in two states: Comparing the Financial and Institutional Organization of the Program. *Economic and Political Weekly*, 40(15), 1528-1534.
- Barai-Jaitly, T. (2002). Health status of children in India--an overview. *Health for the Millions*, 28(4), 14-25.
- Cockerham, W. C. (2007). Social causes of health and disease Polity.
- Dogra, M., & Dogra, B. (2003). Reforming the Mid -Day Meal Programme. Commissioners of the Supreme Court, cwp, 196, 2001.
- Dreze, J. (2004). Democracy and right to food. *Economic and Political Weekly*, 1723-1731.
- Dreze, Jean & Goyal, A. (2003). Future of Mid-Day Meals. *Economic & Political Weekly*, 38(44), 4673-4683.
- Government of India.(1995). Nutrition Support to Education. Report of the Committee on Mid-Day Meals.
- Government of India(2004).Guidelines of revised national programme of nutritional support to primary education. New Delhi: Ministry of Human Resource Development, 1-15.
- Jain, J., & Shah, M. (2005). Antyodaya Anna Yojana and mid-day meals in MP. *Economic and Political Weekly*, 5076-5088.
- Khera, R. (2006). Mid-day meals in primary schools: Achievements and challenges. *Economic and political weekly*, 4742-4750.
- Kumar, Shiva. (2003). "Food Security and Child Rights", UNICEF Publication.
- Kameswari. Education and Nutrition, Yojana, 2003. 42, 36-40.
- Ministry of Human Resource Development, Government of India. Mid-day Meal Programme (2017-18).
- Pollitt, E. (1990). Nutrition and Educational Achievement, Nutrition Education Series, No. 9.UNESCO.
- Thorat, S., & Lee, J. (2005). Caste discrimination and food security programmes. *Economic and Political Weekly*, 4198-4201.
- Viswanathan, B. (2006). Access to nutritious meal programmes: Evidence from 1999-2000
- NSS Data. *Economic and Political weekly*, 497-506.
- Zaidi, A. (2005). Food, for Education. *Frontline*, 26 February–11 March, 22 (5).

**FORM-IV**  
(SEE RULE 8)

1. Registration No. : ISSN 0970-5260
2. Place of Publication : Panjab University,  
Chandigarh (India)
3. Periodicity of its Publication : Biannual
4. Publisher & Editor-in-Chief's Name : Rani Mehta
- Nationality : Indian
- Address : Professor  
: Department of  
Sociology, Panjab  
University, Chandigarh.
5. Printer's Name : Jatinder Moudgil
- Nationality : Indian
- Address : Manager, Panjab  
University, Press
6. Name and addresses of  
Individuals who own the  
Newspapers and partners  
of share holders holding more  
than one per cent of the total  
capital : Panjab University,  
Chandigarh

I, Rani Mehta, hereby declare that the particulars given above are true to the best of my knowledge and belief.

**(Rani Mehta)**  
Signature of Publisher

## DECLARATION OF ORIGINALITY

This is to declare and certify that the research paper entitled, \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ ,

submitted for PANJAB UNIVERSITY RESEARCH JOURNAL (ARTS), written  
by \_\_\_\_\_  
\_\_\_\_\_

is my/our original work. It does not infringe on the rights of others and does not  
contain any libelous or unlawful statements.

This is to further declare and certify that the said paper and, or its part/parts are  
not plagiarized. I/We take full responsibility of originality of this work and shall  
be liable for action, if found guilty at any stage.

Also, I/We declare and certify that the said paper and, or its part/parts have not  
been published or sent for publication anywhere else.

I/We hereby authorize you to edit, alter, modify and make changes in the article  
to make it suitable for publication

1. .... (Name with designation/position)                      ..... (Signatures with date)
  
2. .... (Name with designation/position)                      ..... (Signatures with date)
  
3. .... (Name with designation/position)                      ..... (Signatures with date)
  
4. .... (Name with designation/position)                      ..... (Signatures with date)

## About the Journal :

Panjab University Research Journal (Arts) earlier known as Panjab University Research Bulletin (Arts), PURJA is the mother journal of Panjab University, Chandigarh (India) Started in early 1950s, it is a bi-annual *refereed* journal of international repute and publishes research papers/articles/reviews/survey papers duly assessed and reviewed by a panel of experts. It is included in UGC CARE list. It is devoted to the publication of original research papers/articles/reviews of a very high standard in various disciplines of humanities, languages and arts. One of the objectives of this journal is to create a forum for the dissemination and exchange of ideas among the scholars within the country and outside. Though the journal primarily focuses on theoretical issues of wide contemporary relevance, it also announces special issues drawing attention toward well-defined thematic areas in humanities, languages and arts in general. The journal seeks to propagate and stimulate philosophical, critical and interpretative dialogue across the national and international frontiers. For this reason, we look forward to receiving contributions from scholars working in diverse areas covered broadly under the disciplines of humanities, languages and arts.

## Guidelines for submission of Research Papers

1. The research paper should embody the results of original research and give ample evidence of scholarship, which should be creative, independent in character and fundamental in nature.
2. The research paper should be neatly typed, double spaced with broad margin on sunlit bond paper and submitted in duplicate along with one soft copy and an **abstract** of the paper in about 100-150 words. The abstract must include the objective, methodology and major findings of the paper.
3. All notes and references should come at the end of the paper.
4. The research paper should preferably be between 3000 to 5000 words.
5. The format should be in accordance with the latest APA seventh edition. Sample entry for works cited :

**Books:** Elder, Stuart. (1997). *The Birth of Territory*. The University of Chicago Press.

**Articles:** Bhatia, B and Dreze, J. (2006) Employment Guarantee in Jharkhand: Grand Realities. *Economic & Political Weekly*, 41, pp 319-202

6. **Graphs, Tables and Charts** in MS Office (Word /Excel format-**Black and White**) or equivalent format are preferred. Fonts for special characters also be provided.
7. A short biographical sketch in duplicate should accompany the paper.
8. The author must give an undertaking that the paper has not been published wholly or partly, in any other journal, and that it has not been submitted to any other journal for consideration or publication.
9. All articles submitted for publication shall be used subject to the positive reports from neutral and objective experts in relevant fields of specialization. Only in case of rejection shall the reports of the experts be made available to the contributors.

Research papers not found suitable shall not be returned unless accompanied by a self-addressed, stamped envelope. With regard to the acceptance or rejection of the research papers, the decision of the editorial board shall be final and binding. In this regard, the editorial board shall not entertain any correspondence from the contributors.

10. Copyright of the articles published in this journal rests solely with the ***Panjab University Research Journal (Arts)***.
11. Ten reprints of each article and one copy of the issue in which it is published shall be sent free of cost to each contributor. Additional copies of the journal shall be supplied at the usual rates, plus the necessary postal charges.
12. Annual subscription is offered at a flat rate of Rs. 500/- (£ 40 or \$ 80 US). However, a single copy of the current issue or back issues may be obtained for Rs. 200/-. All these rates are exclusive of the postal charges.
13. Subscriptions may be sent only in form of a Bank Draft drawn in favour of the Registrar, Panjab University, Chandigarh. No other form of transaction is acceptable.
14. The contributors may send all their articles / reviews/research papers directly to: Editor-in-Chief, Panjab University Research Journal (Arts), Panjab University, Chandigarh 160014 (India). They may also be e-mailed to [purja@pu.ac.in](mailto:purja@pu.ac.in)

## **AUTHORS FOR THIS ISSUE**

Agnes Humtsoe, Assistant Professor, Department of Education, Don Bosco University., Assam

Arisha Sajid, Research Scholar, Department of Home Science, Lady Irwin College, University of Delhi, New Delhi

Bharat, Assistant Professor of law, University Institute of Legal Studies, Panjab University, Chandigarh

Gaurav Gaur, Assistant Professor, Centre for Social Work, Panjab University, Chandigarh

Hazel Berret Wahalang, Research Scholar, Department of Social Work, Don Bosco University, Assam

Himani Pandey, Research Scholar, Department of Political Science, Centre for Political Studies, Jawaharlal Nehru University, Delhi

Jaskaran Waraich, Assistant Professor, Department of Defence and National Security Studies, Panjab University, Chandigarh

K.C. Kapoor, Professor, Department of Education, Don Bosco University, Assam

Manjinder Kaur, Research Assistant, Centre for the Study of Social Exclusion and Inclusive Policy, Panjab University, Chandigarh

Priya Sharma, Research Scholar, Department of Political Science and International relations, School of Humanities and Social Science, Gautam Buddha University, Greater Noida, Uttar Pradesh, India

Priyatosh Sharma, Associate Professor, Department of History, Panjab University, Chandigarh

Rahul, Research Scholar, Department of Geography, Panjab University, Chandigarh

Rama Goyal, Research Scholar, Department of Sociology, Panjab University, Chandigarh

Ravinder Kaur, Professor, Department of Geography, Panjab University, Chandigarh

Richa Walia, Assistant Professor, Institute for development and Communication, Sector 38 A, Chandigarh

Richa Mehta, Associate Professor, Lady Irwin College, University of Delhi

Saundarya Kumar Deepak, Research Scholar, Department of History, Panjab University, Chandigarh

Shubham Kumar Sanu, Research Scholar, Department of Geography, Delhi School of Economics, University of Delhi, New Delhi

Urmila, Research Scholar, Department of Defence and National Security Studies, Panjab University, Chandigarh

Vishwa Raj Sharma, Professor, Department of Geography, Shaheed Bhagat Singh College, University of Delhi, New Delhi