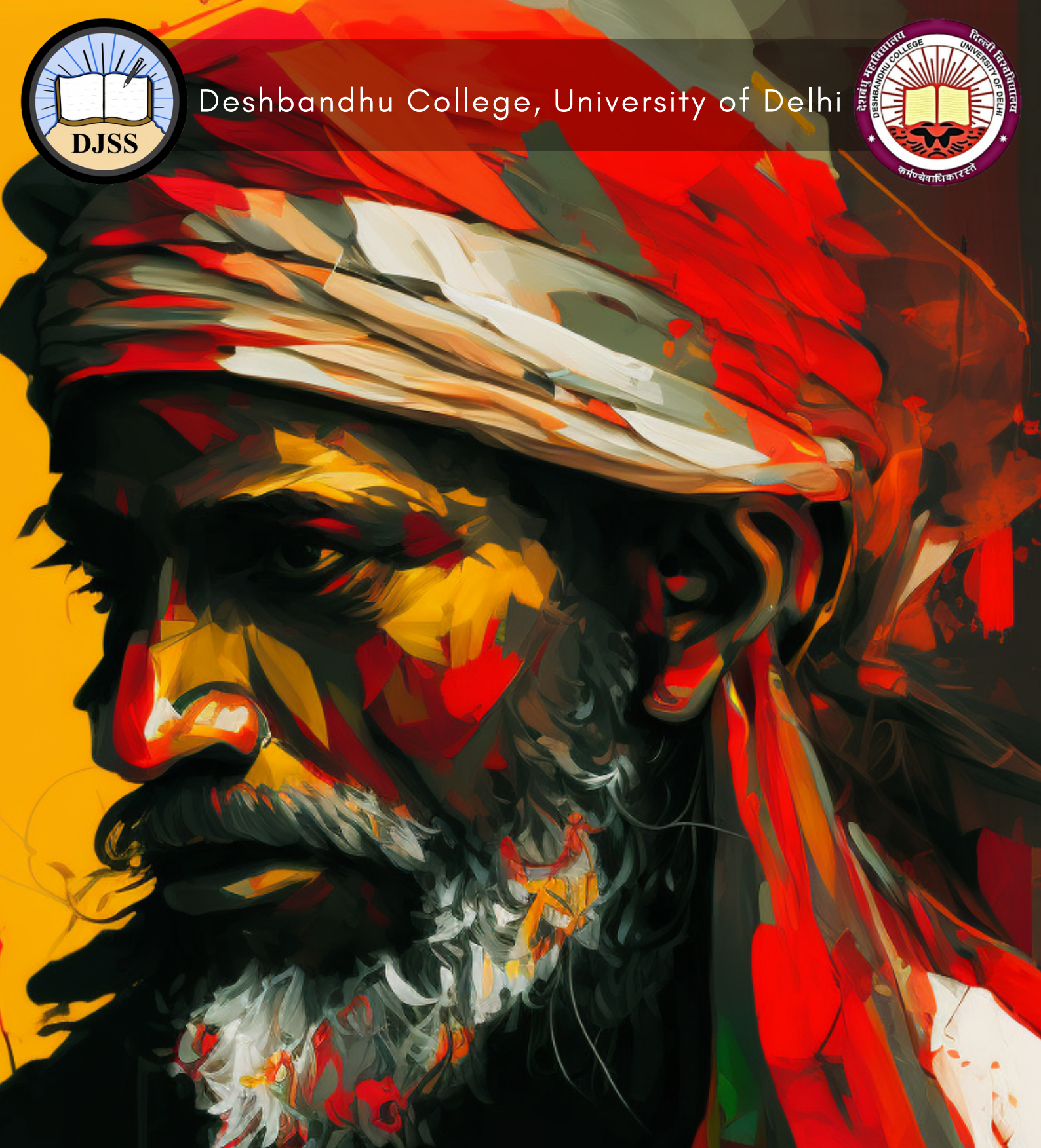




Deshbandhu College, University of Delhi



DESHBANDHU JOURNAL OF SOCIAL SCIENCES

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Principal's Note

Dear students, faculty, and staff,

It is with great pride that I present to you the 1st edition of our college's social science research journal. This inaugural publication represents the hard work and dedication of our talented students and faculty, who have spent countless hours conducting research, analyzing data, and crafting thought-provoking articles.

As the Principal of Deshbandhu College, I am committed to promoting a culture of academic excellence and intellectual curiosity. This bilingual research journal is just one of the many ways in which we are fostering a sense of community and collaboration among our students and faculty, as well as showcasing the incredible talent and potential of our institution.

I encourage all members of the Deshbandhu community to engage with the research contained within these pages and to continue to support and celebrate the intellectual pursuits of our students and faculty.

Sincerely,

Dr. Rajiv Aggarwal

Principal, Deshbandhu College

University of Delhi

Note from the Chief Editor (Faculty)

Dear readers,

It is my great honour and pleasure to introduce the first edition of the Deshbandhu Journal of Social Sciences. This journal represents the collective efforts of students, faculty, and staff who are committed to advancing our understanding of the social sciences and the world around us.

The articles in this edition demonstrate the wealth of knowledge, expertise and passion that our students bring to the study of social science. I am particularly impressed by the diversity of topics covered in this edition. The articles explore issues related to politics, history, psychology, and environment, among others, and they reflect the many different interests and perspectives of our student authors. I believe that this diversity is a strength of the journal, and I hope that you will find the articles to be as thought-provoking and engaging as I do.

I am particularly excited about the potential of this journal to promote interdisciplinary collaboration and to foster a sense of community among the social science community. This journal is not only a platform for our students, faculty and staff to showcase their research and analytical skills but also a means for them to engage with the broader community, serve as a forum for the exchange of ideas and perspectives and contribute to ongoing discussions about important social science issues.

As educators, we know that one of the most important aspects of teaching social studies is fostering critical thinking among students. The articles in this journal demonstrate the success of our efforts in this regard, as they show the students' ability to analyze and interpret information, consider multiple perspectives, and communicate their ideas effectively.

I hope that you will find the articles in this journal to be not only informative but also inspiring. I encourage you to use these articles as a starting point for discussions and further research in your classrooms.

The creation of this journal is a testament to the dedication and hard work of many individuals. I would like to express my gratitude to the editorial team, student authors, and faculty members who have mentored and supported them, and to the staff who have helped to make this journal a reality.

I hope that this journal will serve as a valuable resource and an inspiration for our college community, and I look forward to seeing it grow and evolve in the years to come.

Sincerely,

Dr. Biswajit Mohanty

Chief Editor (Faculty)

Deshbandhu Journal of Social Sciences

Note from the Chief Editors (Executive)

We feel delighted to present to you the very first edition of the Deshbandhu Journal of Social Sciences, an undergraduate-run, peer-reviewed, bi-lingual (English and Hindi) academic research journal of Deshbandhu College, University of Delhi. The journey behind the creation of this journal has been long and challenging, yet equally rewarding for both of us as well as our team members. We feel it is our duty to share, in brief, the story behind it.

While Deshbandhu College has been an established name in the University of Delhi for a long time, we realised that the absence of a professional, peer-reviewed publication was a major deterrent in the way of the collaborative potential and the holistic development of both students and teachers. Upon ideating & brainstorming, we decided to introduce a research journal to fill this gap in academia since it not only serves the purpose of stimulating intellectual growth but also provides individuals with a platform for putting forth their ideas & opinions. Fundamentally, it is the symbolic representation of an institution's scholastic aptitude at a given point in time.

Therefore, by virtue of exhibiting the development of newer ideas and beliefs, a journal is in fact a living publication. In the words of Swami Vivekananda, *"The gift of knowledge is a far higher gift than that of food and clothes; it is even higher than giving life to a man, because the real life of man consists of knowledge. Ignorance is death, knowledge is life. Life is of very little value, if it is a life in the dark, groping through ignorance and misery"*. Armed with these words, we set out towards our goal of creating the 1st peer-reviewed social science journal of Deshbandhu College.

The genesis of this journal originates from us pitching this idea to our professor-in-charge in early 2022, right around the time that universities in Delhi reopened after the COVID-19 pandemic, one of the most difficult periods ever recorded in human history. Being a part of the Department of Political Science's official student magazine, we found ourselves in a better position to work towards conceptualizing a journal that would meet the required standards of academic brilliance. Soon we began setting up the foundations for this journal under the guidance of our professor Dr. Biswajit Mohanty.

The task of conceptualizing was then followed by the task of executing our ideas in real-time. From finding ourselves regularly gobsmacked in the face of adversity & unable to progress beyond a certain point to being short on staff, multitasking & working across multiple portfolios, the whole experience was daunting, time-consuming, frustrating and yet at times interesting for two neophyte student coordinators. The sheer thrill of working alone on several aspects and spending numerous days & nights remains a core memory for us, making the journal something that we are proud to call our own.

The eventual publication of this journal marks the successful fruition of our hard work as well as the realisation of our objective of creating something of substance and standard. Our immense pride in Deshbandhu Journal of Social Sciences emerges from the careful selection of each article for its originality, rigour and relevance to the field, as well as the broad range of topics that it covers, including international relations, climate change, domestic politics and child psychology. Our fundamental belief is that the articles included in this edition represent the diverse & dynamic nature of social science research, and we hope that they inspire further inquiry and debate.

While our editions shall be open-themed for research article submissions, the inaugural edition initiates the practice of having an artistic theme for each subsequent edition with the current theme being '*Subaltern Life*'. This practice has allowed us to achieve greater inter-society collaboration, specifically with '*Sharpshooters*', the Photography Society of Deshbandhu College, whose photographs have been featured in an exhibition contained within the journal. Moreover, keeping in line with the spirit of the digital revolution taking place in India, our cover art on the aforementioned theme has been made using artificial intelligence.

As the first social science research journal of Deshbandhu College, we believe it is the collective efforts of all the authors, reviewers, advisors and editorial staff who have made this edition possible. We sincerely thank them for their hard work and dedication. We convey our heartfelt gratitude to Principal Dr. Rajiv Aggarwal, Dr Biswajit Mohanty and the entire faculty of Deshbandhu College for their help and guidance in publishing this journal. Our hope is that you enjoy this edition of the Deshbandhu Journal of Social Sciences and we look forward to bringing you many more in the future.

Shivansh Nagpal & Raghu Bhatt

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About the Journal

Deshbandhu Journal of Social Sciences is an academic research journal under the aegis of Deshbandhu College, the University of Delhi, pertaining to all disciplines under the purview of social sciences, established with the objective of promoting academic rigour and enhancing research & analytical output. It provides a forum for the exchange of ideas & seeks submissions from various scholars in the domain, and also integrates artistic exhibitions and themes relevant to contemporary societal issues of great importance.

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SUBALTERN LIFE

AN EXHIBITION OF PHOTOGRAPHY



The subaltern life is one of struggle and strife,
Of being pushed to the edges of society,
Of being denied a place in the dominant narrative,
Of being invisible to the powers that be.

It is a life of constantly fighting for survival,
Of battling against the forces that seek to oppress and control,
Of refusing to be silenced and denied agency.

It is a life of resistance and resilience,
Of standing up against injustice and inequality,
Of finding ways to make oneself heard,
Despite the barriers that stand in the way.

The subaltern life is one of pain and struggle,
But also of strength and determination,
Of refusing to give up, despite the odds.

It is a life of fighting for one's place in the world,
Of refusing to be erased and overlooked,
Of standing up for oneself and one's community,
And demanding the respect and recognition that is due.

So here's to the subalterns, the marginalized and oppressed,
The ones who have had to fight for every inch of ground,
The ones who have refused to be silenced or erased,
And have persisted in the face of adversity.
May their struggles be recognized and their voices be heard,
For they are the ones who hold the key to a better, more just society.



THROUGH THE LOOKING WALL



MILEAGE



DOTAGE



TIME FLIES



VICISSITUDES



HUMDRUM



TOIL



VAGABOND

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Deshbandhu Journal of Social Sciences

Child Behaviour: Jealousy in middle-aged children and the Practice of Personification

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¹B.A. Programme, University of Delhi

Abstract

Jealousy in children proposes hostility, which, depending on the social setting, can manifest in complex ways, and affect social dynamics between and within families. The current practice of regulating emotions through typical psychological procedures can be unseemly in the case of children. This paper aims to find the origin of jealousy in middle-aged children, use illustrative skills in emotion regulation, and explore other operative options. Jealousy's negative impact on a child's personality includes aggression, children turning into bullies, isolation, low self-esteem, etc. By using the "*personification method*" in psychology, the study attempts to personalize jealousy as a corporeal being rather than just an invisible evil- a '*substance*' to overcome. My findings indicate that by using personification (also called anthropomorphism), the enemy (jealousy) becomes known and hence easier to tackle, if not conquer entirely.

Keywords: child behaviour, child psychology, personification, jealousy

Introduction

Jealousy refers to a negative emotion that symbolizes some form of interpersonal rivalry. Specifically, jealousy, as opposed to envy, has been defined as a complex emotion with its foundation being the threat of loss of an important relationship with another individual (Smith, Kim, & Parrott, 1988). The threat of losing a relationship with another person is what makes jealousy different from envy which does not involve a threat of loss (Jones, 1994). Given the social nature of this emotion and its pervasiveness in everyday life, many researchers have

investigated individual differences in the affective experiences and effects of this emotion from as young as six months old (Hart, 2002), and progressing into older ages: preschool (Bauminger, Chomsky-Smolkin, Orbach-Caspi, Zachor, & LevyShiff, 2008), early adolescence (Parker, Low, Walker, & Gamm, 2005), and adulthood (Shackelford et al., 2004).

Jealousy in children can develop as early as six months of infancy. Most researchers point to its empirical origin instead of its genetic background. While the phenomenon as a whole, interests me, I was eager to engage with it. As a bystander, I attempted to mediate the situation by actively engaging these children to address their differences. Getting these children to understand what was happening between them was challenging. A five-year-old is probably unable to understand what jealousy is, they might even be hearing the word itself for the first time.

What remains to be understood, away from the literature that focuses on the outward manifestations and individual experiences of jealousy, is how children come to understand the concept itself. More precisely, at a young age when evidence suggests they are beginning to develop an awareness of other people's mentalities. It is against this context that it is important to understand, what skills, children are equipped with to, identify particular aspects of jealousy, such as the existence of a rival or the threat to a relationship. The current study aimed to theorize how children in middle childhood understood jealousy in relation to their immediate attachments and to determine how personification contributed to this growth.

Case Study

Last month, my aunt and her children came over to our house for my brother's wedding. She has two children, ages eight and five. Their arrival was welcomed warmly by everyone. Hugs and kisses were exchanged among the children. In the meantime, my niece, also five, starts acting strangely. It seemed the two children were not getting along with her, despite their attempts to connect with her. It made me wonder what might have caused the reaction. The fact that she appeared irritated at their arrival convinced me she did not like my aunt's children.

Her conduct became increasingly aberrant as more children arrived at our home. I figured she was bothered by other children, not specific individuals. She 'had it all' as the only lone child in

the family. Once the attention got divided, she shrugged to secure her emotional requirements. Consequentially, she ran around instigating brawls with every child she encountered. Sullivan describes this behaviour (termed Malevolence) as the disjunctive dynamism of evil and hatred, characterized by the feeling of living among one's enemies (Sullivan, 1953b). It originates around the age of two or three years when children's actions that earlier had brought about maternal tenderness are rebuffed, ignored or met with anxiety and pain. Malevolent actions often take the form of timidity, mischievousness, cruelty, or other kinds of asocial or antisocial behaviour. Sullivan expressed the malevolent attitude with this colourful statement: "Once upon a time everything was lovely, but that was before I had to deal with people" (p. 216).

I recall watching this movie called 'Inside Out', which was developed under the guidance of psychologist Dacher Keltner of the University of California, Berkeley, in which Riley, eleven, relocates to San Francisco, leaving her life in Minnesota behind. She and her five core emotions, Fear, Anger, Joy, Disgust, and Sadness, are struggling to adjust to their new circumstances. Each is displayed with a corresponding colour (Anger is a fiery red, for example). The emotions take turns ensuring that Riley reacts appropriately to everything that occurs in her life. This is where the viewer can begin to see how this film might resonate with those in the counselling profession—and their clients. For instance, there is this scene where Riley feels sad and Sadness, as a character, states simply, "I don't know what's wrong with me—I can't help it." This translates to Riley crying on her first day in her new school. Now, this scene may be especially useful when working with young children because it provides a tangible, visual representation of something they may not be able to verbalize—being able to see Sadness in all of her gloomy, blue splendour will most likely allow a child to better understand that specific feeling. With this established background to the idea, let us try to understand how personification works in psychology.

Personification in Psychology: *Sullivan's Interpersonal Theory*

American Psychological Association defines personification(n) as a figure of speech in which personal or human characteristics are attributed to an object or abstraction, as in saying 'fortune smiled on her'.

"A person viewed as representing or embodying some quality, thing, or idea". (APA Dictionary of Psychology)

In the approach of Harry Stack Sullivan, "the pattern of feelings and attitudes toward another person that arises out of interpersonal relations with him or her".

People form specific perceptions of themselves and others starting in infancy which continues throughout the various developmental stages. These metaphorical representations, known as personifications, may be very realistic or, because they are influenced by people's needs and concerns, they may be wildly exaggerated. The bad-mother, the good-mother, and the me are three fundamental personifications that emerge during infancy, according to Sullivan (1953b). Additionally, during childhood, some kids develop an imaginary playmate known as an eidetic personification.

Eidetic Personifications, coined by Sullivan, are the unrealistic traits or imaginary friends that many children invent to protect their self-esteem. Sullivan (1964) believed that these imaginary friends may be as significant to a child's development as real playmates.

"Eidetic imagery is an unusually vivid subjective visual phenomenon. An eidetic person claims to continue to 'see' an object that is no longer objectively present. Eidetic persons behave as if they are actually seeing an item, either with their eyes closed or while looking at some surface that serves as a convenient background for the image. Furthermore, eidetic persons describe the image as if it is still present and not as if they are recalling a past event. The incidence of eidetic imagery is very low in children (2-10%) and almost non-existent in adults" (Britannica, 2022).

Materializing Jealousy into Substance

Othello, in which jealousy is depicted as a green-eyed monster by Shakespeare, gives the audience a chance to see the hero's resentment as a distinct emotion from the hero himself. The audience was persuaded that a 'monster' had misled their hero and that it was not the hero who was evil. Children's minds can be hard to change when presented with ideas they have likely never heard of and to which they can make no personal connection. Relevance is key essential

here. We may stand a good chance of managing countless encounters if we can translate this novel concept of jealousy into something children can relate to (a picture, a cartoon, an animal, etc.) and give these inanimate objects human characteristics rather than an alien, unknown form.

Lucy Nichol, a mental health author writes: The advice I was given by a friend many years ago proved invaluable:

"If you see a spider, imagine it in a disco dress - it won't seem so scary anymore"

Of course, it is not bulletproof. Sometimes, no matter how elaborate the sequinned ra-ra skirt and disco lights I conjure up in my mind, the arachnid fiend still gets the better of me. But it helps a little.

Personifying Obsessive Compulsive Disorder is a popular treatment method for OCD (obsessive-compulsive disorder) sufferers. Children, in particular, are frequently encouraged to name their OCD as a specific means of emphasizing that they are distinct from it. They have OCD, not that it is something they are. Pick up any book for children with OCD, and the OCD will almost certainly be named.

The expressiveness of children's drawings has received considerable research attention in recent years (Bonoti & Misailidi, 2006; Brechet, 2013; Brechet, Baldy & Picard, 2009; Brechet, Picard & Baldy, 2007; Jolley, Fenn & Jones, 2004; Picard, Brechet & Baldy, 2007). Earlier studies have established that children use three types of expressive graphic cues to convey basic emotions in their drawings of a human: facial, bodily/posture, and contextual cues (Brechet et al., 2007, 2009). Facial cues refer to alterations in the facial features of the human figure (e.g., a downwardly curving mouth for sadness). Bodily/posture cues correspond to alterations of the arms, limbs, and body posture of the human figure (e.g., crossed arms express anger). Contextual cues refer to graphic elements – exterior to the human figure – that are drawn in the context of the drawing (e.g., shining sun in a blue sky to convey happiness) and convey emotion indirectly and subtly.

The ability of children to employ graphic signals in their drawings to convey emotion is a complex process that takes time to develop (Bonoti & Misailidi, 2006; Brechet et al., 2007, 2009; Ives, 1984; Jolley et al., 2004; Picard et al., 2007). According to research, young children aged four to eight years rely only on facial movements to convey emotion (Cox, 2005; Sayil, 2001; Zagorska, 1996). Children begin to introduce alterations in the figure's body/posture around the age of eight (Brechet et al., 2009; Golomb, 1992; Picard et al., 2007). Children between the ages of eight and fourteen begin to use contextual indices of emotion, such as painting an object or an event in the background of a human figure that is related to or could create the intended mood (Jolley, 2010).

In general, older children employ more and a wider range of graphic clues to convey emotion in a drawing than their younger counterparts (Brechet et al., 2009; Picard et al., 2007). Nonetheless, the age-related rise in the utilization of graphic cues does not appear to be consistent across emotions. According to studies, young children are fairly skilled at using facial clues to express happiness and sadness; however, they are less adept at using similar cues to convey fear, rage, or surprise (Golomb, 1992; Picard et al., 2007; Zagorska, 1996). Other evidence suggests that eight-year-olds utilize context cues frequently to convey anger, fear, and surprise, but far less frequently to convey happiness or sadness (Brechet et al., 2009).

Despite the growing availability of data on the graphic signals used by children to portray various fundamental emotions in their human figure drawings, no study has yet explored how children depict nonbasic or social emotions. It is unknown, in particular, what types of graphic cues they employ to transmit emotions such as pride, shame, and jealousy.

A significant amount of study has been conducted over the last two decades on children's knowledge of other people's ideas, feelings, and desires. While many studies have focused on the development of socio-cognitive awareness in children aged three to four years (Wellman, Cross, & Watson, 2001), research has shown that this capacity is further developed throughout middle childhood (de Rosnay & Hughes, 2006; Flavell, Green, & Flavell, 1993).

The ability to see things from another person's point of view is imperative for understanding their thoughts and feelings. Selman (1980, 1981) advocated a hierarchical organization for children's perspective-taking skill development. According to his concept, younger children (ages three to six) frequently confuse the thoughts and feelings of others with their own thoughts and feelings, but during the middle childhood years, children are able to contemplate the views of others and recognize that others can do the same. Children first understand that perspectives differ because people have access to varied information; later, children employ this understanding more fully in considering the distinct viewpoints of others.

Rather than explaining jealousy as a negative emotion, we could allow the child to personify jealousy and respond appropriately. If we do not understand the opposition, we cannot defeat it. For this, I gathered seven children aged four to eight and provided them with coloured pencils, and drawing papers. I asked them to draw a panda getting jealous. The children were able to draw a panda in all the different shades available to them. Three out of seven used the colour red around the head and under the eyes of the figure, depicting 'jealousy' when asked about it. The colour green was used by one child, shaded on and around the ears and face of the panda. Other children used different colours normally. Subsequently, the children were asked to draw a figure out of their respective *pandas* representing jealousy using those particular colours. The children drew a varied number of shapes and figures with physical human attributes. I asked the children to name their "jealous figures" in order to remember and recall when referring to the same in the future. In fact, the names they chose were intimately related to their immediate environment, usually the things or people that negatively contributed to their lives. For instance, a sibling, uncles and aunts, classmates, a particular food they don't like, and so on.

A child doesn't choose to be jealous of other children, but we might have a better chance of explaining it by staging an encounter between the child (here my niece) and "Jane the Jealousy." Without explicitly labelling her jealousy, understanding a variety of negative emotions, cognitions, and behaviours related to jealousy, and referring to the feelings, thoughts, and behaviours that occur when a person believes an important relationship is being threatened by a rival, she was beginning to grasp the idea. Over the next few weeks, after repeated instances of calling out her personified jealousy, she stopped being a direct target, allowing her to get to know the 'enemy' in a

form she could recognize and thus understand its motivations. In her own way, she started to believe herself to be distinct from her jealousy and that it was just some cartoon character she didn't want to be like. Now, instead of calling her jealous whenever she starts to act a little stiff due to it, I say, "Oh look, Jane, the jealousy is back", which cracks her up every time.

Introduction to emotion is thus the first step in this process. Children will need a way to communicate with the emotion once they have learned about it, which entails personifying or substantiating (as I would call it) the emotion in a way that the child relates to, for instance, the emotion's name and getting comfortable with it. After some consideration, the child chooses to apply this strategy of identifying emotions in a variety of scenarios. It can develop as an early coping mechanism for the complex emotions they shall experience once they grow older. Hence, the application of a literary device like personification in psychology when dealing with jealousy in children becomes an effective technique.

Appendix

Envy and Jealousy

Envy occurs when a person is dissatisfied with something that another person possesses and feels inferior because they do not. This could be an object, a person, or both, or a trait such as success, reputation, or happiness. Envy may also involve adoration for the envied item or person, covetousness toward the envied thing, hatred or resentment of the person having the envied thing, a desire to harm the envied person, and, sometimes, a desire to rob the envied person. The fact that the interpersonal configuration is a two-person one in which the other person has possession of what is envied is critical to the definition. (1)

Derivation: The Latin root of envy is *invidia* from the verb 'invidere', meaning 'to look maliciously upon' (2), 'to look askance at' or 'to look with enmity' (3), and, according to Elliot Jacques, 'to cast an evil eye upon ...' (4). A translation of *invidia* from Cicero is 'to produce misfortune by his evil eye'. Yet another translation of the Latin verb is 'not looking at, or looking at in a contrary direction' (5). Envy first appeared in modern English usage in the fourteenth century. The Oxford dictionary definition of envy is 'the feeling of mortification and ill-will

occasioned by the contemplation of superior advantages possessed by another' (2). Webster defines envy as the 'chagrin, mortification, discontent, or uneasiness at the sight of another's excellence or good fortune, accompanied by some degree of hatred, and desire to possess equal advantages; malicious grudging' (3). There are two important aspects of these definitions of envy: first, lacking something and being mortified by that gap/absence/void; second, the difference in aggression. Webster speaks of 'hatred'; Oxford only of 'ill-will'. To Oxford's earliest, and now obsolete, usage of 'malignant or hostile feeling, ill-will, malice, enmity and "active evil, harm, mischief"', Webster adds 'spite'.

In jealousy, one feels fear, anxiety, suspicion, or mistrust about the loss of a highly valued object or the diversion of care and devotion to another, a third person. It is sometimes related to vigilant guarding against imminent loss and an effort to retain the status quo, to protect ownership. In sexual love, this could mean attempting to extract complete devotion from the love object. In jealousy, the possession, or prized 'good,' is usually a person or the affection of a person rather than an inanimate thing or quality. But this is not always the case. Rivalry with a third person is common and emphasizes an important component of jealousy; it arises in a three-person context when the jealous individual believes that a third person will intrude on a two-person relationship and take ownership (1).

Derivation: The word 'jealous' is derived from the Greek word 'zelos' which signifies emulation, zeal, and jealousy, and denotes the intensity of feeling, as in ardour, fervour, and intense or earnest devotion to a person, cause, or thing. Only much later in Middle English and Old French (twelfth century) were the words 'jealous' and 'zealous' distinguished so that jealousy appeared for the first time as 'gelos'. The close connection of jealousy and zeal was still evident in the early definitions of 'jealous' (obsolete by the seventeenth century) which stood for 'vehemence in feeling, as in wrath, desire, devotion ... ardently amorous; covetous of the love of another, fond, lustful' (2). Modern usage emphasizes first the attitudes toward one's possessions, and second a suspicious attitude toward rivals.

Let's examine the distinctions and parallels between envy and jealousy. Both jealousy and envy are negative feelings but jealousy is usually considered to be more negative. "Envy is a mix of admiration and discontent but the word doesn't usually imply hostility" ("*Jealousy*" vs. "*Envy*":

Can You Feel the Difference?- Dictionary.Com, 2022). On the other hand, to feel jealous means "to feel threatened, insecure, or protective of something you already have. For example, you might feel jealous of your friend's new friend because you feel as if you might get replaced. While envy is closely related to resentment, jealousy involves resentment and the attribution of responsibility. Brene Brown, an emotions researcher and academic, differentiates jealousy and envy as she thinks envy is usually between two people and is wanting something that someone else has and jealousy is normally between three people and is the fear of losing something that you already have to someone else. "One listens for the specific dynamic content when patients refer to envious and jealous feelings. Patients often shift from one to the other in their descriptions. For example, a young, divorced and childless woman was annoyed with a pregnant friend. She acknowledged her envy but then spontaneously spoke of her jealousy. Her envy referred to the wish to have a baby like her friend; her jealousy, was her wish that the friend would not have the baby. Jealousy for this patient was the stronger and more objectionable effect since it was connected with hate and aggression" (1)

How does jealousy develop in children?

Numerous factors can lead to attention-seeking behaviour. Jealousy frequently relates to a notion of lost love or attention, which suggests that a young person may be going through some form of loss. They may act out to achieve what they want since they find it very difficult to comprehend what they feel and have no control over the situation.

According to studies on toddlers' reactions to the birth of a sibling, unevenly distributed mother attention or jealousy-inducing behaviour is upsetting to toddlers. These investigations revealed a wide range of harmful child behaviours, such as aggression, withdrawal, anxiety, regression, reliance, and physical function problems like sleep and elimination difficulties (Dunn & Kendrick, 1982; Gottlieb & Mendelson, 1990; Howe & Ross, 1990; Stewart, Mobley, Van Tuyl, & Salvador, 1987; Taylor & Kogan, 1973). These studies also found that mothers' parenting behaviours had deteriorated, as seen by mothers' decreased warmth and playfulness, lower sensitivity, and increasingly hostile interactions with their toddlers. This is in addition to the observation of deteriorated conduct in children. These discoveries led to the theory that jealousy

is a result of children receiving less attention from their mothers during interactions with them, in addition to direct experiences of dethronement and competition with siblings (Adler, 1931). (Dunn, 1992). Additionally, because toddlers made up the majority of the participants in these naturalistic investigations, the results supported theories that jealousy is only present in children in this age range and is amplified by their higher representational abilities (Dunn, 1994).

A child is frequently unwilling to disclose and express jealousy and prefers to repress it. Because the parents fail to deal with these sentiments appropriately and in a timely manner, the child expresses them through unusual and unwanted behaviours such as anger, sabotage, being troublesome, disobedience, and lying. Therefore, to a child, seeking unfavourable attention is still preferable to receiving none at all. It can sometimes progress to the point of producing involuntary urination, nail biting, lip biting, or feigning illness. Though jealousy doesn't follow a logical path it is triggered by an individual combination of psychological factors which coincide to create the emotion of resentment, a feeling of threat and isolation, and a fear of reduced self-importance.

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The Continuing Relevance of Coalitional Politics in India

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Abstract

This paper aims to highlight the continuing relevance of coalitional politics in India. It discusses the historical and institutional details of coalitional politics in the post-independence era, especially the dominant trends of the different party systems of the country. Moreover, considering narratives surrounding the return of one-party dominance, it provides an analysis regarding the importance of coalitional politics for the ruling dispensation and opposition in the era of the 4th party system since 2014. Towards that end, the paper will also analyse the BJP's rise in the northeast to illuminate the role played by coalitional politics in influencing electoral outcomes, government formation, ideological reach and narratives, welfare decisions and more. Therefore, the paper successfully proves how coalitional politics remains a crucial factor in shaping the current state of Indian political affairs and how it might continue to do so in the future.

Keywords: coalitional politics, Indian elections, party system, BJP

Context

India is a land of immense social diversity, its citizens speak different languages, profess different religions, practice varied customs, and belong to numerous ethnic groups, which V.S. Naipaul describes as a million mutinies (Naipaul, 2011). Post-independence in 1947, India adopted a Parliamentary form of government, drawing from the Westminster model. This, in

Ambedkar's words would ensure representative democracy offering adequate recognition and space to the depressed classes, and aiming towards creating a more egalitarian society. Despite not being formally there at the time of the making of the constitution, today, coalitional politics has become a major feature of the Indian electoral system-both at the centre as well as at the state level. It has resulted in the stitching together of diverse alliances based on several different factors leading to coalitions. These social coalitions have only continued to multiply and emerge in the form of new, vibrant, and fragmented interest group formations- to even forming new political parties seeking to provide adequate representation. These political parties have acquired a unique position in Indian politics, often affecting electoral outcomes and ideological positions.

The initial party system to gain ascendancy in India could be characterised as one of Nehruvian socialism, with the Congress acting as an umbrella for various political beliefs and ideologies in a model of intra-party competition which Rajni Kothari has aptly termed the 'Congress System' (Kothari, 1964), ensuring effective one-party dominance in India's electoral competition-both national as well as regional. However, competition and cooperation based on coalitions have been a longstanding feature of Indian politics- both at the central and state levels since the genesis of the Indian electoral system. Although, challenges to one-party dominance, as witnessed in the formation of anti-congress coalitions such as the Samyukt Vidhayak Dal in 1967 or, cooperation of the kind witnessed in the support offered to Indira Gandhi's minority government by the communist forces and the DMK in 1969 shows the kind of variety coalition politics offers in India.

Although it is presumed that the Janata Party was a coalition at the national level, it was in fact a single party. Due to the absence of an election defection law, the dissension of various blocks represented different parties, but it was one single party. It was only in 1989 that the coalition era of Indian democracy with different political parties representing a multitude of interest groups, often varied in character and purpose began at the national level with the National Front government led by V.P. Singh. This period also deepened an earlier trend; federalisation of the polity and the emergence of social coalitions based on religion, caste, class, and regional identity that formed governments in several states along with the gregarious application of Schedule-10 of the Constitution, known as the anti-defection law by the Election Commission of India.

In the current period of effective dominance by the BJP since its historic electoral victory in 2014 and further expansion on the same in 2019, some have suggested that India has re-entered a period of one-party dominance (Sridharan, 2022). Owing to the BJP's electoral success and the rise of its ideological narrative of a right-of-centre tilt and focus on Nationalism, Development and Hindutva, it has come to acquire a position of pre-eminence over the body politic of the country.

However, it would not be correct to dismiss the extremely crucial role coalitional politics continues to play- both as an antidote to one-party rule as well as a major reason behind the electoral ascendancy of the ruling dispensation.

Coalition: Definition and Institutional Background

The term coalition is derived from the Latin word "coalitio" which means to grow together. A coalition is a direct descendant of the exigencies of the multi-party system in a democratic setup. It is a phenomenon of multi-party government where a number of majority parties join hands for the purpose of running the government, which is otherwise not possible in a democracy based on a one-party system or a sharp bi-party system. A coalition government is formed when many political parties in the house agree to join hands on a common platform by sinking their broad differences and forming a majority in the house (Ahmed and Nilofer, 2009).

The Constituent Assembly (1946-1949) tasked with preparing the Constitution of India preferred a federated polity with a strong central government. This central bias helped in containing the rich diversity of the Indian nation by placing it in an overarching framework of national philosophy. While this quasi-federal polity ensured a reasonable amount of autonomy for the states, it maintained a strong centre that was indestructible. Throughout the political history of post-independence India, there has been an oscillation between the centralised union and regional-federal tendencies, with both the centre and the state/region displaying periods of dominance at different points in time. In addition, election results are based on the First Past the Post System (FPTP) which is favourable for the rise of a multi-party system, especially for smaller parties due

to the presence of different interest groups. The system of FPTP dictates that whomsoever garners a simple majority of votes- wins in a single constituency.

There are different stages of coalitions in India; they can be clear single majorities, pre-poll understandings amongst parties or post-poll compromises. Parliamentary majorities in India have even been supported by external partners that remain outside the government. Coalitions in India can be “interest” based or “opposition” based. An interest-based coalition would involve the coming together of certain political players along certain common lines for a certain common purpose or reason that is mutually beneficial. These common lines might be ideology, identity, issues, or even electoral expediency. The second type of coalition witnessed in India is an “oppositional” coalition which is formed due to shared opposition space between different political forces, towards another party. To ensure stability and consensus, various mechanisms were also deployed to keep these diverse alliances in check, such as the common minimum programme, the steering committee, inter-ministerial conferences etc. in addition to broad understandings between the constituent forces in parliament (Kailash, 2007).

The History of Coalitional Politics in India

1. The One-Party era (1947-1967)

In the period following Independence, the Congress Party was the pre-eminent political force in the country with a pan-India organization and historical legitimacy arising from its role in the Indian freedom struggle. Initially, the thrust was specifically on the constructive activity of nation-building. This was signified by a national development strategy with leaders such as Syama Prasad Mukherjee, B.R Ambedkar, R.K Shanmukham Chetty, Sardar Baldev Singh, C.H Bhabha and N. Gopaldaswami Ayyangar who were invited to join the cabinet, representing a unity government. This represents the first interest-based coalition of independent India, built around the cause of national development. From 1952 till 1967, the Congress Party continued to dominate the country’s political system nationally and came to acquire the characteristic of “one-party dominance” (Kothari, 1964). It was the party of consensus with internal factionalism and a latent threat from parties outside the margin of pressure acting as competition in the system. Thus, Congress after Independence represented a broad rainbow coalition of interest groups that often held contradictory beliefs representing a catch-all character and acted as an umbrella

organisation, giving space to different political ideologies, castes, classes, religions, regional backgrounds, etc. This was because there was a need for economic reconstruction post World War-2 and the Congress favoured the assimilation of interests facilitated by a centralised brand of federalism (Deb & Sengupta, 2009).

During this period, Congress remained the only viable political force nationally. It also sought to accept regional demands for the creation of states on the basis of language, thereby granting more leeway for identity politics. Several coalition governments were formed in states in this period- by the congress as well as the parties opposed to it. The congress allied with parties such as the Praja Socialist Party in Kerala (1960) or the Gantantra Parishad Party in Orissa (1959) to form a government. Similarly, oppositional coalitions such as the United Democratic Front under Gian Singh Rarewala in PEPSU (1952) or the one formed in 1957 by the CPI with independents in Kerala were also witnessed during this period (Kumar, 2012). However, it is also necessary to note that opposition coalitions formed against the congress did not last long and governments often fell or were dismissed. The same was seen in Kerala in 1959, following the liberation struggle (Vimochana Samaram) orchestrated by the Congress against the Communists (Banerjee, 1986) or in PEPSU following the dismissal of Gian Singh Rarewala's government. Through coercion by extra-constitutional means or co-opting parties in their scheme of national development, the Congress party remained the principal pole or anchor of Indian politics around which all other parties aligned themselves.

2. Rise of Anti Congress-ism (1967-1980)

This period is crucial as it lays the foundation for building non-Congress governments for the first time on a regular basis in states since 1967 (for more information, refer to Table 1). It started with a decline of the Congress's catch-all character and its growing inability to incorporate emerging, different social groups due to entrenched interests. Many ideologically opposed parties came together to form governments that were ideologically heterogeneous on the plank of Anti-Congress-ism inspired by the socialist leader Ram Manohar Lohia reaching its zenith with the national coalition of the Janata Party in 1977.

There are four prominent reasons for this; the wars with China (1962) and Pakistan (1965); a food crisis born out of droughts; economic weakening and a total lack of leadership within the Congress following the death of two prime ministers in quick succession that had created a situation of panic. This led to splits and defections at the regional level by the Congress Party, which led to the formation of new parties in several states. In the 4th Lok Sabha elections, the Congress under Indira Gandhi registered its worst performance, winning a total of 283 seats, down from 361 in the previous national election and was defeated in nine states- Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, Bihar, West Bengal, Orissa, Tamil Nadu, and Kerala (Check Table-1).

Several ideologically disparate coalitions, operating on the common plank of opposition to the congress emerged such as the Samyukt Vidhayak Dal, the Popular United Front, the United Front Ministry, etc. but they did not last long, owing to ideological contentions. Despite the setback to Congress in the body politic of the country, it continued to remain the principal force nationally. But in 1969, the party faced a split between the radicals under Indira Gandhi and the conservatives under Ram Subhag Singh's Congress (O), leading to a minority government at the centre-supported by the DMK and Communists. The Congress Party reversed this situation in the 5th Lok Sabha elections in 1971, with the opposition forming the National Democratic Front, comprising of a "Grand Alliance" (Israel, 1972) of the Jana Sangh, Congress (O), Swatantra Party, and the SSP and Indira Gandhi leading a coordinated campaign of Garibi Hatao, and coming to power with 352 seats. This new Congress of Indira Gandhi was different, it lacked internal dissension and factionalism and was increasingly authoritarian with zero scope for the opposition, unlike the earlier Congress system. This brand of authoritarianism is best characterised by the excessive usage of Article 356 by the union government (Tummala, 1996) to dismiss popularly elected governments in different states during this period. The height of such executive overreach was witnessed in the proclamation of emergency in 1975 and the subsequent trampling of civil liberties (Puri, 1995).

To counter this, many opposition political parties merged under a single banner known as the Janata Party to defeat the congress at the national level in the 1977 elections. Drawing inspiration from Lohia's brand of anti-congress-ism as well as Jayaprakash Narayan's movement against authoritarianism, the Janata party saw coalitions between ideologically diverse partners- from all

ends of the political spectrum. Unfortunately, however, this could not last long enough as the Janata Party saw extreme contentions between different members on issues of ideology and opinion. The Janata Party remained a coalition of different parties and groups and was 'a victim of factionalism, manipulation, and personal ambitions of its leaders' (Chakrobarthy, 2008, page 11). Like the anti-congress state governments formed in 1967, it failed to resolve its own issues and competing interests, which finally culminated in the fall of the Janata Party in 1979.

3. The Rise of Regional Forces and the Politics of the Third Front

The 80s saw a period of unhindered Congress rule at the national level from 1980-1989 resulting in severe anti-incumbency later on, deepening from the erosion that had begun in 1967. The fall of the Janata Government was due to its own internal issues and the clever machinations of Indira Gandhi. This period marked several issues, with respect to security, emanating in states such as Punjab, Tamil Nadu, and Jammu & Kashmir. It also saw the assassination of Indira Gandhi in 1984 and the subsequent loss of her son and political successor, Rajiv Gandhi, in the general elections held five years later in 1989. The elections heralded the start of multi-party coalitional politics at the National level, with no single party able to win a clear majority at the centre. In 1989, the National Front coalition, led by the Janata Dal formed the government and was supported from the outside by the Left and BJP - both of which were ideological enemies. It is important to note that the BJP, in the backdrop of its support for the Rama Janmbhoomi issue had emerged as a principal player in Indian politics following the 1989 elections when it emerged as the third largest party with 85 seats. The 1980s saw the rise of regionalism, facilitated by the decline of the INC as well as the rise of new social groups (Especially in Northern India) that the former was unable to accommodate. Between 1991-1999, regional parties increased their vote share from 26% to 46% (Ziegfeld, 2012). As a result of this, the balance of power was tilted in favour of the states as opposed to the centre in the federal relations of India. This was reflected in the foremost role regional parties played in coalition governments continuously since 1989-whether in the National Front, United Front, UPA as well as NDA governments.

The 90s also saw the increasing visibility of markers of identity- caste, religion, tribe, language etc with the ongoing process of regionalization. This was characterised by the interplay of three

factors- Mandal (Caste), Mandir (Rama-Janmbhoomi dispute), and Market (Economic Liberalization) and the associated ascendancy of interest groups due to these factors. The electoral picture was getting fragmented politically with local/state level actors coming to hold important positions on the federal, but more importantly on the national level in multiple coalitions. This was the period when Lohia-ites such as Nitish Kumar and Mulayam Singh Yadav, Ambedkarites such as Kanshi-Ram and Mayawati and regional leaders from the South such as NTR and later Chandra Babu Naidu in Andhra Pradesh or Karunanidhi and Jayalalitha in Tamil Nadu were able to cement their importance in coalition government making resulting in hitherto latent groups of Indian society getting mobilized and politicized (Navlani, 2006). Many regional parties that emerged during this period were simply the political manifestation of these newly ascendant social coalitions.

Competing interests and establishing prominence led to many controversial decisions such as the Mandal commission reforms (which was itself a ploy by V.P Singh to resolve internal contradictions in the Janata Dal faction) initiated by the National Front government, ultimately leading to its downfall. Another Janata Dal experiment by Chandrashekhar led to the formation of the Janta Dal (Samajwadi) which formed a minority coalition government with outside support from the Congress and met the same fate. The Congress re-emerged in the 1991 elections, partly due to the sympathy of voters for Rajiv Gandhi's assassination. Congress under Narsimha Rao eventually formed a minority government which later became a majority after merging the Ajit Singh faction and allying with the JMM, surviving a full term of 5 years but only deepening anti-incumbency, leading to the rise of the BJP. The BJP formed three governments within a span of three years, lasting for 13 days, 13 months and a full term of 5 years. By this point, it had emerged on the national scene as the major political force and efforts were now made by the congress and regional players to undercut the same. Between, 1996-1998, the third front experiment, with Congress's support, was tried twice under the premiership of H. D. Deve Gowda and I.K. Gujral, with not much success. In this sense, one can characterise the cementing bond of coalitional politics in India as negative- where the Anti-Congress-ism starting from the late 1960s eventually came to be replaced by Anti-BJP-ism in the 1990s when it emerged as a national party (Singh, 2001).

4. Towards a growing Bipolarity, contestations between the NDA and the UPA

A broad two-party competitive coalition contest was seen most prominently between the period of 1998-2014, among the BJP-led NDA and the Congress-led UPA. While the NDA remained in power broadly from 1998-2004, the UPA was in power from 2004-2014. This period marked the strength that smaller parties demonstrated in policy decision-making. The BJP had to back down on its demand of the Mandir, Article 370 and Uniform Civil Code to remain in the alliance. Congress, on the other hand, had to face the ire of the Left for accepting the Indo-US Nuclear deal. This led to BJP and the Congress deciding on a common minimum program, handing out suitable ministerial berths to allies and accommodating them in policy decisions. Although the Congress Party made a spectacular gain in the 2009 elections, winning 206 seats, it could not remain in the driver's seat, often at the mercy of allies. In fact, it had a difficult time removing corrupt ministers as allies exercised full control over minister portfolios. This era was characterized by a significant decline in the power of the Central Government, with diminished control. This growing bipolarity is not to suggest that Duverger's law finally took hold in India, indeed as we have seen, the process of regionalization and fragmentation continued well into this period (Jaffrelot & Verniers, 2009), however, a broad consensus emerged around two competing ideas of national development. The Jana Sangh, the ideological predecessor of the BJP, held national unity facilitated by a centralized brand of federalism as one of its key features (Deb & Sengupta, 2009), like the Congress party post-Independence. In such a scenario, both these parties represented a unique dichotomy of ideologies grounded in a shared sense of national presence, as such the politics of the Indian state naturally came to revolve around them and their allies in a broad bipolar contest.

5. 2014 and towards a BJP-centred polity

There are many factors towards the rise of the BJP and the result of 2014 but the most important one is that there was a total lack of hope with the Congress-led UPA, while the Narendra Modi-led BJP-NDA represented both change and hope. The second UPA government (2009-2014) had rampant corruption and misgovernance coupled with policy paralysis, in part due to coalition weaknesses. By the time of the election of 2014, the Congress Party had already lost many allies,

becoming very unpopular resulting in BJP achieving a single-party majority for the first time, and a party achieving a single-party majority since 1984.

BJP achieved this success on the back of Modi's popularity and growing acceptance along with the Sangh Parivar's organisational strength and with the BJP's ideological Hindutva project, which led many political commentators to declare that the era of coalitional politics was finally over. It is the opinion of many, especially after the victory of the BJP in the 2019 elections that India has officially entered its 4th party system (Vaishnav & Hinton, 2019). As such, the central pole or anchor of Indian politics, of the kind seen during the Nehru-era has returned with the BJP now occupying a position of preponderance with its catch-all Hindutva character which resembles the Congress system in its heyday. The BJP is now present beyond the cow belt in areas such as North-East and South India where it was considered a pariah. However, to suggest that coalitional politics has played no role during this era of BJP dominance would be incorrect. Indeed, coalitional politics continues to persist prominently at the central as well as the state level and is often used by both the ruling alliance and the opposition to meet its ends.

Post-2014 narratives surrounding the 4th dominant party system of India

The Indian political landscape, at least since the late 1980s has been exceptionally fragmented politically, especially with the rise of new interest groups and the ascendancy of erstwhile backward classes in several different states (Jaffrelot, 2000). While political development has taken place with regard to a possible second coming of a consensus-based national ideology in the form of Hindutva, politics is still highly representation/interest-based as opposed to issue-based. This often manifests itself in the emergence of interest group-based political parties that are generally representatives of a particular caste/community in a region. Against the backdrop of this phase of demographic and socio-economic change, the BJP witnessed its rise politically and consolidation post-2019, prompting some to state that it may have successfully created a consensus around the concept of ethnopolitical majoritarianism (Chibber & Verma, 2019). Since the BJP's initial victory in 2014, political commentators have signalled the end of coalitional politics and the rise of India's second dominant party system. However, quite dissimilar from Kothari's initial model of parties operating on the margins of pressure- either inside the Congress or outside as a latent threat, regional parties in the era of BJP dominance have successfully operated as independent forces, shifting power dynamics in different states by allying with the

opposition or the ruling dispensation. A case in point is Nitish Kumar-led JD(U) which has been able to swing back and forth from the BJP to the RJD-Congress alliance with ease, in order to remain dominant electorally. Thus, there is apparent fluidity of choice.

Coalition politics has continued to remain relevant. Of the 42 state assembly elections that have been conducted since the 2014 Lok Sabha elections, coalition governments have been formed in 20 of them. Out of these 20, 8 have been opposition alliances against the BJP-led NDA coalition. Quite unlike the pre-1967 era of the first dominant party system, coalitional politics plays an important role for the BJP as well as the non-BJP forces and hasn't been rendered inconsequential. This would suggest that the post-2014 era is not, strictly speaking, an era of pure one-party dominance but rather that there has been a return of one party as the focal point or anchor of Indian politics around which all other parties have reconfigured themselves.

Anti-BJP forces in the post-2014 era

An important question to ask, however, is where does the opposition figure into all of this? After all, in at least six states (Jharkhand, Rajasthan, Bihar, Kerala, Tamil Nadu and West Bengal) there is an opposition alliance in power, with a Congress presence in four states. In the post-2014 era, the opposition has been increasingly seen to form negative coalitions. That is when political parties join and come together with the sole objective of pulling down the government already in power. That negative coalitions are the norm in India has been well established, moving first from negative coalitions against the Congress and then switching to the BJP in the 1990s.

Reminiscent of the anti-congress coalitions of 1967, opposition coalitions in present times too indicate growing instability- borne out of ideological mismatch as was seen in the erstwhile MVA alliance in Maharashtra, inter-party factionalism such as in Madhya Pradesh or even engineered defections- such as in Karnataka in 2019. These alliances are rooted in turmoil due to various reasons- both external as well as internal. Currently, the opposition is devoid of a common narrative or plank on which it could counter the BJP nationally, its alliances are unpragmatic and often end up hurting it (Verma, 2022), and its leaders refuse to form common

minimum programmes as has been witnessed in previous coalitions, nor have there been any interest-based coalitions as the sole objective has been centred around “stopping the BJP”.

Increasingly, the credentials of congress have also been called into question. There is growing nervousness regarding the future of the party, its declining national footprint, the steady exodus of leaders due to entrenched status-quo and ideological incoherence owing to a lack of newer ideas or issues has led to its dwindling fortunes. The result of this has been that the grand old party is no longer viewed as a central pole in Indian politics- a large party around which smaller oppositional forces might gather. Instead, that space is now seen to be up for grabs with parties such as the AAP or TMC projecting national ambitions in recent memory.

Nevertheless, there is growing clamour surrounding the importance of “opposition unity” in the anti-BJP space in Indian politics. The inability to build a broad consensus regarding the same mainly stems from state-level equations with multiple opposition parties opposed to each other- as is seen in West Bengal, Punjab, Kerala etc. The Congress has also been criticised for its inability in creating a broad alliance of opposition forces and has alternatively favoured state-level alliances such as in Bihar or Jharkhand with the formation of Mahagathbandhans.

While brief attempts have been made in recent memory for the creation of a coalition of non-Congress regional forces, with the formation of the federal front between BRS (formerly TRS), TMC and AAP in 2019, broadly speaking, opposition unity surrounding a new third front is largely absent. The prospect of a regional party alliance also seems attractive because so far only the sub-national, linguistic-based parties have proven to be reliable identity-based counters to the politics of Hindutva. In regions like the northeast or the south in Telangana, the BJP has been able to replace the Congress or the Left but when facing regional parties such as the BJD or the TMC, it has been soundly defeated. Until there is a wholesale decline of regional forces in India, alliance politics will largely remain relevant (Phadnis, 2022).

Nevertheless, positive, or negative, coalition formation by the opposition is prevalent and has acquired a unique identity in an era of BJP dominance. Moreover, until a viable national

alternative emerges, it is likely that the opposition will have to continue to rely on coalitions to meet the ruling dispensation head-on.

Coalition formation in the 4th party system- the BJP's rapid rise in the North East

The BJP's national footprint has steadily increased since its initial victory in 2014, this has perhaps been most apparent in its expansion in the northeast. The BJP has treated the region as a whole, ensuring it gets visibility both politically and economically, while giving respect to its culture. Although the entire Northeast comprises 25 Lok Sabha seats only, there are huge repercussions with respect to security and geographical access to East Asia. This is best reflected in BJP's inroads in Assam which had been a combination of ideological narrative and political pragmatism (Tripathi et.al, 2018), its alliance with AGP and BPF not only granted it legitimacy but also prevented a split in the anti-congress votes in addition to fragmenting the vote base of the opposition. To this effect, the BJP post its win in the 2016 Assam elections decided to form the North-Eastern Democratic Alliance after which it has only continued to grow and consolidate its electoral strength. The NEDA in Himanta Biswa Sarma's words, who serves as the national convenor, was "to improve coordination among NDA partners in NE states and strengthen their base in the region, in addition to ensuring speedy development and good governance". It allied with and co-opted several regional parties and political leaders on a broad plank of anti-Congress sentiment, the result being that currently the BJP and its coalition partners in NEDA are in power in all eight states in the region with the BJP directly governing in four.

BJP-led NEDA employed various strategies; pre-poll understandings in Assam or post-poll alliances such as in Meghalaya- the BJP was able to win one state at a time; It also relied on the strategy of co-opting powerful leaders by engineering splits and defections in opposition parties, as was seen in 2016 in Arunachal Pradesh when the INC-led Pema Khandu government defected en-masse, first to the PPA and then to the BJP.

In addition to electoral calculations, the BJP was also able to build upon ideologically by displaying flexibility in dealing with regional identities, while simultaneously assimilating them into the broad Hindutva narrative. For instance, quite unlike the BJP's ideological outreach in the Hindi heartland, it focused on adapting local cults and symbols such as those associated with

Kamakhya and Sankardev-Sattra traditions (Tripathi et.al, 2018). Similarly, in the more Christian-dominant states such as Manipur or Nagaland, the BJP's policy of adapting to the local conditions is reflected in how Christian leaders of the party call it the "Bharatiya Jesus Party", with the Sangh running book banks and health camps for Christian groups (Uttam, 2018) (for more information, refer to Table 2).

The latter too played an important part in this outreach, through development programs, facilitated by the Vanvasi Kalyan Ashram, an organisation that runs health and education services for the tribal communities, and Seva projects, which are aimed at offering help in deprived and remote areas. Moreover, it also tried to reach out to traditionally reticent groups such as the Nagas through demands for awarding a Bharat Ratna to Rani Gaidinliu, the legendary Naga freedom fighter in addition to the valorisation of Indian freedom fighters popular in the region such as Subhash Chandra Bose (Gupta, 2018).

This points out the importance of coalitions in building a broad-minded alliance to take care of the various aspirations of the people of the northeast. It also points out the ways in which a national party like the BJP gains prominence through coalition innovation by carving out separate institutions to take care of the interests of coalition partners. Yet, the NEDA also represents an attempt to re-alter the way in which coalition politics is used to alter the landscape of politics in the Northeast.

Conclusion- what does the future hold?

The BJP's rise in the northeast was entirely predicated on coalitional politics. The simple reason behind its dependence on the same was because India is too diverse demographically for a single party to represent a multiplicity of interest groups, this is not just apparent in the North-East but also in other states such as Uttar Pradesh where the BJP has allied with the NISHAD party and AD(S) or in Goa where it is allied with the GFP and the MGP. The BJP's coalitions-either interest-based or opposition based are centred around either ideology, identity, issues, or electoral expediency. Coalition governments allow a party to build strong social coalitions that offer electoral stability and ideological extension to hitherto unintegrated communities as well as affect development and welfare decisions. The final point is quite interesting to note, the BJP's campaign

in the North-East was a developmental campaign as well, long years of Congress rule had stymied the prospects of the region which prompted the BJP to make promises aimed towards securing the same while simultaneously being conscious of the cultural background of the respective states. In many ways, it further emboldens the point that issue-based politics has seen a rise in India and coalition formation might also be along the line of issues in addition to ideology and identity, as has been witnessed previously.

In fact, one of the major reasons behind the rise of the BJP individually since the 1990s till now has also been centred around the alliances it has struck (Heath, 1999)- at the national level as well as the state level. In Goa, for instance, the BJP's alliance with the MGP and its subsequent cannibalization of the party's traditional vote base allowed it to emerge as one of the principal players in the politics of the state. Yet, it continues to ally with the MGP. Similarly, in Bihar, the BJP – which was until very recently a junior partner to the JD(U) emerged as the single largest party in the 2020 assembly elections. Even in the historic 2014 Lok Sabha elections, of the 282 seats won by the BJP, as many as 57 seats were accounted for by states in which the BJP depended significantly on coalition partners. These are Maharashtra (23 seats), Bihar (22), Haryana (7), Andhra Pradesh (2), Punjab (2), and Tamil Nadu (1) (Farooqui & Sridharan, 2014). Alliances have offered the BJP both opportunities to expand individually as well as gain a foothold in regions where it has no traditional presence- such as in Punjab with the SAD, Tamil Nadu with the AIADMK and PMK and Puducherry with the AINRC.

Moreover, as previously hypothesized in 2014, it won't be a stretch to suggest that the party will continue to rely on coalitions in the future for government formation in states where it cannot expect to win by itself. However, a caveat might be added here that the dwindling number of NDA allies might suggest that the BJP plans to expand its individual presence, which might further point to the possibility of it eventually becoming a pure-one party dominant system down the line. Realistically, however, this is quite unlikely presently and might take a long time to actualize. All of this is not to suggest that the era of coalitional politics of the kind witnessed from 1989 to 2009 is still ongoing, rather it means that it hasn't become entirely irrelevant and remains a consequential part of the 4th party system. Therefore, in an era of supposed one-party dominance,

the BJP is in an alliance of some sort, either as a junior partner or a senior partner in 11 out of 16 states in which the ruling NDA is in power.

Politics in India is essentially representational, characterised by the emergence, politicisation, and organisation of new interest groups- based on ideology, identity, or issues. Relevant literature on the emergence of political parties suggests that factors such as cultural diversity or economic inequality might result in the formation of the same (Harmel & Robertson, 1985). India's political history has seen the ascendancy of emerging interest groups since Independence and with growing economic development and political outreach, these communities are bound to get more mobilized and manifest themselves as political parties. The same was witnessed in the post-Mandal era with the rise of the OBCs on the national scale, with the rise of Hindutva forces following the Rama Janmbhoomi Movement and in recent memory with the rise of the AAP following the 'India Against Corruption' movement. If this representational form of interest group formation continues, coalitional politics in India will continue unhindered as no single party would be able to acquire a catch-all character. The trends certainly point towards that, with the formation of new constituencies under the new national delimitation plan in 2026, the emergence of new interest groups is only bound to increase.

While the BJP has been seen to emerge as the predominant political party of India, it still requires coalitions in several parts of the country to increase its catchment area for extending its social coalitions to newly formed interest groups. These coalitions serve multiple purposes- ideological as well as electoral. Moreover, it has not yet breached the regional fortresses, unable to build its own base, especially in South India despite trying various alliance configurations.

Moreover, while it is true that the BJP has not yet attained a hegemonic position in Indian politics, recent developments surrounding the exit of multiple NDA partners in key states such as Punjab, Bihar and Maharashtra suggest that the BJP might be attaining a more monolithic character. This might point to a future where it may seek to contest alone and win in areas where it previously required a coalition to emerge as the larger party. So, while we are not in an era of true one-party dominance of the kind during the 1950s, we very well may see that as a possibility in the future (Hebbar, 2022).

The opposition on the other hand has recognised that the progressive electoral deterioration of the Congress on the national and state level has opened space for new contenders that might benefit electorally by allying with each other. Some may choose to deny the BJP's pan-India aspirations by fielding coalitions in states such as Jharkhand, Bihar, or Tamil Nadu. Others might seek to form coalitions for increasing their national footprint and provide an alternative to the Hindu-Welfarism model of the BJP. Examples of the latter might be seen in the alliances built by the AAP with the BTP in the run-up to the 2022 Gujarat Elections or those built by the TMC in the 2022 Goa elections. Moreover, the rising discourse of sub-nationalism in India- both by the Congress as well as the non-Congress opposition points again to the oscillation and contestation between the two differing perspectives of centralised union and regional federalism. A future that witnesses the decline of the BJP's political fortunes might be predicated on the same unless a viable national alternative arises.

In conclusion, this process of coalition formation is only bound to increase with the passage of time. It might be due to the BJP's need to expand to hitherto untouched territory, the congress-led opposition's negative coalitions to keep the BJP out of power, the formation of a regional-parties led third front or even the emergence of a new national-level party as an alternative to the congress. Coalitional politics is here to stay and ironically, even its removal would probably require its operation initially – thereby signifying its exceptional relevance for the time being.

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Table 1

Performance of Political Parties – 1967 Legislative Assembly Elections

State	National Parties								Regional Parties										IND	Grand Total	Non-Congress Coalition formed
	BJS	CPI	CPM	INC	PSP	RPI	SSP	SWA	JKD	KEC	MUL	JAC	ADM	ADS	DMK	FBL	BAC	FBL	-		
Haryana*	12	0	0	48	0	2	0	3	-	-	-	-	-	-	-	-	-	-	16	81	United Front (Haryana)
Bihar	26	24	4	128	18	1	68	3	13	-	-	-	-	-	-	-	-	-	33	318	Samyukt Vidhayak Dal
Kerala	0	19	52	9	0		19	0	-	5	14	-	-	-	-	-	-	-	15	133	Seven Party Alliance
MP*	78	1	0	167	9	0	10	7	-	-	-	2	-	-	-	-	-	-	22	296	Samyukt Vidhayak Dal
Orissa	0	7	1	31	21		2	49	-	-	-	26	-	-	-	-	-	-	3	140	Swatantra-Jana Congress
Punjab	9	5	3	48	0	3	1	0	-	-	-	-	54	10	-	-	-	-	229	362	Popular United Front
Tamil Nadu	0	2	11	51	4	0	2	20	-	-	-	-	-	-	137	1	-	-	6	234	DMK led-United Front
Uttar Pradesh*	98	13	1	199	11	10	44	12	-	-	-	-	-	-	-	-	-	-	37	425	Samyukt Vidhayak Dal
West Bengal	1	16	43	127	7	0	7	1	-	-	-	-	-	-	-	-	34	13	31	280	United Front (West Bengal)

Notes – BJS, Bharatiya Jana Sangh; CPI, Communist party of India; INC, Indian National Congress; PSP, Praja Socialist Party; RPI, Republican Party of India; SSP, Samyukt Socialist Party; SWA, Swatantra Party; JKD, Jana Kranti Dal; KEC, Kerala Congress; MUL, Muslim League; JAC, Jana Congress; ADM, Akala Dal Master Tara Singh Group; ADS, Akali Dal Sant Fateh Singh Group; DMK, Dravida Munitra Kazhagam; FBL, Forward Bloc; BAC, Bangla Congress; IND, Independent.

*Signifies the states where the congress faced defections after the 1967 elections and lost its majority

Source- Election Commission of India, <https://eci.gov.in/search/?q=1967%20&quick=1>

Table 2

The BJP's rising vote-share in Manipur since the 2007 Assembly elections

Year	Vote Share (%)
2007	0.85%
2012	2.12%
2017	36.28%
2022	37.8%

Source- Election Commission of India, <https://eci.gov.in/files/category/81-manipur/>

Cooperation, the last stage of colonialism: Analysing the influence of France in Africa

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Abstract

The objective of this research paper is to analyse the transformation of France's colonial influence in Africa and comment on the contemporary relevance of the same. It will highlight the importance of the region for France, discussing the reasons surrounding the latter's persistence in ensuring its dominance in the region. Furthermore, it will illuminate the concept of *Françafrique* and the mechanisms developed by France to shape its relationship with Africa in a manner that will ensure its effective control of the region. Finally, it will also explore the contemporary challenges that the country has faced in the region and provide an appropriate conclusion regarding the possible prospects of the same.

Keywords: Françafrique, CFA System, neo-colonialism

Introduction

“Without Africa, France would have slid down into the ranks of a third-world power”

- Jacques Chirac, Former French President (Riley, 2016)

Colonialism, quite prevalent until the late 1940s, started to collapse after the end of the Second World War. With the onset of the process of de-colonisation, colonial powers had to reluctantly abandon their colonial possessions. Though all the other colonial empires fell, the French Empire survived, backed by certain transformations and alterations. This was because of the desperate ambition of France to cling to her colonies for economic and geopolitical advantages which led to severe consequences like the war in Indochina and the bloody freedom struggle in Algeria.

In the wake of such incidents, De Gaulle decided to reorient France's relations with Sub-Saharan Africa to ensure the empire's longevity in the region, which to a great extent is still alive.



Figure 1: Representation of Colonial Africa in 1914

Note: Sourced from <https://twitter.com/historyville/status/1346340915284217856>

France and Sub-Saharan Africa: Colonialism to Cooperation

To understand the restructuring of relations between France and Africa, it is important to consider why France needed control over Africa.

Firstly, the colonial holdings in Africa were the cash cow of France. The colonies served the dual interests of the colonial power by providing it with the supply of raw materials and being centres of demand for French goods. As a result of this, they provided France with significant monetary profits by supplying cheap resources and importing French goods without any major competition. Due to the world war, the French economy was worn out which prompted France and its allies to extract economic support from Africa. It is also important to note that economic backing was not only required for post-war rebuilding but also for long-term economic gains.

The second reason is that the colonies were instrumental in international politics. France needed its colonies to ensure that it continued to play a major role in world politics. In the post-war era, the USA and the USSR became major players in the international arena, replacing the UK and France. France wanted her place back or at least be at the third spot in global politics and it could do so only by holding her colonies back (Benneyworth, 2011) as the UK was transforming its colonial empires into the commonwealth.

Thirdly, the colonies were associated with French prestige and served as an important geopolitical area. France treated Africa as its backyard or its region of hegemony and could not accept any interference by any other state in the same. Africa served the needs of France whenever required. For instance, the free France movement survived and was sustained largely due to the support and backing of African colonies. The African colonies gave France a tremendous stature on the global stage and supported her economy, thereby increasing French economic and diplomatic strength and thus being a symbol of prestige for Paris.

Fourthly, we have psychological reasons. In the 1940s, 50s and 60s, the French leadership was largely under Charles de Gaulle and other legacy colonial-era politicians who were born and brought up in an era of French dominance. Thus, it must have been psychologically difficult for them to accept that the superior status of their country would be gone and to save or maintain it, control over colonies was needed. Also, there might have been a hope that with a few changes their empire may survive (which was partially true).

Due to the aforementioned reasons, combined with the fall of Indo-China and the freedom movement in Algeria, France wanted to have stronger ties with the Sub-Saharan Colonies of Africa. By the early 1950s, France became delusional with the colonial concept of iron fist control on her colonies and realised that it cannot continue in the same fashion. It thus went on to transform her relations with Africa in such a manner that in the name of African emancipation the needs of France would be served. This transformation was not to be done via top-down control but through blending the socio-political, economic and cultural spheres of Africa and France. This would in turn strengthen their ties and make their relationship inseparable for decades to come.

Figure 2: The Franc Zone, a Tool of French Neo-colonialism in Africa, 2020 (Sylla, 2020)



Note: The picture has two sides, one reflecting the image of Franco-African love but the other reflects France subverting African nationalism and culture for her benefit as the French flag (symbol of French glory and prestige) is raised by an African woman who is symbolising Africa. She (Africa) is not doing so by free will as the image shows the hands of the woman tied in a chain, which interprets into denial of real freedom to Africa, the picture reflects the fusing of two dissimilar cultures.

This transformation came under the titles 'union française' and 'communauté française', which were the new names of the French empire (the latter for the empire in Africa) and was the result of a referendum under which France began the process of civilizing African states to evolve as successful democratic nations. In this referendum, the states in Africa could choose either full immediate independence, thus cutting off all ties from France and the Franco-African Community (the collective identity of French colonies in Africa) or opt for slow and partial independence under the guidance of and with the continued political, economic and diplomatic backing of France under the African-French community.

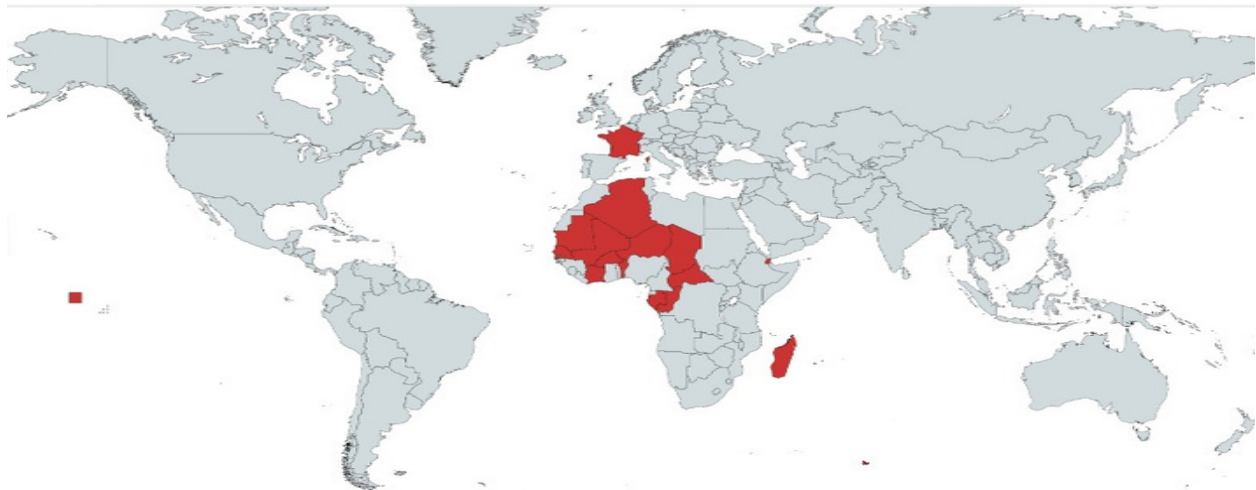
Guinea was the only nation to opt for absolute and immediate freedom and had to face harsh consequences at the hands of France (Hundeyin, 2019), while all others received heavy economic

support/aid, political backing and full protection from the French metropolis and became French-dominated thus serving as resource-rich territories of the modern French Empire. France influences or directs all types of policies of these states and also gets economic gains & diplomatic influence on the international stage. This transformation through which African nations gained partial freedom and France got legitimate influence on them was highly romanticized by the French intellectual class and the nation's puppet governments in the region.

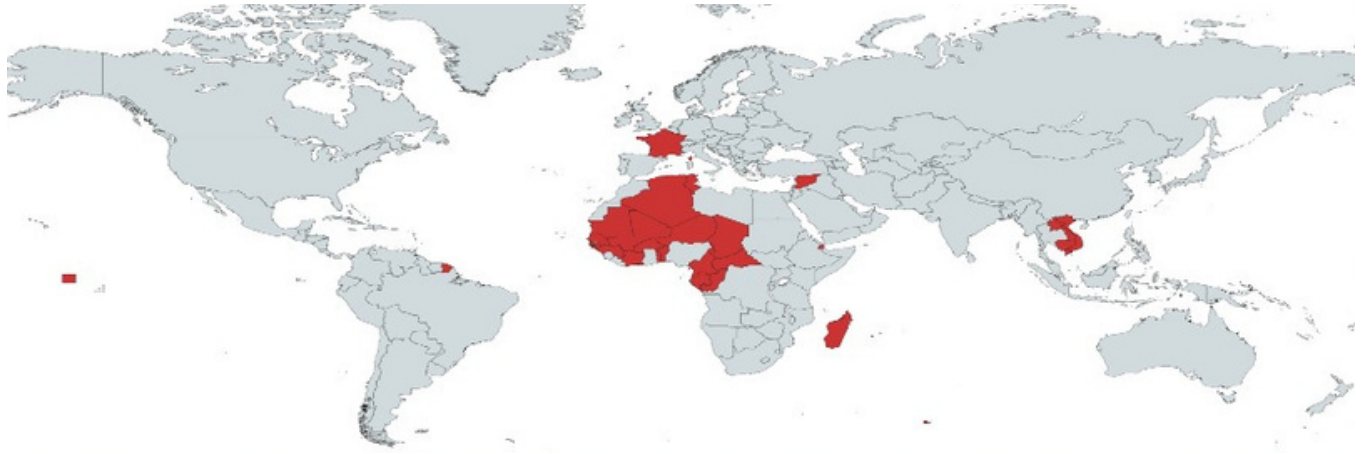
Over a period of time, it was showcased as a relationship between two brothers who were to stand together in all conditions. This policy/ model of control is termed neo-colonialism, which as per Kwame Nkrumah is the theoretical independence and sovereignty of a state, while its economic system and political policies are directed from outside i.e., from another state. This is still very true in the cases of Franco-African relations as even after getting independence in the late 1950s and early 60s (some in the 70s), France is still dominant in the region. For domination, one must analyse various aspects of this relationship.

Figure 3: Pictorial Representation of the Transformation of French Colonialism to Neo-colonialism

(a) Map showing major regions under French Colonial Rule in the 20th century



(b) The map of the French community, 1959



(c) West African CFA Zone



(d) Central African CFA Zone



Note: The above maps show the changing (reducing) influence of France's métropole on the geopolitical level, thus reflecting the desire of France to maintain control of what was left of her empire (French Africa).

Aspects of *Françafrique*

'Françafrique' was a term coined by Houphout Boigny to describe what he believed was the complex web of mutually beneficial relations between France and Africa.

Unlike the other European powers, France decided to intertwine the different aspects of her state and society with Africa in such a complex way that it would become nearly impossible to end her control in the region. The complexity is the result of four interrelated factors:

1. Economic Factor: The francophone African nations use the colonial currency CFA Franc (West African and Central African CFA) which ties these nations closely with the French economic system as it did in the colonial era. This has always been a highly debated issue; the supporters of the system argue that it provides economic stability by avoiding high inflation and is valuable because it is pegged with the Euro (earlier with the Franc) and thus has a stable exchange rate. While opponents of the CFA system criticise it as the colonial tax, it is via this system that France earns billions of dollars every year. The arguable figure of \$500 billion is extracted every year from Africa by France via the CFA system.

This continues to date and is due to the cooperation treaty signed between 14 Francophone African nations and France under which 50% of the Foreign Exchange Reserves of these African nations were to be kept with the latter. These countries can only use 15% of these reserves, exceeding which they have to resort to borrowing (Mbogo, 2020). This agreement was on the pretext that the former colonies will be using the infrastructure built by France during the colonial era, so they must pay for that (Mbogo, 2020). Togo under Sylvanus Olympio desired to shed away this colonialist arrangement but was killed by Togolese soldiers trained in France, thus the aspiration of getting free never came true (Boisbouvier, 2021). There are demands to get rid of the system in West Africa which are getting some heed, but this won't be easy for Africa without French will as it provides the former with a lot of bilateral economic aid, thus forcing it into subservience.

1/3rd of French Official Development Assistance (ODA) which is around 3 billion euros flows in Africa per year. A major part of this is directed towards education, culture and scholarships thus greatly influencing these arenas. The economic influence of France in Africa is hugely supported by French companies operating in the region, these MNCs have hegemony, if not a monopoly on African trade and resources, and are both the result and reason for the French colonial grip on the region. France, to date, through these companies imports significant raw materials from Africa as it has been doing since the 1830s, which in fact, have grown now. The raw material and energy dependence of France on Africa increased from 30% in 1950 to 80% in 1989, 100% uranium

imports of France come from Gabon and Niger, while 70% of the total extraction of oil by Elf-Aquitaine (a French corporation) is from francophone Africa (Benneyworth, 2011). Niger's uranium supplies keep the lights on in Paris while the country remains dark because of the one-sided agreements between these companies and the government. Also, the cooperation treaty provides the right of first refusal on any natural resource found in the region to France. Areva, the French uranium mining company operating in Niger has more revenue than Niger.

This system of French economic control is facing a threat from the rising investments by China which has surpassed France in terms of bilateral trade in the region. Thus, it has invited direct trade conflict with the US, which is in a trade war against China. Along with them, India, Japan and the EU are all trying hard to make inroads in the region but France has now shifted focus on retaining her core zones of influence in the economy of the region like control of mining and natural resources etc. Through the cooperation agreements signed between 1958 and 1960, France is now involved in the monetary policy formation of the region which comes through the CFA as the apex boards of the two CFAs provide seats to France (Sylla, 2020) and therefore even after being challenged and surpassed in different parameters, France remains the actual master and controls the economies of the region.

2. Political Factor: Control over a region is generally associated with political control because, without it, the control of the resources and population of a region is impossible. Therefore, the French have ensured that even though the CFA zone countries are officially free, the political and governance structure is under French control. To do so, the process of giving slow freedom to Francophone nations post the 1958 referendum began under which these nations first became politically free with their premiers heading their governments in the late 1950s and then sovereign with the same premiers being elevated as presidents. The first leaders of these nations were handpicked by the French government, the presidents of these states were selected after two rounds of clearances, one from Jacques Foccart (the advisor to 4 French Presidents) and President De Gaulle and thus they acted as if they were directed by France on all issues (Diop, 2018). Shortly before independence, France decided to introduce the Presidential form of government in all the nations following the Parliamentary setup as controlling one person would be easier than controlling a set of lawmakers (Fröhlich, 2020). The cooperation treaty signed as a part of Françafrique devised by Foccart has played a significant role in

role in ensuring French grip on the governments of these states as the treaty gives France exclusive zones of economic influence, allows her to keep troops in the region and blocks these nations from entering into a military alliance with any other country without approval. This also brings the army leadership of these nations closer to France. Thus, in a situation where political leaders of these nations slip from the grasp of French control, they are dealt with by the military—either French or native and are thus removed.

This was very evident in the killings of Thomas Sankara of Burkina Faso and Sylvanus Olympio of Togo who dared to stand against the French interests. This cooperation treaty has been such an important tool for French sway in Africa that the French government forced African heads of state to sign it at times even by building psychological pressure and harassing them. For example, the premier of France wrote to his Gabonese counterpart that the condition for their freedom was to sign and respect the terms of the cooperation agreement as was done by others (The Franc Zone, a Tool of French Neocolonialism in Africa, 2020). They had also divested the economy and governmental infrastructure of Guinea which opted not to accept the post-independence dictates of France and this had set an example and message for other nations. There has always existed a band of African elites who have benefited from this relationship between France and Africa and have supported the status quo. Similar to the relationship between *zamindars* and the British in India, many heads of state in francophone Africa were in power due to their personal ties with French elites.

Alongside armies and treaties, French MNCs are also accused of influencing elections in the region for their benefit. The French state and major brands have also been accused of having supported dictators in the region who fostered French needs like in the case of Emperor Bokassa of the Central African Republic and others. Over a while, French Presidents and the Heads of the CFA states have enjoyed a special relationship under which the African leaders have supported candidates in French electoral competitions and then these presidents have supported the rule of these leaders in their states. Candidates of French Presidential elections till now visit these nations on campaigns and the transformation of relations with them have always been on their election agenda, though no real positive change has ever occurred. Many African states to date have dictators and presidents backed by France and these nations wait for their real political independence.

Currently, France is facing a challenge from Mali where the Russian-backed government has taken over and has asked French troops to leave the region. However, even after this, French influence is strong in the region as the opponents of the government are seeking and receiving support from France, while the other zones of influence remain intact.

3. Security Aspect: Security is one of the most crucial aspects involved in Franco-African relations. It was the foundation on which the process of civilising Africa was based when the nations of Africa opted for slow independence to ensure that they could become successful democracies & properly functioning nations. These African nations faced major threats from militias or army takeovers, either backed by one of the two superpowers or self-originating ones and thus they entered into security agreements as a part of a cooperation treaty with France. This would ensure the security of the newly emerging states as this allowed France to station troops whenever needed, although under the agreement these nations were also obliged to send troops to assist France whenever called for. This arrangement has been both a boon and a bane for both Africa and France.

On one hand, through this system the French train the African troops (Mbogo, 2020) and defend the cause of these governments whenever required and on the other hand, these troops trained in France have brought down many Anti-French governments in the region. In addition to this, French troops ensure that the business interests of the colonial power are not compromised in any condition, even in civil wars like the one in Chad. This maintains the hegemony of France in the region but comes at the cost of the lives of French servicemen. The Sahel region, which largely lies in the CFA Zone, is one of the most disturbing terrorist belts in the world. It has also become a haven for Jihadist fighters from the Middle East, who are now operating in the region alongside other native terror groups (The Hindu, 2021). The civil war in Libya has also served as fuel for terrorist activities in the region. France, since the rise of jihadist groups, has tried to curtail them in the region to ensure that its interests and prestige are intact. Jihadist terrorism is viewed as a cause of insecurity for France because if they take over the government in the countries of the region, its influence in the region will be sabotaged. At present more than 5000 French personnel are fighting the extremists in the region.

4. Socio-Cultural Aspect: The real essence of Franco-Africanities lies in this aspect of their relationship. To achieve socio-cultural assimilation, African nations were made to accept French as

their official language (Borchers, 2017) and since then, French has been the most prominent medium of education. Moreover, the influence of France on the education system of central and western African countries has been such that even after decades of independence, the content of the textbooks in use was finalised by the former. This was and is more rampant in central Africa.

The colonial hangover is still prevalent, especially amongst the elite class of these nations as they try to and are deeply ingrained in the French lifestyle, which is associated with prosperity and class mobility. Thus, people in the lower strata of these societies must adopt these French ways and norms since without them it is difficult to reach the upper echelons of society. Even the Presidents, Dictators and Emperors of francophone Africa see their French counterparts as role models. For instance, Jean-Bedel-Bokassa, the Second President and the Emperor of the Central African Republic was a French army officer who crowned himself as emperor on 4th December 1977- he was influenced by French Emperor Napoleon I and crowned himself in a manner as his role model (Association for Diplomatic Studies and Training, 2014). His coronation attire was also made by the same company that did it for Napoleon. Throughout his autocratic rule as president and emperor, there were accusations that he received assistance from France and French MNCs.

Figure 4: Bukasa and Napoleon

Note: (Left) Clockwise- Bukasa's crown, imperial emblem(Napoleonic eagle on top), admiration for Napoleon & De Gaulle, and dressing for the coronation ceremony. (Right) Napoleon's crown, royal dress, and Napoleonic eagle. Notice how the crown & dressing styles of both emperors are similar. (Melloul, 1977) (Pavlovsky, 1985) (Hoành, 2019) (Apic, 1804) (Heritage Images, 1821)

Sourced from (www.gettyimages.in/photos/jean-bedel-bokassa),

(www.gettyimages.in/photos/coronation-of-napoleon),

(cvdvn.net/2019/03/26/the-vietnamese-daughters-of-an-african-emperor-2-vietnamese-daughters-of-african-president-wed/) and (medias.gazette-drouot.com/prod/medias/mediatheque/76673.jpg)



As per the cooperation treaty, senior African military personnel were to get training in France and would thus develop an appreciation for the French military and technical superiority. This would ultimately lead to them always looking towards French assistance in any calamity and would keep other powers out of the region. It has always been a trend that anti-French governments in sub-Saharan Africa are brought down by army men trained in France. There has been a lack of exposure to any alternative external culture in this region as the population here has been under colonial control and then French influence now for more than 180 years. During the cold war, almost all third-world nations were either influenced by the US or the USSR but in this region, only French influence was present. To counter USSR, the USA backed France in this region and opted to remain out to ensure that France was not annoyed. After the cold war in the unipolar world, the US did not pay much heed to the region. The countries of the region do not have a promising diaspora, as not many

people pursue higher education. Outside the francophone zone, there is a great disparity between former British and French colonies when it comes to students going abroad for higher education and jobs. While much of the education back home is influenced by France, major parts of the Official Development Assistance (ODA) are directed towards education and culture.

The major threat that the French socio-cultural influence faces in the region comes from the Jihadists who have proposed a separate ideology, which is gaining ground in the region and is driving the people against the French-influenced governments.

These aspects of Franco-African relations are the cornerstones of the neo-colonial empire of France, and have undergone some changes over time but have largely remained static and biased towards French benefits.

Recent developments and challenges to the French empire

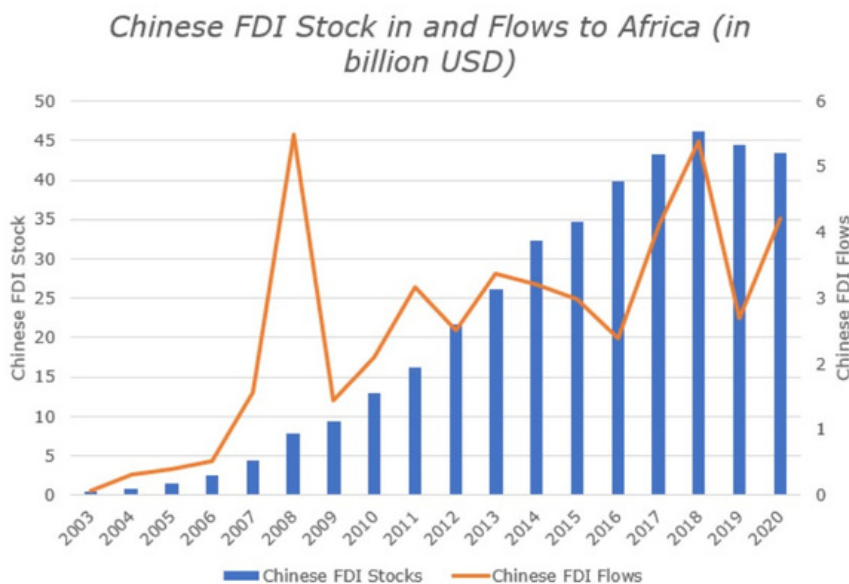
President Macron, who took the office in 2017, was quite critical of colonial rule and its legacy. He had the desire to rebuild French policy towards Africa. He has acknowledged the horrors of the colonial era and has decided to reshape & restructure the ties with former colonies in Africa, and has done so by trying to be more transparent when it comes to tracking the past links of France with Africa which involve the grimmest memories.

To restructure the relationship, he had also decided to return colonial artefacts to Africa from French museums. The financial dimension of this transformation involves doing away with the CFA System, but it has been an uncertain issue as not all nations in Africa are willing to end it. The Western African nations are more willing to bring a change while the central African nations lack this determination. The President's stand is also somewhat ambiguous. While Macron on one occasion stated that CFA is a non-issue, at another event Macron and the President of Ivory Coast said that they will transform the CFA system and obligations like the deposition of 50% of foreign exchange reserves with France. There exists a will among West African nations to end CFA in favour of one single currency called Eco; the program aimed to achieve a major milestone by 2019-20 but got delayed due to the Covid-19 pandemic. Though this system looks for change, that would not be an end of French control of the region and will only happen when it gets a nod from the French government, as has been the case in the past i.e.,

whenever the terms of CFA were altered, it was with the consent of Paris. For example, following the independence of CFA nations, they were obliged to keep 100% of their Foreign Exchange reserves with France but then with a nod from France, it was brought down to 65% in 1973 and then 50% in 2005 (Chowdhury & Sundaram, 2022). So even though the system changed it was with the will of France. So, it is anticipated that even if the system has to end, French benefits will not be compromised.

The public opinion on Macron’s outlook on Africa is extremely divided as some people believe that he genuinely wants to reform Franco-African relations, while others call him a modern-day De Gaulle because of his high ambitions, which can’t be fulfilled without Africa as his geopolitical backyard. As former French Prime Minister Jacques Godfrain put it “... A little country [France], with a small amount of strength, we can move a planet because [of our] relations with 15 or 20 African countries ...” (Riley, 2016). Another recent economic development is that China has taken over France in terms of bilateral trade and is pouring in investments in the region. In the year 2000, France was the largest economic partner of these countries and as of 2022 it has been thoroughly replaced by China but again this challenge loses its edge as France controls the governments of the region and determines the monetary policy thus keeping a check on Chinese ambitions (The French History Podcast, 2022). Also, to tame China, France has increased its cooperation with India in the Indo-Pacific.

Figure 5: Chinese FDI Stock in and Flows to Africa (in billion USD) (Fu, 2021)

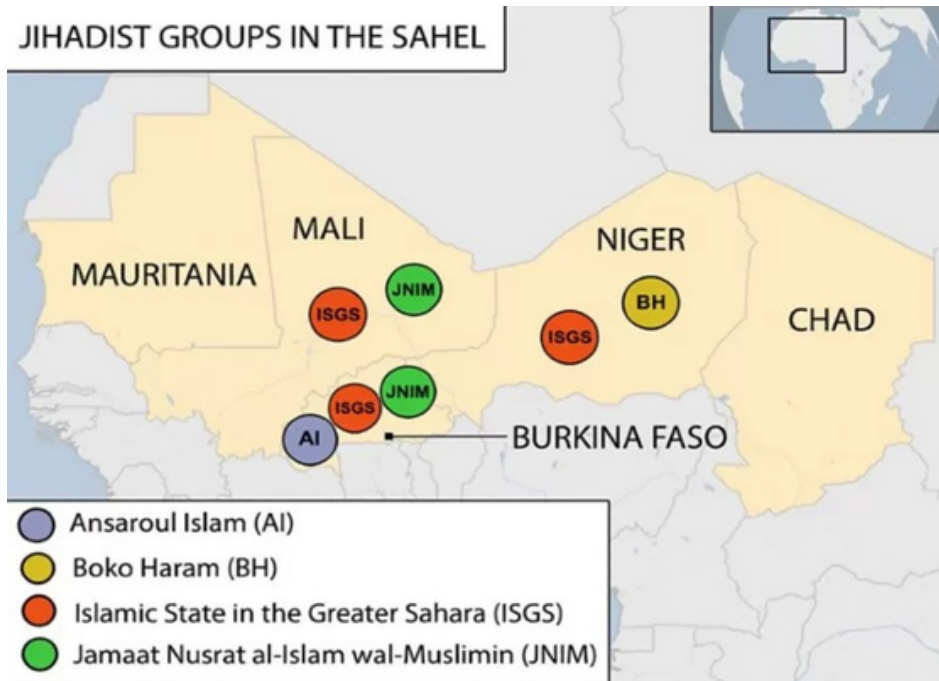


Note: Sourced from <https://thediplomat.com/2021/11/the-quiet-china-africa-revolution-chinese-investment/>

The takeover of Mali by a Russian-backed Anti-France junta government in 2021 is a major political challenge to France but it is determined to retake the fallen fortress and for that, it counts on the economic, socio-cultural and security aspects of her relations with Mali. Although the French have got the ultimatum to leave Mali, they are counting on anti-government rebels for their return, which is a serious possibility considering that the security conditions of the region provide it with the grounds to make a comeback. Also, the French MNCs operating in Mali make way for the security of French economic gains.

The steep rise of terrorist activities in the Sahel region, which constitutes 9 francophone countries has created great challenges to the political, economic, socio-cultural and security interests of France. The French government is in no mood to take it lightly and it gets more complicated as to take over the terrorist belt, it requires direct and prolonged military involvement in the region which is not a very popular idea for many in France as hundreds of French personnel have laid their lives on foreign lands without gaining much success. Even after some major operations by France which killed terrorists like Adnan Abu Walid al-Sahrawi, the region still serves as a haven for terrorists and is one of the most disturbed in the world (Pandit, 2022) Also, French military operations have lost popular support from sub-Saharan nations because people there believe that France has failed to deliver in its fight against terrorism. Also, France has been accused of keeping local army men on the front lines in risky operations which lead to more native army men dying and thus causing uproar in some nations like Burkina Faso. Even after all this, Macron has not changed his firm stand on the issue of security and is determined to keep fighting terrorism in the region.

Figure 6: Jihadist groups in the Sahel (Al-Lami, 2020)



Note: Sourced from <https://www.bbc.com/news/world-africa-52614579.amp>

Analysis, is there a modern French empire?

The existence of a modern French empire can be argued by looking at the various aspects of the relationship between France and Africa. Even though Sub-Saharan African Nations are sovereign, they are still subservient to France. This one-sided relationship was built in connivance with African leaders, some of whom were only interested in retaining power and thus agreed on every dictate of France. While others were hopeful that with French aid their nations would flourish, this hope was shared with the common people who had opted for slow and guided freedom under France.

The French promise of a prosperous Africa and a mini-Paris in all mining towns providing raw material supplies to France is anything but true. Looking at the statistics of various indexes measuring different parameters of prosperity, one can say that Africa has not gained anything but has only given riches to France. Considering the HDI index 2021, one can conclude that the conditions in the region are pathetic, in the ranking of 189 nations, Gabon is the only country which is below 145 in the 119th position, which is not very satisfactory. It becomes worse when

one looks at Mali and Burkina Faso in the 184th and 182nd positions, while Niger and Central African Republic lie at the last on the 189th and 188th ranks, respectively, while France is at the 26th rank. In the ranking of 189 nations for GDP per capita, the Central African Republic is in the 185th position while the other states all rank in proximity and France again is far ahead (Human Development Index (HDI) by country 2022, n.d.). Similarly, these countries are failing to perform well on the democracy index of Africa as well. Out of the 44 African nations, the Central African Republic is in the 43rd position while Chad is in the 42nd position (Kamer, 2022). Many of these francophone states have military juntas ruling them, such as Burkina Faso and Mali. This is so because after independence these mineral-rich nations and their governments did not work for the people of their nations but for French profits, and governments who did not fit well in this framework were overthrown and replaced by pro-French leadership. This arrangement in which France is flourishing at the cost of a failing Africa is a distinctive reflection of an imperialist relation in which the concurred or colonised country serves the needs of the master nation by suffering on its own; this shows how France retains her colonial empire in partiality.

Coloniality has also played a significant role in ensuring the deep-rooted French control in the region as generation after generation believe that their people and their nations are subservient to the French. This mental colonialism is so strong that individuals even now believe that local unresolved problems might or can be solved by the French. The following instances from Burkina Faso reflect the same- when a student asked President Macron what he intended to do about the frequent power cuts in the nation and on another occasion, he was asked about the malfunctioning of the air conditioners in a school (Jacinto, 2017). Replying to the first question, he said that France should not be pointed out whenever a problem surfaces as they are no more a colonial power while on the other occasion, he pointed out to the President of Burkina Faso, saying that he was the right person to answer.

France has in the past held a European land empire but due to wars and the empire being less profitable, it went on to create an overseas colonial empire. When faced with the challenge of falling due to de-colonialization, it was transformed into a neo-colonial empire which has to date been a successful attempt to retain control of the resources and economy of the former colonial nations and has outlived challenges like rising nationalism, regionalism, the cold war, etc.

This is because France had proper plans in place after the Second World War to keep her empire afloat. Though there are growing modern challenges across different arenas like in the economy from China, in politics from rising nationalism, jihadism and involvement of Russia in the region, as well as national and international criticism of French neo-colonialism. For example, the Deputy Prime Minister of Italy said that “ *France has never stopped colonizing Africa and its colonial-style policies in Africa are impoverishing Africans*”, (Mbamalu, 2019) and the Prime Minister of Italy also accused France of commanding considerable sway over its former colonies in Africa and being responsible for several problems faced by them (Gordon, 2022) but the trends show that the fall of the modern-day French empire won't be easy and it won't be anytime soon.

As there is a major difference in the sway of France across its neo-colonial empire in Africa, it might not meet the fate of the erstwhile state of the USSR or the Napoleonic Empire. On one hand, West Africa shows more dynamism and will to separate from France, while central Africa does not, as in the case of the CFA system. Also, this control of France on her neo-colonial empire is so complex that even if one dimension of this control comes under threat, the others play a significant role to restore it. For instance, though Mali has since 2021 slipped off the hands of France politically but the French control of her resources and monetary policy remains strong and the French intelligence is also working against terrorists in the region at the same time. With the support of other countries in the region, France is trying to reassert its geopolitical dominance there while also working on bringing a Paris-backed government to the general election due in 2024. Likewise, though China has become a major player in the markets of sub-Saharan Africa and has thus invited the attention of the US, India and Japan in the region, the French interest remains intact because the political control, resources and security of the region largely lie in the hands of the same. Thus, one can say, by using all sorts of tactics France has successfully retained control of her empire.

The prolonged interference and control of France during the colonial and post-colonial periods in the countries of sub-Saharan Africa have brought the world system theory into implementation in the region as the Sub-Saharan nations serve as the periphery states and supply cheap raw material and labour force to France, which acts as the core state that gets advantages from the periphery.

This French influence is facing resistance from the youth across the peripheral countries, which are voicing their anger against French hegemony (Fröhlich, 2020). However, they are neither sure nor united on what sort of change they wish for; if it is political change, economic transformation, socio-cultural shift or are they looking to end the French influence holistically; this confusion has weakened their claims. Moreover, they are not certain about what to opt for once the French influence and interference are gone. Will they look towards the west for support against terrorism and domestic issues or towards Russia just as Mali did or to someone else?

Moreover, will the side they choose not try and build a new hegemony? Another alternative is that they can go on without external support but in this case, their survival comes into question as they are too weak. For instance, Chad has one of the highest levels of hunger in the world. Also, many of the CFA countries have a rating below average in the ranking of fragile states- these include Chad, Burundi, Central African Republic, Cameroon, Niger, Guinea Bissau, Mali, Ivory Coast, Liberia, Mauritania, Togo, Djibouti and Rwanda (Failed States 2022, n.d.). Due to prolonged exploitation and continued backwardness, these nations have become so fragile that some face the threat of meeting the same end as Afghanistan at the hands of jihadist groups operating in the Sahel and therefore need the assistance of French troops. Also, the countries of the West and Central CFA Zone have witnessed interstate conflicts like civil wars and revolts (Chouala & Ayangafac, 2008), (Kuerschner, 2013) and would have faced the same fate as that of Yemen or Libya but the French intervention to protect their interests prevented such conditions. For instance, the French troops fought in Mali to ensure that the government of Mali retains its hold over the regions which slipped out of its control, as this would ensure French dominance remains intact (Nelson, 2016). Thus, France has not allowed these states to fail and at the same time is keeping them fragile enough to ensure the survival of the French Empire in Sub-Saharan Africa and this has led to the creation of a vicious cycle in which the CFA zone countries are being exploited for the advantage of France, which is very much in line with the world system theory.

Conclusion

The analysis shows the dire condition of francophone African countries- this is largely because of the French rule and exploitation of Africa even after the independence of these countries by

policies charted by the French Government. Unlike them, if one looks at the African commonwealth nations, it could be seen that they have done significantly better than the former French colonies in different areas and are better placed in almost all indexes; they are truly sovereign and thus actually free. A basic difference that reflects their better status is the much greater student diaspora that they have than the CFA countries. This difference is because the governments of former British colonies functioned much more freely than the governments of former French colonies. This was in turn because of the difference in approaches of the British and French governments in the post-2nd World War era. Britain under the Labour Party headed by Attlee decided to dissolve the empire and create a commonwealth of nations in which the former colonies would work together with free will. In the words of the late Queen Elizabeth, it is a family of equals (Newton, 2022), as the government wanted to concentrate on issues in the UK. On the other hand, France under De Gaulle decided to reassert control back on her colonies. Thus, in the name of transformation from colonialism to cooperation, France brought the neo-colonial empire in place which is more vicious than colonialism because of the official invisibility of the other country that controls vital aspects of the suppressed nations. This official absence of the oppressor makes neo-colonialism harsher and stronger than colonialism; the external power (ex-colonial master-France) is no more directly involved in the day-to-day affairs of the former colonies, the neo-colonial power does not have the burden of handling the governmental aspects in the subjugated nation or being answerable to the problems of the people. No direct use of hard power to control these nations is needed, thus bringing down the maintenance cost of the colonies of the neo-colonial empire, thus making neo-colonialism more profitable.

Throughout elections, French Presidents and presidential candidates have talked about changing the relationship with CFA zone countries but as they come into power, they seem to do nothing constructive. African leaders have also in recent times shown more desire to leave the system and move on. This continued hold of France on its former sub-Saharan colonies shall come to an end as no empire lasts forever. The neo-colonial empire of France emerged as a measure to delay the declining control of France over its former colonies, its control would come to an end over a while, but the memory of colonial rule shall always remain. The greatest threat to the modern French empire comes from Pan-Africanism, though it is not a very strong force but it can certainly be a future prospect that can liberate former French colonies from the grip of the French state.

Nationalism can also be a way out of the French influence, and these two can be the best options as they will ensure the true sovereignty of the region, which will lead them to the path of progress.

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Climate Change & Disaster Management: The Adversity of Floods & Landslides in the Himalayan States

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Abstract

Climate change has been a phenomenon in the making for decades and has had a far-reaching impact on the present-day world. Nations worldwide have been embroiled in the disastrous outcomes brought about by this, spending billions of dollars on political, social, economic & technological mechanisms to tackle climate change. India, in particular, has been no exception to this and has suffered from various events such as floods and droughts (read natural disasters), especially in the last decade, as a consequence of intensifying greenhouse emissions, among other factors contributing to climate change. While instances of such events are apparent across the country, the Himalayan states, in particular, have stood out, for the consequences of climate change have resulted in an array of disasters such as floods, landslides, and thunderstorms, causing massive damage over the years. This paper aims to selectively highlight the history of such events across the Himalayas, discuss the situation in vulnerable areas, as well as provide a brief outline of actionable policies & measures that can be adopted to tackle them.

Keywords: glacial retreat, climate change, IPCC, disaster management & response, floods and landslides

Context: Climate Change- A Menace

It is undoubtedly evident that climate change remains one of the most pressing issues in today's world. According to the first part of the 6th Assessment Report released by the Intergovernmental

Panel on Climate Change (IPCC) in August 2021, titled *Climate Change 2021: The Physical Science Basis*, global temperatures are anticipated to rise 1.5-2 degrees (Celsius) above pre-industrial levels in less than the next 20 years. The report's findings indicate that extreme weather events are becoming more common throughout South Asia, including India, describing that in the 21st century, heatwaves will grow more powerful and frequent, and summer and monsoon rains will also increase and become more frequent (Aggarwal & Ghosh, 2022). Data indicates that extreme rainfall occurrences shall increase as much as 20% across the Indian subcontinent, leading to floods and depressions and eventually to severe, more common cyclonic storms along India's 7500-kilometre-long coastline. Evidently, India would certainly face a tragedy as a result of such catastrophic weather events (Lahiri, 2021). A report titled 'Global Climate Risk Index 2021' released by Germanwatch ranks India 7th globally among the most climatically vulnerable countries in the world (Eckstein et al., 2021), thus cementing the previous statement. Further, according to data from the Council on Energy, Environment and Water's (CEEW) report of December 2020 titled *Preparing India for Extreme Climate Events*, more than 75 per cent of the districts in India (with nearly 64 crore people) are extreme climate events hotspots, prone to events such as floods, cyclones, droughts, etc (CEEW, 2020). India has witnessed several recent disasters, such as Kerala flashfloods in 2018 (Chavez & Pokharel, 2018), the cloudburst and the consequent flooding & landslides in Uttarakhand in 2013 (Manzar, 2013), and Cyclone Yaas in Odisha in May 2021 (Singh & Barik, 2021).

These events are concrete examples of how climate change is no longer a stand-alone issue but one that has significantly impacted our lives. Keeping this in mind, it becomes important not to be in the dark about such changes since they have the potential to adversely affect the economy as well as the lives of the common people; otherwise posing a risk to economic growth, social development, and political stability on a widespread scale.

The Himalayan States & The Recipe for Disaster

Arising from the collision between India (the Indo-Australian tectonic plate) & Tibet (the Eurasian tectonic plate), the Himalayan Mountain ranges are the highest and one of the youngest in the world (Sorkhabi, 2009). Spread across the landmass of South Asia, these are often called the Third

Pole, for they are home to the largest deposits of ice & water (read glaciers, more than 15,000) after the North & the South Poles, respectively (WWF, 2020). For this reason, the Himalayas are also home to several river systems (such as the Indus, the Ganga-Brahmaputra, and the Yangtze) that serve as lifelines for water in the adjoining countries. Furthermore, the young mountains also have the sway to influence the air systems in the region (impacting climate & weather) because of their tendency to act as natural barriers against the cold Arctic winds as well as the monsoon winds.

Based on the modern theory of plate tectonics, scientific research points out that this mountain range continues to grow at a pace of 2cm per year, making itself one of the most vulnerable to sudden tectonic movements, often leading to earthquakes, floods & landslides (PBS, 2014). This fragility has only been worsened by climate change as several natural processes such as sedimentation, creation of cracks & fractures in the rocks, and melting of glaciers have only been accelerated in terms of their speed & intensity. As a result, the Himalayas have experienced significant warming in the 1900s, particularly the Hindu Kush Himalayas (HKH), a range that houses the largest ice caps in these mountains (Sabin et al., 2020). A key finding from an annual report of the International Center for Integrated Mountain Development (ICIMOD) in 2019 states that the Himalayan region will warm above the global average of 1.5-degree Celsius (Krishnan et al., 2019)- at least 0.3-degree higher in the HKH and at least 0.7-degree higher in the northwest Himalayas & the Karakoram ranges. Apart from this, glaciers are melting faster than ever before, leading to a loss of volume & mass due to warming (Kulkarni & Karyakarte, 2014) (refer to Table 1); this is evident from a faster rate of warming i.e. 0.2-degree Celsius per decade in the HKH from 1951-2014, as opposed to a mere 0.1-degree Celsius per decade from 1901-2014 (Kulkarni et al., 2013). Another study points out that this region experienced as much as 2.5 degrees Celsius warming during 1950-1999 (Rao et al., 2016) and is expected to reach as high as 9 degrees Celsius by the year 2100, which is a worrying trend. This glacial retreat is the source of many events, such as glacial lake outburst floods (GLOF) and inundation due to sea-level rise (SLR) (CEEW, 2020). Further, there are internal differences within the Himalayan geography (say Eastern & Western ranges) with respect to the overall effects of climate change.

Name of glacier	Period (years)	Average retreat (m/year)
Bandar Punch	1960–1999 (39)	25.5
Jaundar Bamak	1960–1999 (39)	37.3
Jhajju Bamak	1960–1999 (39)	27.6
Tilku	1960–1999 (39)	21.9
Gangotri	1935–1999 (64)	19.0a
Bhrigupanth	1962-1995 (33)	16.5
Bhagirathi Kharak	1962–2001(39)	16.7
Chaurabari	1960–2010 (50)	6.5
Pindari	1906-2001 (95)	15.2
Chipa	1961–2000 (94)	26.9
Meola	1912–2000 (88)	19.3
Jhulang	1962–2000 (38)	10.5
Nikarchu	1962–2002 (40)	9.2
Adikailash	1962–2002 (40)	12.8
Milam	1848–1997 (149)	16.7
Bhurpu	1966–1997 (31)	4.8
Mean	57 years	17.8

Table 1: Average annual retreat of major glaciers in Central Himalayas (as per Study Group Report, Government of India 2011) (Patwardhan, 2011)

The Indian Himalayan Region

Like other parts of the Himalayas, the Indian Himalayan Region (IHR) is also facing the cascading effects of climatic changes- visible in its ecology, geology, weather patterns, political & social lives, and local economy. A Census report from 2011 reveals that the Indian Himalayan Region is home to nearly 50 million people in over 13 States/Union Territories- the largest among all mountain ranges in the world, and also spans around 2500 square km (around 16% of India's total geographical area). It is characterized by its diverse demography and socioeconomic & environmental systems. *The Hindu Kush Himalaya Assessment* report, published in 2019, explains the consequences of the accelerated pace of warming in the Himalayas- including loss of biodiversity, faster melting of glaciers, and lower availability of freshwater, among other aspects (Krishnan et al., 2019).

A significant finding by experts is the withdrawal in the number of snow days in the HKH (Sabin et al., 2020) (Krishnan et al., 2019), which affects the availability of freshwater downstream. In line with the previous study on glacial retreat in the Central Himalayas, another study in Himachal Pradesh in 2020 notes the area under snow cover in 2019 as being ~23,540 sq km, which significantly dropped down to ~19,100 sq km in 2020, confirming the loss of area under snow cover and the rapid melting of glaciers (Randhawa & Gautam, 2021). Similarly, 1) in Jammu & Kashmir and Ladakh, nearly 1200 glaciers decreased by as much as 35cm/year on average between 2000 and 2012 (Romshoo et al., 2020); 2) in Uttarakhand, there was an overall decrease of 27 sq km of snow cover in the Gangotri & surrounding glaciers between 2020 & 2021 (Nath, 2021). As per a study titled *Glaciohydrology of the Himalaya-Karakoram*, the Himalayan rivers cover an area of 2.75 million sq km, have the largest irrigated area of 577,000 sq km, the world's largest hydropower capacity of 26,432 megawatts, and cater to the water-needs of a billion people in the region (the entire population of Nepal, and half the populations of India & Bangladesh) (Sabin et al., 2020). This although, for India, has serious implications since freshwater from the Himalayas supports the lifelines of nearly 500 million people in the Indo-Gangetic plains and is also the principal constituent for the production of almost 1/3rd of the country's total energy capacity.

Another aspect of climate change's ill effects- is shorter, more intense spells of rainfall across India (as per IPCC-AR6, 2021), which coupled with irregular variations in monsoon winds have led to an overall increase in the extreme rainfall trends across the Himalayan region (Guhathakurta et al., 2011). For instance, a study conducted in the state of Himachal Pradesh, using data from the Indian Meteorological Department suggests that while the average annual rainfall between 1989-2018 remains the same, the average frequency of dry days has increased- meaning lesser days of precipitation (rain/snow) (Guhathakurta et al., 2020). Another study on the Gangotri glacier (the largest in the region) of Uttarakhand points out the increased rainfall & decreased snowfall in the region, prompting faster melting of the glacier, which has eventually led to GLOFs & flash floods in Uttarakhand, such as the Chamoli glacial burst in 2021 as well as the infamous Kedarnath tragedy in 2013 (Santoshi, 2022). Therefore, from these instances, it can be inferred that trends in extreme rainfall and the rapid glacial retreat are causing most of the disasters in the Himalayan states. The diverse geography of this region, its fragile ecosystem, and its high vulnerability to active tectonic movements, further exacerbated by anthropogenic factors like human interference & climate change, have made it into a hotspot for natural disasters like earthquakes, cloudbursts, forest fires, floods, and landslides, many of which are induced at a faster pace by climate change & associated phenomena.

Case study 1: The State of Himachal Pradesh

The northern Himalayan states of Himachal Pradesh & Uttarakhand and the Union Territories of Jammu & Kashmir and Ladakh are constituents of the Hindu-Kush Himalayan range. This part of the Himalayas is home to many glaciers, the origin of several perennial rivers, a global hotspot of biodiversity & culture, a hub of natural resources such as minerals, and a coveted prize in terms of its strategic location. As fascinating as this sounds, these Himalayas are young & fragile in nature and, thus perhaps the most vulnerable to climate change as well. It is already established that glaciers are melting at faster-than-ever rates, yet westerly winds have accelerated this process, impacting most of the westernmost parts of the Himalayas (northern India) than the eastern Indian Himalayan Region (Tayal, 2019). Again, despite there being internal differences within the Himalayas as to the effects of climate change, it is interesting to note that the IHR territories of Himachal Pradesh and Jammu & Kashmir (J&K) still display different trends in rainfall, mean

temperatures, etc, indicating how ecologically & geographically diverse (and sensitive) this region is (Tayal, 2019). Based on the data from the Indian Meteorological Department (IMD) from 1951-2010, while J&K shows a decrease in annual mean temperatures (-0.01 degree Celsius each year) and an increase in annual average rainfall (+2.13mm each year), Himachal Pradesh surprisingly shows contrasting trends- a decrease in annual average rainfall (-3.26mm each year) but a larger increase in annual mean temperatures (+0.02 degree Celsius each year), in what can be argued as the primary reason behind the triggering of GLOFs (refer to Figure 1) (IMD, 2013). In terms of pure vulnerability rankings (as per a study by the Department of Science & Technology titled *Climate Vulnerability Assessment for Adaptation Planning in India Using a Common Framework*), J&K is a “relatively moderately vulnerable state” with an index of 0.55 (due to its low road density, lack of proper railway network, high incidence of water-borne diseases), which is higher than that of Himachal Pradesh (HP) i.e., 0.49, which is classified as a “relatively low vulnerable state” (Indian Institute of Technology Mandi et al., 2019). Yet, the same assessment points out HP’s case to be an interesting one i.e., “*it is one of the rare states that is neither the best nor the worst*” in terms of the vulnerability assessment criteria (Aggarwal, 2018). The author finds the selection of HP to be more pragmatic for this study due to its (more) diverse topography vis-à-vis J&K, positioning in a high seismic zone (Seismic Zone IV and V i.e., highly prone to earthquakes), and relatively (more) fragile ecology. In the domain of disaster management, the state of HP is notorious for the variety of disasters it experiences each year- floods, landslides, earthquakes, cloudbursts, forest fires, etc. For instance, there were estimated damages of 20 billion INR from incessant intense rains and flooding, in the recent month of August 2022 (Dogra, 2022). A report by the state government’s Department of Environment, Science and Technology in the same month describes the state as being vulnerable to 25 of 33 identified types of hazards, making it one of the most disaster-prone states across India (Vasudeva, 2022). Increasing glacial retreat has only led to cloudbursts and stronger spells of intense rainfall across the state, which have only increased in the last few years, the report says. According to Sharma (2020), nearly 250 people died till September 2021 due to natural disasters in the same year’s monsoon season as compared to 161 in June-September 2020. Further, Himachal Pradesh has seen an average mean increase of 1.6-degree Celsius in the surface temperature in the last century- higher than 1 degree Celsius experienced by the downstream Indo-Gangetic plains & the rest of India (Himachal Pradesh State Disaster Management Authority, 2017). Cloudburst & extreme rainfall events have become so common in the state that a risk assessment report by the state government in 2015 declared all the 77 blocks of

the state (with an estimated 18,600 villages) to be prone to landslides (Disaster Management Cell, Govt of Himachal Pradesh, 2015). It should be emphasized that apart from major factors such as glacial retreat & changes in precipitation, many disasters in HP & neighbouring Uttarakhand are induced due to anthropological (human) intervention- construction of buildings, roads, industries, hydropower projects and so on. An expert from the Department of Geology at Uttarakhand's Hemvati Nandan Bahuguna Garhwal University (HNBGU) defines the mountains in these parts to be "climatically & tectonically [highly] sensitive" and goes on to describe the ill role of such (unchecked) human intervention as agents worsening the effects of an already-devastating climate change. This is visible from-

1. The existing length of 2624 km of the National Highways (as of 2018)- with a sanctioned addition of another 4312 km, associated with the 500-km long Chardham highway project (that involves widening of roads up to 30 feet) as well as linking/creating border roads to increase tourism & logistical/strategic capabilities for security along the Chinese border,
2. 813 hydroelectric power plants on various river basins in the state (Himdhara Collective, 2016)- with another 53 to be built soon (that experts say could lead to repetitions of the Kedarnath & Chamoli disasters) amidst India's global move to switch to renewable/green energy and increasing its production to 450 gigawatts by the end of 2030, and
3. Higher-than-ever rate of deforestation- with forest cover dropping to 27% as opposed to the mandated 50% in HP (FSI, 2019), in what is said to be a push for private investment in the region at the cost of local environmental concerns.

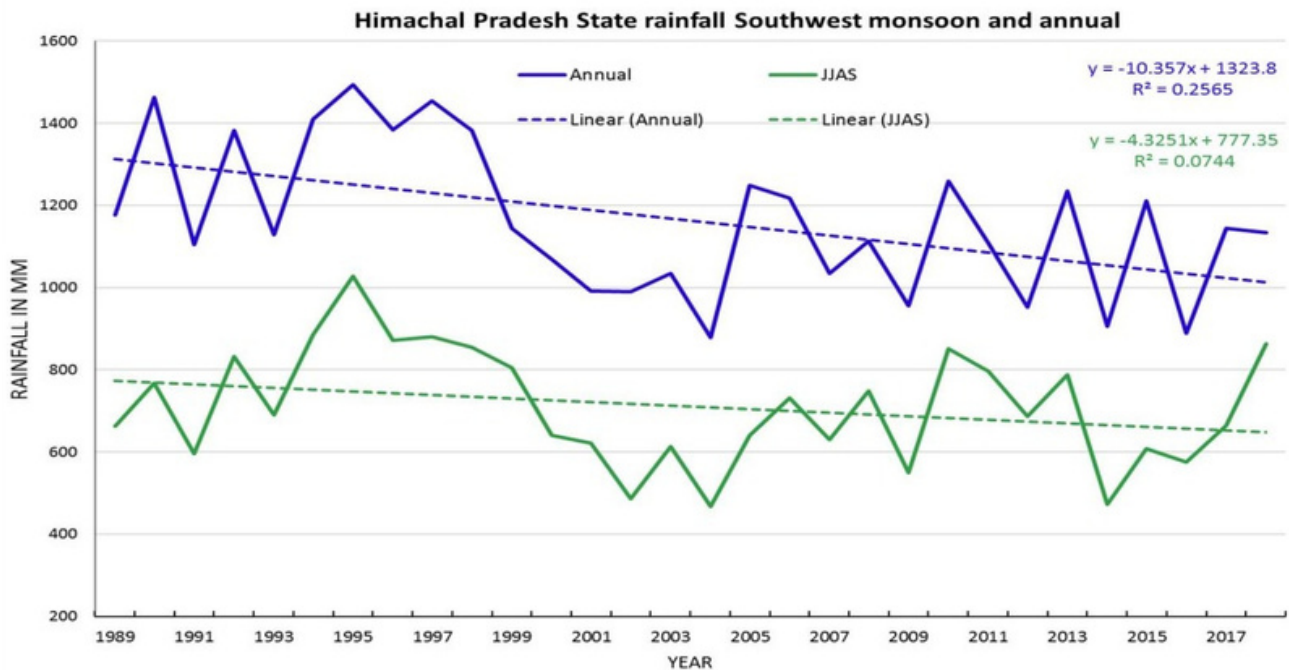


Figure 1: Time series of rainfall in mm for the southwest monsoon season and annual trends;

Source: IMD Pune (Guhathakurta et al., 2020)

Further, quoting IMD’s data on rainfall in HP from 1989-2018, not only have there been shorter, intense spells of rain leading to higher surface runoffs, floods, and landslides, but this change in precipitation has also meant a rise in the number of natural water springs- as much as 50% of them (Bhardwaj, 2013), drying up across the state (Gupta & Kulkarni, 2018), which is detrimental to the 90% population of the state dependent on agriculture (now forcing them to alternate other means of livelihood or migrate to cities/towns downstream) (Indian Institute of Technology (IIT) Mandi, 2019) and also to the “hydrological role in generating streamflow for non-glaciated catchments and in maintaining winter and dry-season flows across numerous Hindu Kush Himalaya basins.” (Scott et al., 2019) A cumulative result of all such factors is the ever-rising number of landslides, which is the most common natural disaster in the state. Between the years 1800 and 2011, an assessment of the geographical distribution of landslides across India found the western & northwestern Himalayas (in northern India) to be the most vulnerable to landslides, followed by Northeast India’s Himalayas (Prakash, 2011). Such a nexus of floods & landslides has been wreaking havoc in HP, and has the potential to jeopardise the hydropower-generation systems if such events increase in the future (Eriksson et al., 2009).

Case study 2: The Northeast of India

Like the Himalayan states in the northern part, the states in Northeast India (NEI) are equally, if not more, prone to the effects of climate change- including natural disasters. The *National Landslide Risk Management Strategy* published in 2019 by the National Disaster Management Authority (NDMA) under the Ministry of Home Affairs (MHA) describes the Northeast as particularly prone to landslides (and other natural disasters like floods) due to active tectonic movements, intense rainfall and fragile geology in the region.

For ease of understanding, this study considers 1) the flooding problem in Assam, and 2) the landslides in Meghalaya.

A popular & an apt example is the state of Assam, which is notorious for its devastating floods & landslides every year, such as the Silchar floods in June & July 2022 that drowned ~95% of the town & affected nearly 5.5 million people in the state. To this end, a vulnerability assessment of Indian states with respect to natural disasters under the aegis of the Department of Science & Technology, Government of India (Indian Institute of Technology Mandi et al., 2019) found Assam to be among the most vulnerable states in India (an index of 0.62 out of 1, with a higher index meaning a higher rate of vulnerability) - 5th out of all states & Union Territories, the 2nd most vulnerable state in the Northeast (after Mizoram) as well as the most vulnerable in the IHR; so much so that 15 districts of the state are among the most vulnerable 25 districts (to climate change) across the country, as per a study by Council on Energy, Environment and Water (or CEEW) (CEEW, 2020). The Water Resources Ministry of the Government of Assam lists out the vast network of river systems, erosion of river banks by deforestation, illegal encroachments and GLOFs/cloudbursts to be the primary reasons for flooding & landslides in the state, describing it as “different from other states w.r.t extent & duration of flooding and the magnitude of erosion” as well as the “most unique problem [of flooding] in the country”; it further affirms nearly 40% of the state’s total area (amounting to 31 lakh hectares) to be flood-prone, which is 4 times higher than the national average (~9.40%) as assessed by the Rashtriya Barh Ayog (RBA). The Brahmaputra River basin, which covers most of the area of Assam, Meghalaya, Nagaland, Sikkim, and Arunachal Pradesh has only seen abnormal monsoon rains in the last 30 years, with an exponential increase in extreme flood events since 2010, the CEEW study cites (CEEW, 2020).

The problem of flooding in Assam is so severe that the state incurs an expected average annual loss of 200 crores, apart from the economic, environmental and socio-cultural loss resulting from associated phenomena such as soil erosion and landslides. A glance at a typical flood in Assam- the floods of 26 June 2019 in the Brahmaputra River, includes the following data (refer to Figure 2).

Name of district	No. of village affected	Crop area affected (ha.)	Population affected	Relief camps	Distribution centre	Population in camps
Dhemaji	419	8,830	128,853	1	7	49
Barpeta	502	3,243.50	735,450	-	28	-
Lakhimpur	130	3,968.70	65,969	1	13	177
Jorhat	77	1,463	47,690	2	-	197
Biswanath	133	1,585	75,988	1	-	229
Golaghat	109	5,070.23	119,179	15	38	2,413
Baksa	14	650	4,050	10	-	3,394
Nalbari	90	4,198	72,600	2	22	284
Chirang	12	2,314.70	7,024	7	-	1,249
Majuli	90	2,367	78,547	5	29	442
Darrang	119	1,312.50	69,865	-	5	-
Sonitpur	48	2,324.16	40,350	8	3	2,246
Bongaigaon	42	1,899.50	83,338	1	40	334
Nagaon	107	3,012.71	19,428	-	-	-
Kokrajhar	1	-	144	1	-	144
Morigaon	296	25,291	349,703	6	3	601
Dibrugrah	91	4,809.22	51,186	6	8	872
Dhubri	323	3,182	337,799	3	-	1,246
South Salmara	53	832	1,0,849	-	-	-
Goalpara	148	4,172	99,290	-	-	-
Kamrup	100	4,035	36,855	-	3	-
Hojai	62	1,225.20	9,228	-	5	-
Sivsagar	33	235	1,170	-	14	-
Tinsukia	60	1,095	38,001	8	17	911
Cachar	40	-	9,732	5	-	1,354
Karbi-Anglong	1	-	937	3	-	445
West Karbi-Anglong	22	6	10,158	-	7	-
Hailakandi	56	486	2,150	-	-	-
Total	3,181	87,607.43	26,45,533	85	242	16,596

Figure 2: Analysis of the damage by floods in Assam (June-July 2019)

Source: Information Bulletin: 20 July 2019; 1) International Federation of Red Cross and Red Crescent Societies, and 2) State Disaster Management Authority (SDMA), Assam

A few more key findings from the June 2019 floods in Assam:

- Nearly 43 lakh people in the state affected, across 31 of total 33 districts
- 4000 villages inundated
- Brahmaputra river flowing 110 cm above the danger level (in Guwahati)
- National Highway 37- connecting the upper & lower halves of Assam, closed for a few days
- Flooding of 90% of Kaziranga National Park, death of ~2000 animals, including 4 rhinos (including 2 endangered One-Horned Indian Rhinoceros) and 1 tiger
- More than 183 relief camps organised by the state by the end of July 2019; rescue efforts (including humanitarian aid) led by the National Disaster Response Force (NDRF), Assam State Disaster Response Force (SDRF) and the Indian Army

The extent of such destruction is such that the state experiences it every year in the months of June, July & August (Karmakar, 2020), so much so that the lower parts of Assam have historically been called the “floodplains” as they get flooded due to the extreme south-western monsoon rain. Further, the SDMA states that 85% of the average annual rainfall is received in these 3 months, amounting to nearly 2900 mm. Another key statistic from the Assam Government highlights the loss of nearly 8000 hectares of land per year due to riverbank erosion along the Brahmaputra, on which an estimated 30,000 crore INR has been spent in the last 60 years by successive governments in Assam (Sumeda, 2022). In light of such destruction, the Assam Government enacted an Assam State Climate Change Action Plan in 2015, and revamped its Assam State Disaster Management Plan (SDMP), among other efforts to build climate resilience & encourage disaster preparedness; all of these efforts backed by scientific studies led by governmental and/or private expert bodies, which time & again have emphasised 1) the expected increase in extreme rainfall between 5-40% and 2) the expected increase in floods by 25% in Assam by 2050 (IANS, 2022).

Second, the State of Meghalaya. While Meghalaya may not be the most vulnerable state in the IHR (as per the DST Vulnerability Assessment report, 2019) with an index of 0.56, it is among the “relatively moderately-vulnerable states” in India, meaning that it still faces a high threat of natural disasters in the absolute sense. Two crucial factors behind considering this state for the study are 1) its average annual rainfall of 11,500 mm, which is the highest in the country, and 2) its presence in Seismic Zone-V, being prone to severe earthquakes & earthquake-induced landslides (Amateur Seismic Centre Pune, 2022). As for landslides, while it might seem more feasible to view them as pure consequences of flooding events, landslides are induced not only by natural events (like earthquakes & floods) but also by other (human) factors such as ill planning, induced soil erosion, use of cheap construction materials, etc. The severity of landslides as events of destruction can be gauged from the mere fact that Asia recorded the most landslide fatalities between 2004-16, and India was one of the worst affected with nearly 18% of global casualties (Froude & Petley, 2018). In light of climate change, intense rainfall has indeed caused higher surface runoffs and, thus, landslides, which are equally disastrous and ubiquitous as floods. Nearly 12% of India’s total area (0.42 million sq km) is prone to landslides (Geological Survey of India, 2020), with as much as 30% of the global landslides occurring in the IHR (Ministry of Home Affairs, 2011). Once again, the Northeast’s vulnerability (which houses 0.18 million sq km of the total landslide-vulnerable areas) to landslides is highlighted in the NDMA’s *National Landslide Risk Management Strategy 2019* (National Institute of Disaster Management, 2019) (refer to Figure 3). Frequent occurrences of landslides across this region (particularly Meghalaya) have impeded economic growth & created hindrances to development- across the public & private sectors. Data from the Geological Survey of India (GSI) points out that landslides cause as much as 1-2% loss of the Gross National Product (GNP) annually in many developing countries, including India (Geological Survey of India, 2020). A study in 2011 estimates this figure to be 150-200 crore INR each year for India (Prakash, 2011). Further, the states in the IHR lose up to 1 billion USD per year due to landslide-inflicted damages, which amounts to a staggering 30% of the global economic damages due to landslides (Himalayan Landslide Society, 2021). Apart from these economic costs, the damage caused by landslides in Northeast India (NEI) includes loss of cattle & biodiversity, decreased tourist inflow, reduced real-estate values, decreased tax revenues, loss of industrial/agricultural revenue, and loss of productivity (Sujatha & Sridhar, 2021).

An underlooked aspect of the damage is the loss of connectivity in the Northeast, wherein major bridges & roads including the National Highways have been known to be blocked/shut down due to landslides & accumulation of debris. Such events are concerning since they not only disrupt the local economy but also hinder economic development- a phenomenon that has caused NEI to suffer from historical neglect in politics, economy & culture, as well as promote threats to the strategic security of the nation. It is however important to point out the lack of adequate data on the damages caused by landslides in the state of Meghalaya (as well as the rest of NEI and the HKH region), which has also been pointed out (Eriksson et al., 2009) in ICIMOD's *The Changing Himalayas: Impact of Climate Change on Water Resources and Livelihoods in the Greater Himalayas* of the year 2009. Efforts, though, are being made since 2007 to create a national statistical database of landslide events across India (Prakash, 2011) by the National Institute for Disaster Management (NIDM), GSI and the Central Statistical Organisation (CSO).

In Meghalaya, though, the Meghalaya State Action Plan on Climate Change (SAPCC) of 2017 has outlined the strategy to deal with the consequences of climate change by identifying key sectors & issues, establishing long-term goals, and building climate resilience through other means such as sustainable agriculture, national water and solar missions, energy efficiency, strategic knowledge on climate change, etc (Meghalaya Climate Change Centre (MCCC), 2019).

Figure 3: Landslide Incidence Map, India, 2019 (Source: Vulnerability Atlas of India, 3rd Edition, 2019); Parts in red represent the landslide hotspots in India



Further, it has also led to changes in the Meghalaya SDMP of 2016 by the inclusion of pragmatic measures to reduce landslides, notably being:

- Strengthening of embankments, buildings and other basic utility infrastructure in the vulnerable areas (refer to Figure 4)
- Arrangement of strong & reliable communication systems in landslide-vulnerable areas
- Setting up of control rooms to monitor landslides
- Removal of illegal dwellings/embankments at the edge/downstream of rivers in vulnerable areas

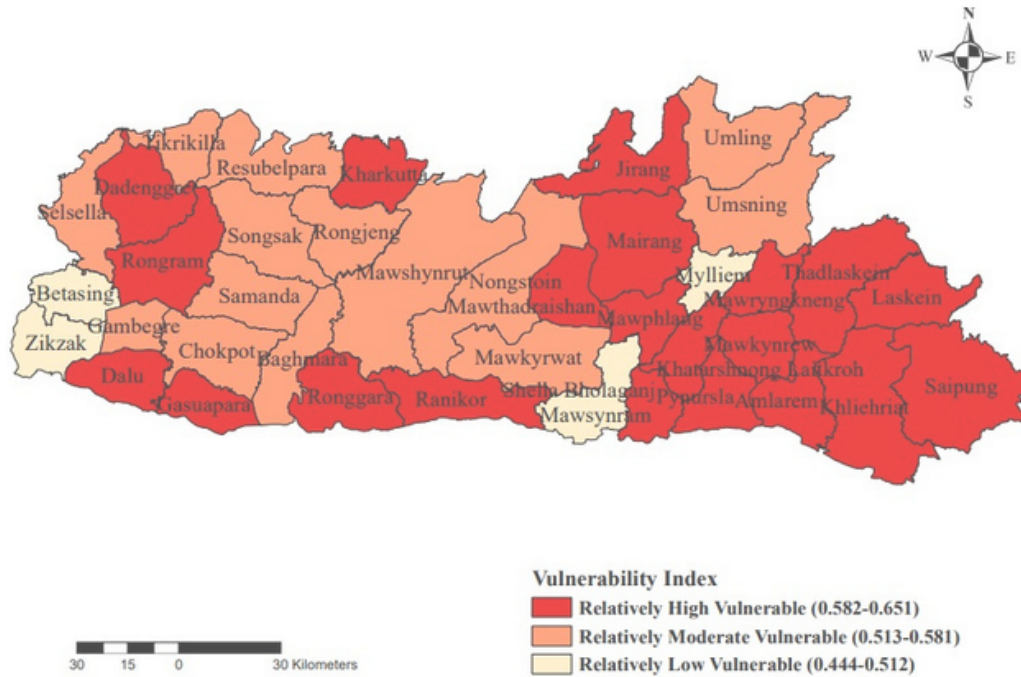


Figure 4: Map showing vulnerability categories of Meghalaya at the block level (Source: Department of Science & Technology Vulnerability Assessment 2019)

These measures in the Meghalaya SDMP are established to ensure minimal loss of lives & property, protect the local economy as well as preserve the ecological stability in the region.

Climate Change & Policy

Overview

Tackling climate change is perhaps one of, if not the most complex issues in the world. From dealing with its diverse consequences such as global warming, natural disasters, and socio-economic inequalities to bringing together all stakeholders for consensus on common issues, it involves a lot of time & calibrated effort. In the context of nations dealing with climate change, there have been several international organisations & summits such as the Kyoto Protocol, the UN Climate Change Conferences (COP), etc that have been trying to garner international support & attention towards climate issues. While it is debatable whether or not they have been immensely successful in achieving their objectives, these entities have, at the least, been helpful in stirring discussions on climate change as a menace of the 21st century. Various international

conglomerates/business houses, educational institutions, non-profits, media and other bodies have now become part of such discussions, prompting governments to take necessary action.

In light of India's policy to deal with climate change-induced disasters, the sheer diversity of the geography and the variety of disasters that can happen across states have to be pointed out. The role of agents such as rainfall, surface temperatures, snowfall, pressure zones & wind circulation systems, etc and their constant trends cannot be ignored. As a result, the Ministry of Environment, Forest and Climate Change (MoEFCC) under the Government of India is the apex & nodal agency in the country responsible for the planning, coordination, and implementation of India's environmental policies, as well as the country's representative at forums & agencies like CoP, United Nations Environment Programme, ICIMOD, etc. It has led initiatives in the past that have led to the enactment of key environmental laws such as The Forest (Conservation) Act of 1980, and The Environment (Protection) Act of 1986- formed in the aftermath of the infamous Bhopal Gas Leak Tragedy, The National Environmental Authority Act of 1997- aimed at adjudicating matters concerning environmental clearances for projects and industrial activity, etc (Shaharban V, 2018). While these laws are primarily concerned with the protection of the environment & stability of ecosystems, the technical policies regarding natural disasters are enacted by the Ministry of Home Affairs (MHA) or several of its affiliated agencies at the national level; at the State level, state governments have formed their own bodies to deal with disaster management. By definition, disaster management is concerned with the prevention, preparedness, mitigation, responsiveness, assessment, evacuation/relief and rehabilitation of the concerned stakeholders. As such, the National Disaster Management Act (NDMA) 2005 has provided for the enactment of such strategies by Disaster Management Authorities (DMAs) at the national, state & district levels (DDMAs), apart from the establishment of an expert-led NIDM, creation of response forces (NDRF & SDRFs) and disaster mitigation & response/relief funds at all levels. NDMA has introduced a significant change in India's approach towards disaster management as it has provided greater autonomy to State Governments, paved the way for decentralisation of relief & rescue efforts up to the block & village levels, ensured logistical & financial support to public administrations, and integrated disaster management into more mainstream issues of governance & administration. Further, it has allowed the Central Government (i.e., the Disaster Management Division of the MHA) to formulate & update the disaster management strategy in spirit (while

delegating the operational task to the States, as per decentralisation of powers), as well as to play a key role in coordinating efforts & information to-and-from itself and/or among different states in situations of natural disasters.

Way Forward?

In response to the increasing frequency & intensity of climate change-induced natural disasters, there have been growing calls across Indian states for developing policies & strategies to deal with such events. With the introduction of the National Action Plan for Climate Change (NAPCC) of 2008, key areas of climate action have been identified to be addressed along with the agenda of development- national missions undertaken by different ministries on issues such as solar & renewable energy, sustainable water bodies & habitats, preservation of the Himalayan ecosystem, development of agriculture and strategic knowledge, etc. The NAPCC is fundamentally formulated on the basis of the Intended National Determined Contributions (INDCs) of India i.e., climate actions originally agreed upon & ratified by each participating country at the United Nations Framework Convention on Climate Change (UNFCCC) of October 2015- popularly known as COP21 or the Paris Agreement. Among others, the INDCs include goals such as reduction in carbon emissions, increase in non-fossil-fuel energy production, the introduction of frameworks for cleaner energy, healthy & sustainable lifestyles, etc, which have been declared after careful consideration of national circumstances as well as the principal of '*common but differentiated responsibilities*' (CBDR). The NDCs are periodically updated by the Government- for instance, as recent as August 2022, the Cabinet chaired by the Prime Minister announced enhanced climate action targets under the 'Panchamrit' promises, as listed below (PIB, 2022):

1. Achieving the long-term goal of net-zero carbon emissions by 2070
2. Reduction in carbon emissions by 1 billion tonnes by 2030
3. Reduction in the carbon intensity of GDP by 45% by 2030
4. Increasing non-fossil-fuel energy capacity to 500 gigawatts by 2030
5. Achieving 50% of energy needs via renewable means by 2030

One significant achievement of the NAPCC has been the introduction of the State Action Plan(s) on Climate Change (SAPCC) since the year 2009. Backed by scientific research & in sync with the NAPCC, the SAPCCs are policy documents of the States/Union Territories highlighting their strategies & policies to mitigate climate change & build climate resilience across key sectors. Over the years, all states & UTs have prepared & published their SAPCCs, and as a result, newer methods & technologies have been adopted such as vulnerability assessments, renewable energy sources, waste management, cleaner technologies, improved infrastructure, etc- all falling in line with India's updated INCs.

As mentioned previously in this study, many vulnerable states have implemented special policies & measures to battle the ill effects of climate change as part of their SAPCCs. For instance, the state of Odisha on the eastern coast of India- receiving erratic & unseasonal rainfall and being highly vulnerable to meteorological hazards like cyclones & storms, was one of the first few states in the country to have developed a comprehensive action plan (Dubash & Jogesh, 2014). The plan with an aim to build climate resilience and simultaneously promote the developmental agenda has outlined a process to identify key stakeholders, map regional vulnerability indices to different disasters, integrate existing policies with climate policies, and allot finances to corresponding climate action via India's 1st climate action budget. Among various key sectors, agriculture- engaging 70% of the state's population & contributing 26% to its GDP, has been suggested the following reforms under the SAPCC:

1. Developing water-efficient micro-irrigation methods via individual & community farm ponds to maximise the efficiency of water-use and help prevent crop failure due to inundation of agricultural fields
2. Introducing dedicated seed banks at the village level to manage climate variability and seeding in the long term
3. Investing in green-energy efficient models for farmers to help improve crop yield and protect the environment, while simultaneously increasing their [scientific] knowledge base and helping them adapt to such innovations
4. Adoption of climate-smart agricultural practices such as the System of Rice Intensification (SRI) i.e., a low-water & low labour-intensive agricultural technique, at the village level to help reduce methane emission and improve crop yields

Looking at the SAPCCs of other states across India, one can easily comprehend the similarities in policies- from identifying key sectors to suggesting policy/technical reforms. Since it is beyond possible to cover all the aspects of SAPCCs in one study, the paper shall focus solely on the policy recommendations that state action plans have come up with over the years. Further, it shall explore the intersection of climate change and natural disasters from a policymaking perspective. Lastly, the author shall list out a few actionable policy recommendations that can be implemented in the concerned state(s), since the prevalence of scientific evidence & the implementation of such practices in different countries across the world has garnered global attention, including that of policymakers & administrations, who now wish to start implementing them in Indian states with local customisations.

Consider the particular case of Meghalaya, as already discussed in the study. The Meghalaya State Disaster Management Plan of 2016 is the nodal document outlining the spirit of the state's Disaster Management (DM). A key feature of Meghalaya's model is the distribution of responsibility, in the form of District Disaster Management Plans (DDMP) tasked with specifying region-specific policies. Each DDMP takes all relevant decisions under the chairmanship of the district's Deputy Commissioner. For instance, the East Khasi Hills district, Shillong has worked in close coordination with the North Eastern Space Applications Centre (NESAC) at Umiam (near Shillong) since 2008 on remote sensing (RS) & satellite imagery (Rajasekar & Dashora, 2017). Shillong has also incorporated various aspects of disaster management in its urban development, under the Shillong City Master Plan (2001). It is also aimed at decongesting urban areas to mitigate the risks of earthquakes & landslides. Studies have also suggested the competent functioning of existing warning systems in Meghalaya to warn vulnerable groups, including the use of modern technology such as vehicle-mounted Public Address Systems (PAS), digital public displays, phone calls, emails & flash warnings (Rajasekar & Dashora, 2017). The Disaster Management Cell (established in 2006) & the State Disaster Response Force (SDRF) also conduct mock drills, awareness & sensitization programmes in partnership with institutes like North Eastern Hill University, National Institute of Disaster Management, etc. Interestingly, Meghalaya is also the 1st state in the Northeast to conduct DM-associated training for female government officials (Meghalaya State Disaster Management Authority, 2021). The state has also created multiple shelter locations in each district for effective utilisation. On a closer look, however, urban

expansion has sidelined disaster mitigation as traditional disaster-resilient buildings have been replaced by concrete structures. Despite the presence of urban plans, urban local bodies have not been able to monitor the construction of illegal structures in vulnerable areas. Further, despite decent warning systems in place, night-time warnings have no specific arrangements and the state is mostly dependent on national bodies like the Geological Survey of India (GSI) to issue real-time warnings. Lastly, it is relevant to note that despite extensive awareness programmes by the State, the rate of public participation has not been able to match the expectations.

Since Meghalaya (and the rest of Northeast India) is highly prone to floods & landslides, the SDMPs and the SAPCCs shall be promptly revamped to meet any challenges. Some states have been prompt in recognising this and have introduced significant changes in their approach towards disaster management. For instance, the Assam Government launched a new draft version of their State Disaster Management Plan (ASDMP) in August 2022, after consultation with as many as 26 of its departments (Sentinel, 2022). After mapping the Northeast's vulnerability to disasters, it seems apt to take inspiration from Japan- a country that faces frequent earthquakes, floods, landslides and volcanic eruptions due to its presence in the Pacific volcanic belt. With an average of 1500 landslides per year, the *Guide to Disaster Management* published by the Disaster Management Bureau of Japan outlines the country's strategy for managing disasters and increasing preparedness. As such, using a broad reference to the aforementioned guide as well as a comprehensive study of the state of Meghalaya so far (with respect to its SDMP, SAPCC and its disaster vulnerability profile), the author feels the implementation of the following policy recommendations in the state can be crucial towards addressing natural disasters (particularly floods & landslides) induced by climate change:

1. Establishment of a dedicated landslide monitoring, auditing and control cell: This cell should be manned by subject matter experts. It should be made autonomous with technical, administrative, financial and legal powers to function effectively on its own. This is in line with the recommendations of the Department of Science & Technology, Government of India from 2018 for Sikkim (and other states in the Northeast) (National Institute of Disaster Management-NIDM, 2018). This can be feasibly implemented for other disasters such as earthquakes and floods as well.

2. Installation of specialised Deterrence Piles & Restraining Walls: This practice is widely implemented in Japan (JBP, 2020). These structures can prevent landslides and soil erosion by holding together the soil particles and allowing the excessive surface/groundwater to flow down into the ground. Further, their construction/installation can be done rapidly without disturbing the daily lives or the surrounding environment.
3. Mapping landslide-prone areas at 1:50,000 scale using satellite systems: This is being extensively followed in the states of Himachal Pradesh and Uttarakhand, where Landslide Hazard Zonation (LHZ) maps are prepared, refined and highly magnified to identify vulnerable areas.
4. Formation of dedicated early-warning systems: This has been implemented in Sikkim since 2018, wherein more than 200 sensors have been installed in 12 locations (prone to floods and landslides) in/around the capital Gangtok. This indigenously-developed system can provide a warning up to 24 hours in advance, thereby providing time for evacuation and institutional responses.
5. Prevention of illegal construction: Construction in high-hazard zones should be made liable for independent geologist reviews without which No Objection Certificates (NOCs) can not be obtained by the builder/applicant. This can help prevent illegal/unplanned construction on slopes vulnerable to floods & landslides, and also encourage better land use and land planning by urban bodies.
6. Installation of Automatic-Rain Gauges (ARG)/Automatic Weather Stations (AWS) to help keep a check on excessive surface runoffs, which are among the leading triggering constituents for floods and landslides in the Northeast.

Conclusion

Climate change poses a huge risk to lives and livelihoods across the globe. Some climate events are slow in their onset- like sea level rise (SLR), rise in the temperature, and glacial retreat- and have an impact on the ecology and mankind over time; while some other climate events- flash floods, heavy landslides- happen suddenly and are known to have an immediate devastating impact. The frequency of such extreme climate events has only risen in India & across the world in recent decades. Between 1999 and 2018, there have been over 12,000 extreme climate events globally, resulting in 495,000 deaths and economic losses amounting to nearly USD 3.54 trillion (Mohanty, 2020). Developing countries like India are particularly prone to such events. Further, the Himalayan region in the north- along with the northeastern part- of the country is relatively more vulnerable to climate change & induced natural disasters due to its fragile geography, active tectonic movements, irregular trends in precipitation, and a sensitive ecosystem. From glacial retreats and unchecked rapid urbanisation to declining forest covers and age-old policies, the IHR is facing the brunt of some of the most devastating natural disasters the country has seen in recent years- Kedarnath, Chamoli, etc. Such events bring to light the urgent need to take climate action through relevant policies & techniques, as highlighted towards the end of this study. The review of the vast literature available on these areas of study, the identification of vulnerable locations & key disasters in those areas, the analysis of national & state-level climate policies, and the eventual section dealing with the actionable policy recommendations are designed to ensure that the reader shall be able to gauge how the Himalayan region of India can be better prepared for withstanding adverse climate events in the future.

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The Privatisation of Indian Education: Challenges & Solutions, with Special Reference to the Primary Education System

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Abstract

This research paper aims to examine the education sector of India, especially after an attempt has been made to privatise education in recent years. In essence, the process of privatisation i.e., when any sector or market goes from publicly owned to privately owned, has increased in recent years as a higher number of private schools & other educational institutions- including those for higher education, have emerged, leading to a sectoral shift away from the initial public/government-funded education institutions- providing education to students at an affordable price, to more expensive private institutions, which are often unaffordable for economically and socially deprived sections of the society. This paper aims to find out if (and how) privatisation has affected different segments of society and the contemporary realities of India's education system, now increasingly witnessing privatized education at a premium cost. Moreover, it highlights a brief history of the privatisation trends in India and how they fare with respect to newer educational policies such as the National Education Policy. Lastly, it explores the viability of studying in a public institution in the current era, considering that the standard of education provided is lower than in private schools, as well as provides feasible solutions to aid India's ailing education sector.

Keywords: privatisation, Indian education, public-private, school education

Introduction

One of the most important words or perhaps, one of the greatest phenomena to occur after capitalism is the rise of privatisation, which has only intensified across various sectors in the last two centuries. While the modern usage of the term in an economic sense is attributed to Peter Drucker (Drucker, 1969), the original mention of the same in academic literature is observed in the works surrounding the analysis of economic policy in Germany under the rule of the National Socialist Party in the 1930s and early 1940s (Bel, 2006). The term 'privatisation' later became popular in Europe and then spread to the Global South (Kwaghe, 2020).

Privatisation refers to the transfer of ownership and control of government or state assets, firms and operations to private investors. This transfer takes the form of the issue and sale or outright distribution of shares to the general public. Broadly used, the term privatization includes other policies such as "contracting out" that is, the process by which activities, while publicly organized and financed, are carried out by private sector companies, e.g., street cleaning, garbage collection, housing, and education (OECD, 2003).

This transfer of ownership of property usually occurs from the public sphere (wherein it can be used/accessed indiscriminately by everyone) to the private sphere such that its utility or access is now restricted to the new owner. Another way of using the term 'privatisation' is when private entities establish, grow and sustain themselves in an economy over time on such a scale that public entities are outnumbered by the former, leading to a more private presence in the market. Herein, a perfect example of a public good (read service) is public healthcare infrastructure existing in a country, which is owned, controlled and maintained by the government across various levels & locations, and is generally available to all individuals- regardless of their background, at affordable rates, with the sole aim of advocating social welfare by providing healthcare services to citizens which would otherwise not have been possible due to an array of reasons. In the context of this example, the process of privatisation would happen when government hospitals would be shut down altogether or sold to a private entity for better functioning & governance, or when a large number of private hospitals would open in the same location, providing [better] healthcare services to people, although at higher costs perhaps.

In the context of education, the term privatization relates to many different educational programs and policies. It is a process which can be defined as the transfer of activities, assets and responsibility from government, public institutions and organizations in the education sector to private individuals and agencies (Abrol, 2016).

Historically, India's education system has tried to maintain the spirit of the 'Right to Education', which states free & compulsory education is provided by the State to children aged 6-14 years (Singh, 2021). Primary and secondary have seen massive success over the last few decades with enrolment rates touching as high as 96% along with a more than 50% increase in the number of enrolled female students, improving the gender gap in India's schools (for more information, see Appendices A & B). While primary & secondary levels have their own set of challenges, they have fared largely well in comparison to the higher secondary levels which have been plagued by issues like quality of education, accessibility & affordability for students, lack of skill development, etc. Regarding the domain of higher education, traditionally, the country has followed the '10+2+3' system of education under the National Education Policy of 1986, which includes 10, 2 and 3 years of primary & secondary, higher secondary and (at least) 3 years of undergraduate study before one can pursue a Master's or a PhD (Aithal & Aithal, 2020). A glance at the recent trends in the ownership of educational institutions across India reveals to the reader an interesting aspect- a stark increase in the amount of private educational institutions, as opposed to the public/government-administered institutions. Various studies on this subject have been done; for instance, one study states that nearly 60% of the total higher education institutions in the country are owned/controlled/promoted by the private sector (Sheikh, 2017), leaving a mere 40% to the public sector. Despite the apparent increase in the quality of education since independence, better rankings and indicators and a larger share of the literate population in the country, there still have been debates on the purpose and impact of privatisation on [higher] education.

Aims & Objectives

This essay will explore privatisation in the education sector. The analysis in this paper will try to delve into:

- a) The interrelation between the education sector and the economy
- b) The privatisation trends in the education sector & their various implications
- c) How privatisation has impacted the different socio-economic strata and induced public-private dichotomy, with special reference to India's school education system
- d) India's education model, and contemporary problems & solutions
- e) How has privatisation emerged as a broader phenomenon in the context of the recent New Education Policy (NEP)?

How are Education & Economy related?

There are several factors that bind education and the economy of a country together as the essence of education is to provide the country with assets that can, in the future, help the country grow by allowing its people to get more jobs, inventing & innovating new ideas, which thus allow a much greater rise in the efficiency and the productivity levels of individuals in the country's economy. In this way, education's major contribution to the economic growth of a country, spread over large periods of time, binds them both in a significant relation to each other. It is for this reason that education, along with healthcare, is often referred to as the two most substantial indicators of the socioeconomic growth of a country; this is evident from their inclusion in the Human Development Index (HDI) prepared by the United Nations Development Programme (UNDP), which uses indices from nearly 190 countries and allocates them global ranks based on their life expectancy, education/literacy levels and the average income levels (gross national income per capita, adjusted according to purchasing power parity in US Dollars). Thus the gradual process of teaching & nurturing students in schools should not only be viewed in terms of [the public/private sector] having to hire teachers, using basic infrastructure & other resources but also in terms of allowing the students to grow in terms of their physical as well as intellectual prowess, which are eventually proven productive for the society and the economy they are part of. Since the last 30 years or so, the advent of liberalisation, privatisation and globalisation, especially in India, has only led to more consolidation in this belief of countries acknowledging human resources to be the most important resources possessed by them, and consequently using all the resources at their disposal to induce human resource development, by means such as better education, healthcare, skill development, etc. The accelerated trend of globalization in the past decade or so has only accorded a more prestigious position to education, with countries now investing more in individuals through

research & development, vocational skills, training in social and emotional quotients, etc, to be able to produce trained & educated individuals who have the potential to face the dynamic challenges of the 21st century. This fundamental understanding of its significance has allowed proportionate investments in education for the growth of the said human resource, through two levels described as follows:

- A. Micro Investment
- B. Macro Investment

Micro investment is usually done when a person invests in himself, and when the government/ the State invests in its people, it is conversely called Macro investment, as further explained in the diagram given below.

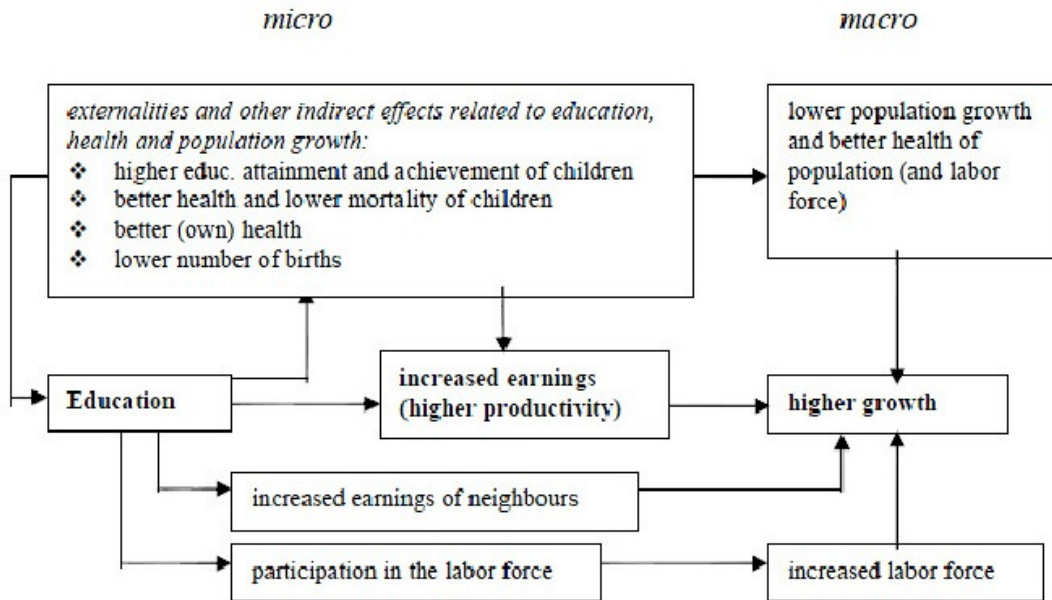


Figure 1: The Returns of Education, (Michaelowa, 2000)

This diagram helps us in understanding how exactly education leads to a return on investment for both the person involved and the state. When a person is educated, it directly correlates to the fact that they can procure better jobs which leads to two basic things-

- 1) **Higher Earnings;** they earn more as they are now more qualified and can apply for better jobs
- 2) **Higher Growth & Productivity;** as more people are educated, it indirectly means that the number of people that would participate in getting jobs would increase, thus, increasing labour and increasing the productivity of the people which leads to the growth of the economy of the state. (Michaelowa, 2000)

The people themselves also benefit by finding better jobs that offer higher pay/compensation for their labour and services, which leads to higher sustainability of incomes and employment levels in the long run. While this is the interrelation between education and the economy at the micro-level, a comprehensive analysis of both at the macro-level requires taking into account and studying various other variables, including the effect of privatisation, especially in this context. This paper will now attempt to outline the broader working of the education sector in India before the impact of privatisation can be studied.

The working of the Education sector now

The government usually classifies various sectors of the economy into two parts- strategic and non-strategic. Strategic sectors are often classified as the critical sectors that are vital for a country's growth (like defence, energy, law & administration, foreign affairs, critical resources, etc) and are largely administered/managed by the government itself, whereas non-strategic sectors are the sectors that might be controlled by either the government or the private sector (by both in some cases) to help the economy or to provide better services for citizens. Education is one of the non-strategic sectors, characterised by the dual presence of both the state and the private institutions, since the state may not be able to fulfil the needs of the growing number of people that seek education, the implications of which shall be discussed in the subsequent sections of this paper.

For instance, the figure given below is a representation of the ownership/management of the universities (public and private) that existed during 2008-2009 in India.

TABLE 1: Number of University & University Level Institutions

Sl. No.	State	Central University	State University	Private University	Deemed University	Institutions Established Under State legislature Act	Institution of National Importance	Total
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	3	21	0	4	2	2	32
2	Arunachal Pradesh	1	0	0	1	0	0	2
3	Assam	2	4	0	0	0	2	8
4	Bihar	0	13	0	2	1	2	18
5	Chhattisgarh	1	7	0	0	0	1	9
6	Goa	0	1	0	0	0	0	1
7	Gujarat	0	16	5	2	0	1	24
8	Haryana	0	6	0	3	0	1	10
9	Himachal Pradesh	0	3	1	0	0	1	5
10	Jammu & Kashmir	0	6	0	0	1	1	8
11	Jharkhand	0	4	0	2	0	1	7
12	Karnataka	0	16	0	14	0	1	31
13	Kerala	0	7	0	2	0	2	11
14	Madhya Pradesh	2	13	0	2	0	1	18
15	Maharashtra	1	19	0	21	0	2	43
16	Manipur	2	0	0	0	0	0	2
17	Meghalaya	1	0	0	0	0	0	1
18	Mizoram	1	0	0	0	0	0	1
19	Nagaland	1	0	0	0	0	0	1
20	Odisha	0	10	0	2	0	2	14
21	Punjab	0	7	1	2	0	3	13
22	Rajasthan	0	14	4	7	0	2	27
23	Sikkim	1	0	2	0	0	0	3
24	Tamil Nadu	0	20	0	25	0	3	48
25	Tripura	1	0	1	0	0	1	3
26	Uttar Pradesh	4	19	4	10	1	2	40
27	Uttarakhand	1	5	3	4	0	1	14
28	West Bengal	1	18	0	1	0	3	23
29	Andaman & Nicobar Islands	0	0	0	0	0	0	0
30	Chandigarh	0	1	0	1	0	1	3
31	Dadra & Nagar Haveli	0	0	0	0	0	0	0
32	Daman & Diu	0	0	0	0	0	0	0
33	Delhi	4	1	0	11	0	2	18
34	Lakshadweep	0	0	0	0	0	0	0
35	Puducherry	1	0	0	1	0	0	2
Grand Total		28	231	21	117	5	38	440

Source: University Grants Commission (UGC)

Figure 2: Number of University and University-Level Institutions across India;

Source: Statistics of Higher and Technical Education 2008-09 (MHRD, 2012)

Here, one can clearly see the total number of universities in India is 440 in number, out of which the number of private universities is a meagre 21, whereas the number of public institutions is 419 (i.e., 440-21). Interestingly, in recent times, as late as 2019, the All India Survey on Higher Education (AISHE) report shows the following data (to be observed is the number of universities, not the responses):

Box 2: Response of Universities during 2019-20		
Type of university	Number of Universities	Number of Response*
Central University	48	46
Central Open University	1	1
Institution of National Importance	135	133
State Public University	386	379
Institution Under State Legislature Act	5	5
State Open University	14	14
State Private University	327	315
State Private Open University	1	1
Deemed University- Government	36	36
Deemed University- Government Aided	10	9
Deemed University- Private	80	80
Grand Total	1043	1019
<i>*Including 26 universities which have uploaded data for AISHE 2017-18 to 2018-19.</i>		

Figure 3: Response of Universities during 2019-20;

Source: All India Survey on Higher Education 2019-20 (DHE-MHRD, 2020)

What is apparent is that, currently, there are 640 public institutions, as opposed to the 419 in 2008-09, which means that the percentage increase in public institutions is only 52.74%. Whereas, on the other hand, compared to the earlier 21, private institutions have now increased to 408 in number, amounting to a whopping 1842.86 per cent increase.

Here, the following question comes to mind- what does such a rapid increase in private institutions mean in the long run for the education sector? It can be answered in the following ways:

1) Perhaps the most visible & the most obvious inference is the increase in the prices for pursuing higher education- the reason being that as the population of India grows, so does the need for more universities that could accommodate the enormous number of students graduating from their high school (Ravi, 2015). Earlier, because of the high number of public institutions, it indirectly meant that education was largely accessible to the larger public. The small increase in public universities as opposed to private ones led to a more significant increase in the price of university education and thus in proportion meant that fewer people were able to afford such [quality] education. As explained by the diagram above, the number of people who can work thus decreases, therefore, in effect meaning that it adversely affects the economy of the country.

2) The socio-economic gap, which was prevalent even during the earlier decades continues to increase, meaning- the rich get richer and the poor get poorer as they are unable to afford education, except the few that are able to enrol in a public institution that is affordable, and thus they are unable to get better-paying jobs which require qualifications to apply for (Hoque, 2018).

On one hand, it is pleasing to know that government intervention in the education sector still prevails and hasn't been reduced to an absolute zero figure. On the other hand, one sees the sheer number of private institutions that have emerged over the last 10 years or so with the aim to combat the increasing demand for higher education. However, this rise in the number of private institutions has led us into this scenario where the need for the affordability of quality higher education (at private institutions) is dire but the country's lagging growth is visible from its 132nd rank in the Human Development Index, inducing a process wherein private universities and colleges have been increasingly incentivised to establish, administer and promote themselves to uplift the status of education levels in the country, which public institutions have repeatedly failed to do so.

The dichotomy between public and private education in India

The various examples and the study of the status of education- especially at the higher education level in India, only reveal the emergence of the private players in this sector, and to some extent, the withdrawal of the State. While higher education often occupies the limelight in the sector's studies- due to its essential role in producing trained individuals that later form the workforce and add to the income of the country, the lower levels, including primary/elementary, secondary and higher secondary are often not at the helm of such studies, and thus ignored. What is important though is to realise & acknowledge that the lower levels of education are responsible for creating & shaping the fundamentals of the traits and the skills an individual possesses later in life. Therefore, it becomes increasingly important to view the education sector as a whole and include all levels of education in its studies & its reforms. The following sections shall solely discuss the current status of the school education system prevailing in India vis-a-vis privatisation.

The binary nature of school education in India, broadly classified into public and private, has been reflective of the disparity that exists between the two. This also forms the core of the discussions that have been centred around the Indian education system. This ever-growing gulf has resulted in the reduced capacity of the poor and weaker sections of society to be ambitious and have opportunities as compared to the better sections. The differences that sharply divide the two groups can be based on the following factors – infrastructural facilities, socioeconomic status, medium of instruction and level of outcome. These are discussed ahead, in detail.

Infrastructural Facilities

The polarity between private and public schools is evidenced by the quality of infrastructural facilities present in both cases. In India, around 25 crore students are enrolled into 15 lakh schools (for more information, refer to Appendix C). Among these students, about half or nearly 12 crores attend private institutions, which amounts to 1/3rd of the total number of schools (Arora, 2020). The remaining 2/3rd of the share is accounted for by the public schools, which cater to the needs of the other half (Kishore and Jha, 2020). Although the bigger share is held by public schools, there has been a notable escalation in the number of private academies as well.

One of the prime reasons for the same could be the higher standards of infrastructure delivered by private organizations, as discussed earlier (for more information, refer to Appendix D). While sophisticated amenities like language labs and digital libraries are catered by private players, it is surprising to know that public schools often even struggle to maintain clean washrooms. In addition, the teaching and non-teaching staff in public schools tend to exhibit lower levels of accountability as compared to private ones. This leads to an increased rate of absenteeism amongst the staff members. A study conducted in 3500 public schools across the country revealed that about 25% of primary teachers were absent. Also, only half of the teachers present were found to be tutoring the students. The others were reported to have been engaged in private errands (Harjani, 2018).

Socio-economic status

A sharp contrast can be seen between the two cases on the basis of the socio-economic backgrounds of the students. As per general observation, students from economically stronger families are admitted to private schools. On the other hand, public schools are mainly chosen by financially weaker families. According to the Annual Status of Education Report (ASER) of 2020, assets such as a smartphone were available to 54.6% of students in public schools as compared to 74.2% in private ones (Pratham Foundation, 2021) (for more information, refer to Appendix E). The decision of enrolling students in public schools is not taken on the basis of the quality of education but on economic restraints. A survey carried out across 13 villages in the country, covering 250 families, revealed a general inclination towards private education (Härmä, 2011). A wide range of co-curricular activities and state-of-the-art facilities are furnished by private educators which works as an advantage. However, the tuition charged for these services is five times higher than that of public schools. The fee structure can range anywhere from 30,000 INR per month to 13,00,000 INR per year. Recent data shows that Indians who earn more than 25,000 INR per month comprise the top 10% of the population. Thus elite private education remains entirely unattainable for the rest of the population.

Medium of instruction

Differentiation can also be made with respect to the medium of instruction in public and private schools. As a greater sense of achievement is tied to education in the English medium, students

tend to approach private schools more. However, access to English medium education is linked to factors such as caste, gender and economic status. Data findings indicate that students belonging to the top 20% of the economic ladder are ten times more likely to get an English education. Further, the likelihood of general-category students getting an English-medium education is three times more than that of an SC (Scheduled Caste) student in India (Kishore and Jha, 2020). Focusing on gender, families often compromise on the girl child's education and promote English as the medium of instruction for boys. The increase in demand for an English-based curriculum has led to the steady rise of private institutions. The number of these schools and the students attending them has grown over the past two decades from 19% in 2006 to 31% in 2014 (Kundu, 2014). In sum, the number of private schools is directly proportional to the demand for English education.

Level of Outcome

A study conducted by the Young Lives Survey (YLS) for students aged between 5-12 throws light on the gradual development of an achievement gap. The students were examined on Maths and Peabody Picture Vocabulary Test (PPVT). The performance at the elementary level in private and public schools was nearly similar. However, the gap significantly widened at the pre-adolescent level. Students from public schools had a 10 to 28 percentage point, and 9 and 19 percentage point chance of performing poorly in math and PPVT, respectively, vis-a-vis the private schoolers (McDonough et al., 2021). The survey also suggested that private schools contribute more towards value addition and provide a comprehensive learning experience. Further, schools in urban areas were found to produce better results than the ones in rural areas (ODID, 2022). There can be a number of causes behind such an achievement gap. The focus on holistic versus strict scholastic education can be cited as one. Private schools while concentrating on the overall development of the students provide them with wide opportunities to hone their extracurricular talents. Public schools lack the infrastructure, resources and networks to do the same. As a result, public-educated pupils fall behind their private counterparts who possess the cultural capital and sophistication required by higher educational institutions.

The above-discussed points can be understood with regard to the prime objective(s) of both types of schools. Public schools seem to be essentially concerned with the provision of basic literacy. For ensuring maximum participation in these schools, incentivization schemes such as free uniforms, textbooks and mid-day meals are often provided by the government (Härmä, 2011). On the contrary, private schools aim to build a multi-skilled individual. This difference in objectives produces highly varying results, which eventually work to the disadvantage of students in the public sector. In order to reduce this learning gap, the government has taken initiatives such as the reservation of the Economically Weaker Sections (EWS) in private schools. Along with that, many low-cost, private schools have also been set up with the aim of providing increased exposure to the students. However, these steps have proven to be unsuccessful due to several reasons. EWS category students hardly cope with the environment of private schools owing to perceived class differences. Along with this, low-cost private schools remain inaccessible to the poverty-stricken. The additional costs of educational resources make it impossible for these groups to secure private education. In fine, it can be said that despite the constant efforts, the goal orientation of public and private schools remains the same. While the former struggles to maintain its existence, the latter strives towards excellence.

India's Education Model- Problems & Solutions

After studying the current situation of the education sector in India at both higher and lower levels, one can perceive the differences induced by the privatisation of education. More often than not, privatisation has led to a widespread increase in the quality of education, although at decreased accessibility to large sections of the population and at extravagant costs that can be afforded only by the financially-well sections. The next essential step in this paper is to take a look at the [potential] solutions & devise a feasible model, if possible, that would be affordable for the public at large and practically possible for a developing country like India. Therefore, the primary aim of the model shall be to ensure that more people are getting educated and are thus able to contribute to the economy and society.

An important, initial step in doing this is to take a look at the Finnish Education Model, one that is starkly different from ours. To begin with, the Finnish education model is regarded as one of the

best in the world, where the focus is on practical learning rather than being taught in a standardized way, which includes tests and other memorization-related courses. While these small changes have gone a long way in shaping the Finnish model system, perhaps the most important thing out of all of them is the fact that Finland bans any institution from profiting from basic education and a majority of their institutions are publicly owned, which makes it easier for them to be managed by the State. It also allocates proper resources in this sector, combined with a rigorous testing procedure to select & appoint teachers in schools, and offering them job security and ample wage with flexible work hours- as most days in Finland's universities start somewhere between 9 and 9:45 am. Thus, in this regard, Finland has made quite a strong education structure for itself, while also giving students alternatives in terms of the courses they [want to] study. Moreover, education is free of cost for students which makes a huge difference in terms of incentives for low-income households to send their children to pursue primary & secondary studies (CCE, 2022)

On a closer look, one can easily infer that the Finnish model is in clear contrast to the current Indian model of education, wherein students follow a rigorous structure to achieve higher education, which also includes a higher financial cost. The Indian model leads to more students actually opting out (dropping out) of pursuing further studies, mainly because of the reason that they can't afford it, leading to lesser productivity and consequently, applying for low-quality jobs. This goes on to harm the country's per capita income. As a result of having a low-quality job, people are often unable to fulfil their potential and cannot even afford basic necessities, thus leading to an increase in the previously-mentioned socio-economic divide.

Thus, after an analysis of these factors, it is impractical to simply conclude that the government should 1) be the one investing its finances & other resources in education, and 2) ban privatisation as a whole. This is because even though privatisation is not affordable, it still has students enrolling in private institutions and also provides long-term employment to various strata of society. Thus, because there is no way to completely do away with privatisation, a more sensible argument is to make do with the present resources and strive to create a more co-dependent ecosystem for the public and the private players in the education sector.

The major problem with public institutions is the lack of infrastructure and faculty owing to a lack of funds, while private institutions face criticism due to their exorbitant pricing and no job securities, offering a majority of people jobs only on a contractual basis. As mentioned earlier, inhibiting the growth of private institutions by any means is more often than not counterproductive to the socioeconomic development of the country. Therefore, more pragmatic solutions have to be implemented in the education sector to increase accessibility and the affordability of education at all levels and minimise the consequent socio-economic gap among various groups & classes across the country.

With respect to the argument presented at the beginning of the section titled ‘The dichotomy between public and private education in India’, a comprehensive study of the contemporary challenges & prospects faced by the Indian system of education (at the school level) is essential towards reforming the education sector as a whole. First, it is essential to acknowledge that the Indian schooling system is by no means perfect and host to a whole range of problems. Inadequate infrastructure, lack of teachers and the poor quality of education are only some of the many foundational issues in the public education setup of the country. According to one ‘State of The Sector Report on Private Schools in India’ by the Central Square Foundation (CSF) from the year 2020, it has been observed that parents prefer private education for their children due to the better quality of education, dedicated teaching staff as well as the prospect of being taught in English as the dominant medium of instruction.

From 1973 to 2017, enrolments in private unaided schools grew 33 times (CSF, 2020). The result is that a significant proportion of students in the country now attend private educational institutions – nearly 50% (CSF, 2020). While such an apparent increase in enrolment in private institutions might signal the apparent edge these institutions have over the public education setup, the reality is in fact quite different.

As it turns out, private education is not without its own faults- learning levels have either declined over time or have remained stagnant and this has been exacerbated by class as well as gender divisions (CSF, 2020). Moreover, valuable information is not widely prevalent regarding the supposed quality of education associated with these institutions. For example, 60% of private

schools do not extend to the grade of board examinations, therefore standardised information on these schools' learning outcomes does not exist. As a consequence, private school owners do not have the required incentives or the pressure to improve learning levels among students (CSF, 2020).

While it is important to initiate changes that might provide more valuable insight into the functioning of private institutions so that parents might make informed choices, the consistently receding public education setup must also strive to make a comeback if education for all is to be ensured in line with the commitments under Article 21-A of the Indian Constitution. As things stand, the private-unaided schooling system is bound to consistently grow over the next decade.

In such a scenario, two broad strategies must be employed. These are as follows:

- 1) Concentrated efforts towards improving the quality of public education in the country
- 2) Introducing a system of oversight and regulation in privately aided institutions

The former would be seen in terms of an infrastructure overhaul, better screening processes for teacher recruitment and institutional redesign. While the Government of India has been largely successful in raising accessibility and equity, owing to the Right To Education Act and the Sarva Shiksha Abhiyan (SSA), it still lacks in the crucial area of the quality of education (refer to Appendix F).

Therefore, the need of the hour is to develop effective strategies and unique solutions to improve the education sector in India. A handful of such solutions include the following:

- 1) **Better management & administration in public institutions;** this includes inculcating transparency & accountability among the top officials managing the said institutions, developing more rigorous, uniform and unbiased selection procedures for the appointment of teachers & professors, providing incentives not only by reduced tuition charges but also by other lucrative means such as coordinating jobs & internship offers post-study, scholarships to athletes and other students with exemplary track records in one or the other domain, etc. Another way is to ensure compliance with legal & technical regulations, encourage research & academic culture among

scholars, establish Memorandums of Understanding (MOUs) with both domestic & foreign institutions for better cooperation & collaboration in different spheres, etc

2) **Minimising setbacks within private education;** extravagant costs are perhaps the single biggest drawback on the path of accessing private education. Yet, what is often overlooked is the huge costs of investment borne by the private players to set up such institutions; therefore above-average market costs of education are the only way for such institutions to ensure their existence and survival in the market. Once this is realised, a small yet overwhelming potential solution is for the State to aid private players in lowering their investment costs, which can include subsidies and/or tax relief(s) on land, basic services (such as water, electricity, etc), reduced registration & compliance costs, which over time compound and lead to huge expenditures for the founders. Similarly, establishing options for students to allow intra-course transfers between public and private institutions, MOUs for better academic exchanges and encouraging student diversity (with respect to their social and financial backgrounds), etc can be game-changing solutions to bridge the gap between the public and the private sectors in the education sector.

Thus to reform India's ailing education system, the focus shall be towards increasing accountability (especially administrative accountability), introducing proper recruitment & training procedures, and ensuring quality control without the possibility of institutional bias. With regard to private-unaided schools, the government should introduce proper tools for oversight and regulation in order to prevent the associated loss in learning levels. Moreover, in line with the recent National Education Policy (NEP) of 2020, measures such as Public-Private Partnerships (PPP) should also be initiated; however, their focus should be geared towards knowledge & skill transfer and not mere philanthropic or ownership-transfer agreements. The focus needs to be on improving public education through the learnings and experiences of the private setup, as opposed to allowing both to stagnate as separate entities. Moreover, technological and digital inputs need to be integrated into the teaching system in order to further bolster inclusivity and equity so that education for all may become a reality.

NEP'ing the system

In the context of the privatisation of education, the National Education Policy of 2020 is a step in the right direction for it emphasises higher literacy among students and calls (read allows) for a more flexible structure in syllabi across both the higher & the lower levels of education across India, which are guided by the Academic Bank of Credit- a new, unique system of course credit the likes of which have been followed & implemented in leading global universities & schools since long (Kurien & Chandramana, 2020). Poised as one of the biggest reforms in the education sector since 1947, the NEP seeks to create a 'hub of knowledge' within the schools & universities in India and paves the way for multi-disciplinary education in India- a trend like the popular liberal arts education advocated by the Western universities (Pathak, 2021). A closer reading of this policy not only reveals the strong emphasis on the integration of disciplines (pure sciences, business, humanities and social sciences), critical thinking & understanding, and development of social and emotional traits among students, but also the following aims in the education sector- to increase the quality of education, to make education affordable, accessible, accountable and equitable for all, regardless of their social/cultural/political/economic backgrounds (Kumar et al., 2020). While these goals may sound generic at first, the NEP as a policy document talks in detail about reforming the regulatory framework within the education sector, increasing state-administered investment in education via public institutions, emphasis on technology and digital inputs (such as by teaching coding/programming to students at a young age) to adapt to the dynamic challenges of the 21st century, formulation of overseeing education commission(s) at the national levels, etc (Aithal & Aithal, 2020). In particular, it talks of almost doubling state expenditure on public education from the present 10% of the total public expenditure to a newer amount of 20% of the total capital at the disposal of the government. Further, the establishment of a National Education Commission or a 'Rashtriya Shiksha Aayog' that would work in tandem with other organisations such as the Central Board of Secondary Education (CBSE), University Grants Commission (UGC), and Department of Higher Education (DHE) under the Ministry of Education (previously known as the Ministry for Human Resource Development or MHRD), is a welcome proposal that has the potential to shape & guide the spirit of the forthcoming education reforms in India, under the leadership of the Prime Minister of India itself. While such reforms at the moment can not be attributed to targeting either the public or the private sector of education in particular, they are certainly intended to make governance in education better than before- a step that is promisingly well-thought to uproot the misgovernance in several public & private educational institutions.

Further, it also encourages private institutions in particular 1) to make education more affordable by providing out larger (than before) scholarships to a higher number of students, especially those from underprivileged backgrounds, and 2) to operate under the aegis of an apex body called the Higher Education Commission of India (HECI)- one like the previously-mentioned National Education Commission, although HECI being specifically for all (both public & private) higher education institutions (HEI) (Kalyani, 2020).

Conclusion

Through this research paper, the author has made an attempt to observe and analyse the situation of the education sector in India. Using examples & data from different levels of education in the country, the paper discusses various aspects such as socio-economic gaps in the population, varying levels of quality, affordability & accessibility to education that exist among different sections of society, and how privatisation has had a mixed bag of results over the last few decades or so. While these factors provide more than a satisfactory outlook on the education sector, one can not choose to ignore the latest addition to this list of variables i.e., the NEP of 2020. The NEP, while being revolutionary in its spirit, has sought to alter & reform this sector; yet its promising effects are yet to be seen for it is too new of a policy. A comprehensive study of the NEP on the sector and its consequent effects on the society and the economy of India shall require at least 4-5 years of data before one comes to a conclusion. For the time being, this paper shall emphasise privatisation being both a boon and a bane for India's education, as discussed in multiple sections. While improving the quality of education across multiple levels and institutions remains the need of the hour, ensuring its affordability, as well as accessibility, needs to be made a priority too, for, the bureaucrats, policymakers as well as the (non-governmental) civil society organisations that are looking to make a difference in this sector. Lastly, the accelerated pace in the trends of privatisation in the aftermath of the 1991 reforms, should not be mingled with, since it has also led to significant economic growth, despite its array of drawbacks. Like other sectors, the way forward should be to encourage more privatisation by several means and encourage PPP, while ensuring that public institutions are not forgotten to be left as symbols of a bygone era- symbols that remind

us of the ever-widening rich-poor gap, among other drawbacks of India's education system.

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Appendix A**Percentage of Children enrolled in school. By age group, sex and school type. 2020.**

Age group and sex	Govt	Pvt	Other	Not enrolled	Total
Age 6-14: All	65.8	28.8	0.8	4.6	100
Age 7-16: All	65.5	28.6	0.7	5.2	100
Age 7-10: All	64.3	30.5	0.8	4.4	100
Age 7-10: Boys	60.9	33.6	0.8	4.7	100
Age 7-10: Girls	68.1	27.0	0.8	4.1	100
Age 11-14: All	68.0	27.4	0.7	3.9	100
Age 11-14: Boys	64.5	30.9	0.7	3.9	100
Age 11-14: Girls	71.9	23.5	0.7	3.9	100
Age 15-16: All	62.1	27.3	0.6	9.9	100
Age 15-16: Boys	60.8	29.7	0.8	8.8	100
Age 15-16: Girls	63.6	24.8	0.5	11.1	100

Appendix B

Enrollment status of young children (age 5-8). Status from 2020 and percentage point change over 2018 levels.

Age	Not enrolled	Enrolled in:			Total
		Anganwadi	Pre-primary*	Primary**	
5	14.9	24.1	26.2	34.9	100
	+6.8	-4.0	-4.2	+1.4	0.0
6	7.9	5.6	15.2	71.3	100
	+4.5	-2.0	-3.1	+0.5	0.0
7	5.7	0.9	6.6	86.8	100
	+3.9	-0.9	-1.5	-1.5	0.0
8	3.9	0.4	2.0	93.8	100
	+2.4	-0.3	-1.8	-0.3	0.0
5-8	7.5	6.4	11.2	74.9	100
	+4.0	-2.6	-3.3	+1.9	0.0
6-10	5.3				
	+3.5				
11-14	3.9				
	+0.7				

Appendix C

Percentage of children enrolled in school. By grade, sex and school type.

Std	ASER 2018						ASER 2020					
	Boys			Girls			Boys			Girls		
	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total
Std I-II	57.9	42.1	100	65.1	34.9	100	61.1	38.9	100	66.7	33.4	100
Std III-V	62.7	37.3	100	71.2	28.8	100	65.6	34.4	100	73.3	26.7	100
Std VI-VIII	65.8	34.3	100	73.3	26.7	100	68.3	31.7	100	77.0	23.0	100
Std IX & above	64.6	35.4	100	68.9	31.2	100	69.7	30.4	100	72.7	27.3	100
All	62.8	37.2	100	70.0	30.0	100	66.4	33.6	100	73.0	27.0	100

Appendix D

Percentage of enrolled children who have textbooks for their current grade. By grade and school type. 2020.

Std	Govt	Pvt	Govt & Pvt
Std I-II	79.8	69.7	76.2
Std III-V	85.5	72.0	81.4
Std VI-VIII	86.3	73.7	82.8
Std IX & above	82.7	73.5	80.0
All	84.1	72.2	80.5

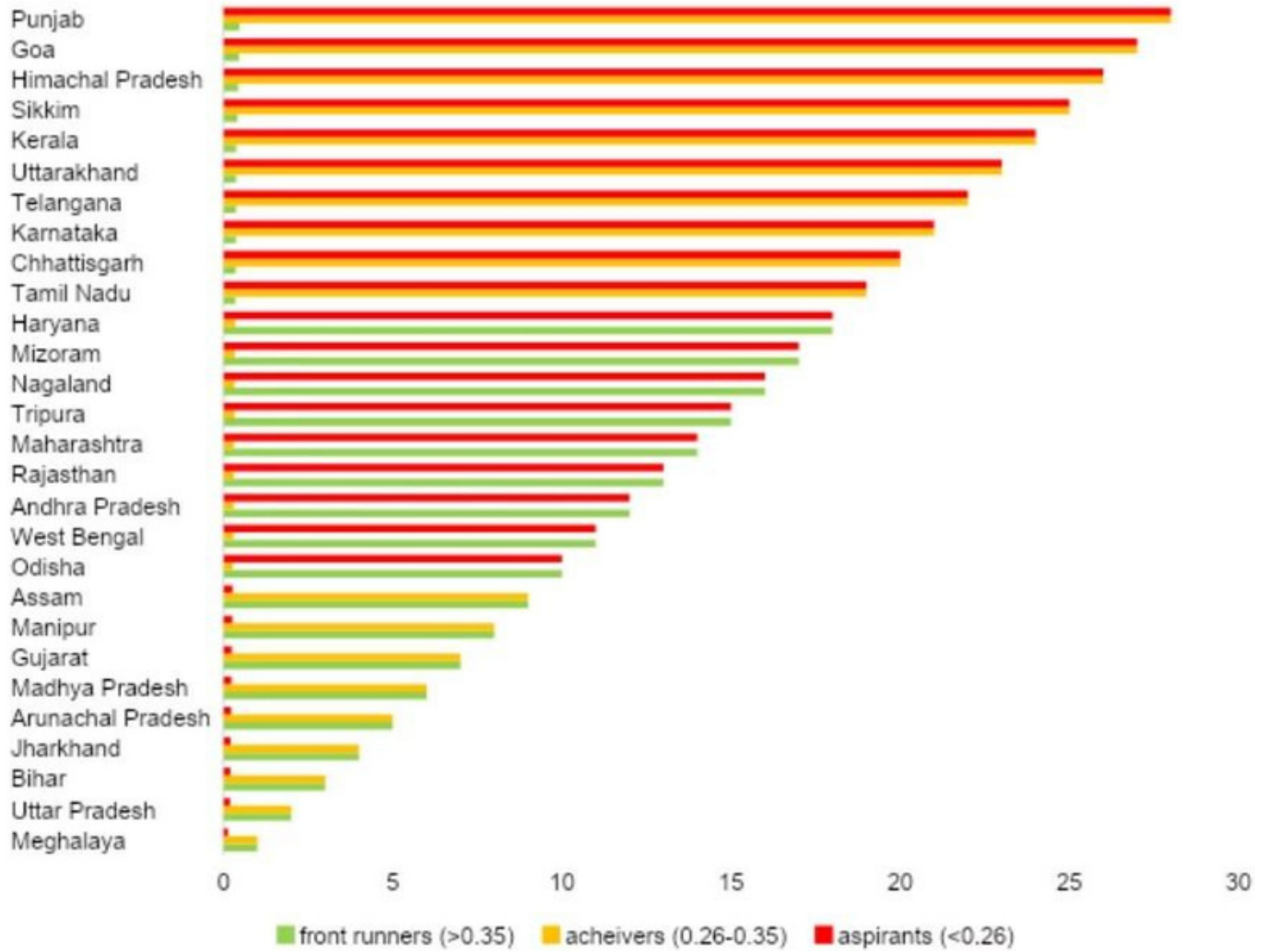
Appendix E

Percentage of enrolled children with selected assets available at home. By school type and asset type. 2018 and 2020.

Household resource	% Children					
	ASER 2018			ASER 2020		
	Govt	Pvt	Govt & Pvt	Govt	Pvt	Govt & Pvt
Smartphone	29.6	49.9	36.5	56.4	74.2	61.8
TV	54.8	72.5	60.7	56.0	71.9	60.8
Motorized vehicle	39.1	62.5	46.9	43.5	64.7	49.9

Appendix F

Access to Education: Ranking of States in India



आचार्य प्रफुल्ल चंद्र राय - एक जीवन परिचय

इंद्रजीत सिंह¹ और प्रजापति झा²

¹बी. ए. (ऑनर्स) हिन्दी और ²बी. ए. (ऑनर्स) संस्कृत, दिल्ली विश्वविद्यालय

सारांश

आचार्य प्रफुल्ल चंद्र राय भारत के अग्रणी वैज्ञानिक, शिक्षक, शिक्षाविद् और स्वतंत्रता सेनानी थे। औपनिवेशिक शासन के दौरान हो रही बौद्धिक जागृति के समय बंगाल में जन्मे राय ने भारत के आत्मनिर्णय और आत्मनिर्भरता के अधिकार का समर्थन किया। अपने जीवन काल में उन्होंने कई पुस्तकें लिखीं और एक रसायनविद् के रूप में उल्लेखनीय वैज्ञानिक खोजों में वे सबसे आगे थे। उनके विचार भारतीय और पश्चिमी विचारधाराओं का अनूठा मिश्रण हैं, इस शोध आलेख का उद्देश्य प्रफुल्लचंद्र राय के रोचक और घटनापूर्ण जीवन का एक संक्षिप्त चित्र प्रस्तुत करना है।

मूलशब्द : आचार्य प्रफुल्ल चंद्र राय, स्वतंत्रता सेनानी, भारतीय रसायनविद्

स्वतंत्रता आंदोलन और शिक्षाविद्

भारत के इतिहास में आधुनिक काल का प्रारंभ उन्नीसवीं शताब्दी से माना जाता है। लेकिन विभिन्न प्रांतों में इसके सोपान निर्माण का कार्य इस शताब्दी के पूर्व से ही शुरू हो गया था। सबसे पहले इसका विस्तार बंगाल की धरती पर हुआ। वर्ष 1757 के प्लासी युद्ध में अंग्रेजों की जीत के बाद बंगाल पर अंग्रेजों का प्रभुत्व स्थापित हुआ। हालांकि अंग्रेजों का भारत में प्रारंभिक उद्देश्य व्यापारिक था किंतु धीरे-धीरे उन्होंने यहाँ का आर्थिक शोषण करना शुरू किया और तदुपरान्त अपना राज्य स्थापित किया। अपने व्यापार विस्तार तथा उसकी समृद्धि हेतु उन्होंने कानून व्यवस्था स्थापित की, भूमि तथा कृषि के लिए नया प्रावधान किया, रेल तथा डाक का जाल बिछाया और अंग्रेजी शिक्षा के साथ प्रेस की शुरुआत की, जिसने भारत में आधुनिकता को गति देने का कार्य किया, और भारत में अंग्रेजों की पूर्ण रूप से आर्थिक और राजनैतिक पकड़ कायम हो गई। अब इन सभी के व्यवस्थित नियंत्रण के लिए प्रशिक्षित कर्मचारियों की आवश्यकता पड़ी। जिसके लिए उन्हें भारतीयों पर निर्भर होना पड़ा।

इस अवसर के बाद कई भारतीय प्रशिक्षण व शिक्षा के उद्देश्य से विदेश गए। विदेशों में शिक्षा प्राप्त इन भारतीयों ने इन देशों के स्वतंत्र परिवेश में रहकर, वहाँ के आम जीवन को अनुभव किया और स्वतंत्रता का महत्व समझा। जिससे ये लोग अंग्रेजों की शोषण परक नीति से पूर्णतः अवगत हुए, और भारत लौटकर इन्होंने अपने-अपने स्तर पर लोगों को जागरूक कर अंग्रेजों के खिलाफ आवाज उठाई। इनमें प्रमुख विद्वान तथा स्वतंत्रता आंदोलनकारी बंगाल प्रांत के हुए, क्योंकि सर्वप्रथम आधुनिकता (वैज्ञानिकता तथा मशीनीकरण) का विस्तार वहीं हुआ। आचार्य प्रफुल्लचन्द्र राय उनमें से ही एक विद्वान थे। बतौर वैज्ञानिक काम करते हुए इन्होंने भारत के स्वतंत्रता आंदोलन में देश को आत्मनिर्भर बनाने तथा भारत की अपनी शिक्षा व्यवस्था को अपनाने पर अत्यधिक बल दिया।

प्रफुल्लचन्द्र राय का आरंभिक जीवन और शिक्षा

प्रफुल्लचन्द्र राय का जन्म 2 अगस्त, 1861 को पूर्वी बंगाल (वर्तमान बांग्लादेश) के जैसोर जिले के एक गांव में हुआ था। उनके पिता हरिश्चन्द्र राय जमींदार थे और विचारों से उदार थे। वे ब्रह्मसमाज के सक्रिय सदस्य थे, जिसका गहरा प्रभाव उनके बेटे प्रफुल्ल पर पड़ा।

प्रफुल्लचन्द्र राय की प्रारम्भिक शिक्षा गांव में ही हुई तथा प्राथमिक शिक्षा पूर्ण करने के बाद वर्ष 1870 में उन्होंने कलकत्ता के हेयर स्कूल में प्रवेश लिया। हेयर स्कूल से शिक्षा पूर्ण करने के बाद वर्ष 1879 में कलकत्ता विश्वविद्यालय की प्रवेश परीक्षा उत्तीर्ण कर उन्होंने वहाँ प्रवेश लिया। अपने पिता द्वारा संग्रहित पुस्तकों में से प्रफुल्ल को एक पुस्तक मिली जिसमें कुछ महान वैज्ञानिकों के जीवन चरित्र अंकित थे। जिन्हें पढ़ प्रफुल्ल काफी प्रेरित हुए। प्रफुल्ल महान वैज्ञानिक बेंजामिन फ्रैंकलिन के जीवन से सर्वाधिक प्रभावित हुए। उनके जीवन चरित्र को पढ़कर ही राय ने वैज्ञानिक बनने का निश्चय किया। पाश्चात्य साहित्य में रुचि रखने वाले प्रफुल्ल बहुत ही कम उम्र में अंग्रेजी, फ्रेंच, जर्मन सहित अनेक विदेशी भाषाओं के जानकार बन गए। प्रफुल्ल अंग्रेजी के महान कवि और नाटककार शेक्सपियर की रचनाओं को बहुत ही शौक से पढ़ते थे।

जब उनके समकालीन विद्यार्थी साहित्य और दर्शन विषय चुन रहे थे तब प्रफुल्लचन्द्र ने साहित्य और इतिहास के प्रति अपने गहरे आकर्षण के बावजूद विज्ञान का चयन कर अध्ययन करने के लिए विदेश जाने का निश्चय किया, क्योंकि उनका मानना था कि देश की प्रगति की कुंजी आधुनिक विज्ञान व तकनीकी के क्षेत्र में है। उनका विश्वास था कि अपने गौरवशाली अतीत और विशाल संभावनाओं के साथ राष्ट्र अभी और अधिक गौरवशाली भविष्य की ओर देख सकता है।

वर्ष 1882 में प्रफुल्लचन्द्र ने इंग्लैंड पहुंच एडिनबर्ग विश्वविद्यालय में प्रवेश प्राप्त किया। यहां उनका सम्पर्क कई जाने-माने रसायनविदों से हुआ, जिसके बाद प्रफुल्ल का रसायन प्रेम और अधिक मजबूत हुआ। प्रफुल्ल ने बी.एससी की परीक्षा में शानदार सफलता प्राप्त की। आगे चलकर वर्ष 1888 में डी .एससी की उपाधि प्राप्त की। उन्हें कई छात्रवृत्तियां भी मिलीं। एडिनबर्ग में अध्ययन करने के दौरान वर्ष 1885 में विश्वविद्यालय द्वारा आयोजित निबंध प्रतियोगिता जिसका शीर्षक 'इंडिया बेफोर एंड आफ्टर द म्युटिनि' था ने प्रफुल्लचन्द्र की राजनीतिक समझ और लेखन क्षमता को और विकसित किया। इस प्रतियोगिता के लिए उन्होंने कई संदर्भ ग्रंथों (भारत संबंधित) का अध्ययन किया, जिसके बाद उन्हें भारतीय शासन व्यवस्था को करीब से जानने का अवसर प्राप्त हुआ और उनकी तार्किक शक्ति का भी विस्तार हुआ। इस अवसर ने उनके भीतर राष्ट्रीय चेतना का भी बीजारोपण किया। वे वर्ष 1888 में ही भारत लौट आए। वर्ष 1889 में कलकत्ता के प्रेसीडेन्सी कालेज में बतौर प्रोफेसर नियुक्त हुए। अध्यापन कार्य के साथ-साथ वे मौलिक शोध कार्य भी करने लग गए। वर्ष 1916 में वे राजकीय सेवा से निवृत्त हुए ।

आचार्य राय के प्रमुख अनुसंधान

रसायन विज्ञान के क्षेत्र में आचार्य प्रफुल्ल चन्द्र राय का विशेष योगदान रहा है। अपनी प्रयोगशाला में तेजाब व पारे का प्रयोग करते हुए उन्हें एक नये रसायन मरक्यूरस नाइट्राइट की प्राप्ति हुई। उनकी यह खोज काफी महत्वपूर्ण साबित हुई क्योंकि उस समय अन्य वैज्ञानिकों को इस स्थिर यौगिक के बारे में कुछ जानकारी नहीं थी। इस पदार्थ के गुण-धर्म सभी वैज्ञानिकों के लिए बिल्कुल ही नए थे और आचार्य राय की यह खोज पूरे विश्व में ख्याति का पात्र बनी। यह खोज सचमुच काफी महत्वपूर्ण थी। आचार्य राय ने अपने द्वारा निकाले गए निष्कर्ष को लंदन की केमिकल सोसायटी की एक विचारणीय बैठक में भी प्रस्तुत किया।

भारत अन्य देशों से वस्तुओं का आयात किया करता था जो कि काफी उच्च दर पर देश में बिकते थे। परंतु आचार्य प्रफुल्ल चन्द्र ने सर्वप्रथम विज्ञान व उद्योग के क्षेत्र में स्वदेशी की नींव डाली। उन्होंने स्वदेशी को बढ़ावा देने के लिए एक लघु उद्योग की शुरुआत की। जो आज बंगाल केमिकल एंड फार्मास्यूटिकल वर्क्स के नाम से जाना जाता है। यह एक बड़ा कदम था जिसमें देसी सामग्रियों का उपयोग करके दवा व औषधियों का निर्माण कार्य किया जाने लगा। आचार्य राय के शोध संबंधी लगभग 200 पत्र प्रकाशित हुए हैं, इसके अलावा उन्होंने भारत में पाए जाने वाले खनिजों को सूचीबद्ध किया। उन्होंने लोगों का ध्यान रसायन विज्ञान की ओर आकर्षित करने में एक मुख्य भूमिका निभाई। उन्होंने "हिस्ट्री ऑफ हिंदू केमिस्ट्री" नामक महत्वपूर्ण ग्रंथ की रचना की । यह एक अनूठा योगदान साबित हुआ।

इंग्लैंड से भारत लौट कर उन्होंने कलकत्ता के प्रेसीडेंसी कॉलेज और कलकत्ता विश्वविद्यालय में काम किया। उन्हें प्रोफेसर पद की जिम्मेदारी सौंपी गई।

- वर्ष 1919 ई० में ही ब्रिटिश सरकार ने उन्हें "नाइट" की उपाधि से अलंकृत किया।
- वर्ष 1916 में वे प्रेसीडेंसी कॉलेज से रसायन विज्ञान के विभागाध्यक्ष के पद से सेवानिवृत्त हुए। तत्पश्चात् वे कलकत्ता विश्वविद्यालय के साइंस कॉलेज में 20 वर्ष तक प्रोफेसर रहे। किसी विश्वविद्यालय में "प्रोफेसर" बनने का सम्मान प्राप्त करने वाले वे पहले भारतीय थे। यहां वे वर्ष 1936 तक काम करते रहे और बाद में भी वर्ष 1944 में अपनी मृत्यु तक "एमेरिटस प्रोफेसर" के पद पर बने रहे।
- उन्हें अनेकों विदेशी और भारतीय विश्वविद्यालयों और संस्थानों से सम्मानित भी किया गया। जैसे वर्ष 1920 में काशी हिंदू विश्वविद्यालय के संस्थापक पंडित मदन मोहन मालवीय जी ने आचार्य राय को डी .एससी की मानद उपाधि प्रदान की।
- आचार्य प्रफुल्लचन्द्र की स्मृति में उनके नाम से कॉलेज, बालकों के लिए हाई स्कूल तथा कोलकाता में आचार्य प्रफुल्लचन्द्र कॉलेज पॉलीटेक्निक हैं। इसी प्रकार बांग्लादेश के बागरहाट में प्रफुल्लचन्द्र कॉलेज है।

आचार्य राय और प्राचीन भारतीय साहित्य

आचार्य राय रसायन शास्त्र के बहुत बड़े जानकार थे। लेकिन उन्हें संस्कृत और वैदिक साहित्य का कोई खास ज्ञान नहीं था, न ही वे इस शास्त्र को पढ़ने में सक्षम थे। यही वजह रही कि उन्होंने अपने बेहतरीन शोध "हिस्ट्री ऑफ हिंदू केमिस्ट्री" के लिए संस्कृत के प्रकांड विद्वान पंडित श्रीराम नवकांत कविभूषण का सहयोग लिया। पंडित श्रीराम ने आचार्य राय के लिए संस्कृत साहित्य और वैदिक वांग्मय के कई ग्रंथ तथा संबंधित जानकारियां इकट्ठा कीं और उन्हें समझने में उनकी मदद की। यह उदाहरण इसलिए महत्वपूर्ण है क्योंकि आज भी जो वैज्ञानिक अज्ञानतावश भारत के समृद्ध पुरातन ज्ञान विज्ञान पर प्रश्न उठा देते हैं, उन्होंने कभी स्वयं इन शास्त्रों का अध्ययन किया ही नहीं है, ना ही ये इसकी पात्रता रखते हैं।

सामान्यतः वैदिक वांग्मय को संस्कृत के जानकार ही समझ पाते हैं, लेकिन वे भी स्वयं ज्योतिष और कर्मकांड तक सीमित हो कर रह गए हैं। पंडित नवकांत कविभूषण भी रसायन शास्त्र के जानकार नहीं थे, लेकिन उन्होंने आचार्य राय के साथ मिलकर आधुनिक विज्ञान और भारत के पुरातन रसायन शास्त्र पर महत्वपूर्ण शोध करने में उनकी सहायता की। आज के दौर में भी ऐसे ही प्रयासों की आवश्यकता है।

प्रफुल्लचन्द्र राय इतने महान वैज्ञानिक होने के बावजूद भी अपनी भारतीय संत परंपरा को नहीं भूले, वे सर्वदा भारत

की भाषाओं, संस्कृतियों, सभ्यताओं पर गर्व करते रहे। उन्होंने अपनी मानवीय संवेदनाओं को सर्वदा जीवित रखा। उनकी सादगी, उनका सरल व्यक्तित्व, उनका स्वभाव, उनकी कुशलता, कौशलता आज के युग में अपना की आवश्यकता है।

आचार्य राय राष्ट्रीय चेतना, स्वतंत्रता आंदोलन और आत्मनिर्भरता की पहल

आचार्य प्रफुल्ल अत्याधिक राष्ट्रवादी व स्वदेशी प्रवृत्ति के व्यक्ति थे। एक महान वैज्ञानिक रसायन शास्त्री होने के साथ-साथ वे एक समाजसेवी भी थे। वर्ष 1922-23 के अकाल व बाढ़ के चलते उनके गांव रारुली कटिपारा की स्थिति दयनीय हो गई थी, उस दौरान उन्होंने लोगों की काफी सहायता की। उनके जीवन की ऐसी कई घटनाएँ हैं जो हमें समाज सेवा के लिए प्रेरित करती हैं। प्रफुल्लचन्द्र राय हमें आत्मनिर्भरता की ओर जाने के लिए भी प्रेरित करते हैं उनके पदचिह्नों पर यदि हम चलें तो देश सफलताओं की सभी ऊंचाइयों को छू लेगा।

आचार्य जी का मानना था कि राजनीतिक स्वतंत्रता के बिना राष्ट्र की आर्थिक स्थिति को नहीं सुधारा जा सकता और न ही विदेशी शासक से निष्पक्ष न्याय की अपेक्षा ही की जा सकती है। ऐसी स्थिति में ज्ञान-विज्ञान का प्रसार-प्रचार भी अत्यंत कठिन हो जाता है। अनुकूल आर्थिक व प्रशासनिक व्यवस्था के अभाव में देशवासियों के लिए रोजगार के साधन भी सीमित हो जाते हैं। यह स्थिति युवा वर्ग में केवल हताशा का ही सृजन करेगी। अतः आचार्य जी का मानना था कि सबसे पहला लक्ष्य स्वराज प्राप्ति ही होना चाहिए।

सरकारी सेवा में होने के कारण आरंभ में तो वे किसी आंदोलन में सम्मिलित नहीं हो पाए लेकिन पर्दे के पीछे से वे सदैव सहयोग करते रहे। सरकारी सेवा से निवृत्त होने के बाद राष्ट्रवादी आंदोलनों में उनकी सक्रियता बढ़ी और वे निरंतर राष्ट्र उत्थान के कार्यों में लगे रहे। कुख्यात रोलेट एक्ट के विरोध में सी. आर. दास द्वारा कोलकाता में आयोजित सभा में बोलते हुए उन्होंने कहा था कि - 'वर्तमान परिस्थिति को देखते हुए मुझे प्रयोगशाला की टेस्ट ट्यूब को छोड़कर राष्ट्र के उत्थान व स्वराज की प्राप्ति का बीड़ा उठाना ही उचित लगा'। यह भी सर्वविदित है कि आचार्य जी दिनों-दिनों तक क्रांतिकारियों को अपने यहाँ आश्रय दिया करते थे। कहा तो यह भी जाता है कि आचार्य जी ने उन्हें विस्फोटकों का निर्माण व प्रयोग करना भी सिखाया था।

आचार्य राय ने जहाँ गांधी जी के अहिंसक सत्याग्रह के द्वारा स्वतंत्रता प्राप्ति की संकल्पना को सराहा वहीं सुभाषचन्द्र बोस व अन्य क्रांतिकारियों के त्याग व शौर्य को भी सम्मान की दृष्टि से देखा। उनका मानना था कि आंदोलन व क्रांति ये दोनों मिलकर ही स्वतंत्रता प्राप्ति का पथ प्रशस्त करेंगे।

आचार्य प्रफुल्ल की राष्ट्रवादी भावना का एक प्रारंभिक संकेत वर्ष 1879 में ईश्वरचंद्र विद्यासागर द्वारा स्थापित संस्थान में शामिल होने के उनके निर्णय में देखा जा सकता है (अपर्याप्त सुविधाओं के साथ एक नया कॉलेज होने के बावजूद) क्योंकि यह एक राष्ट्रीय संस्थान था और एक महान राष्ट्रवादी एस.एन. बनर्जी उस कॉलेज में शिक्षक थे।

इस प्रकार प्रफुल्लचन्द्र राय भारत की राजनीतिक स्वतंत्रता के आंदोलनों में खुले तौर पर शामिल नहीं थे पर उनकी सभी शैक्षणिक तथा व्यावसायिक गतिविधियाँ देश के बौद्धिक और आर्थिक पुनरुत्थान और स्वतंत्रता की दिशा में प्रयासरत थीं।

इसी उद्देश्य को ध्यान में रखते हुए उन्होंने विदेशी सरकार से खुलेआम टकराव की जगह रचनात्मक सहयोग का रास्ता चुना। देश को वैज्ञानिक अनुसंधान और औद्योगिक उद्यमों के मजबूत केंद्र बनाने के प्रारंभिक चरणों में आचार्य राय को इस बात का ध्यान रखना था कि राजनीतिक उथल-पुथल उस वैज्ञानिक और वाणिज्यिक कायाकल्प को साकार करने के रास्ते में न आए जिसका वे प्रयास कर रहे थे ।

बंगाल में बढ़ती बेरोजगारी से चिंतित आचार्य प्रफुल्ल ने औद्योगिक उद्यम की खोई हुई भावना को पुनर्जीवित करने की आवश्यकता महसूस की। उन्होंने महसूस किया कि उद्योगों के अभाव में लोग गरीबी से मर जाएंगे। वे जानते थे कि सफल औद्योगीकरण के लिए भारतीय निर्माताओं को विज्ञान का सृजनात्मक उपयोग करना होगा। उनके बंगाल केमिकल ने प्रदर्शित किया कि वैज्ञानिक ज्ञान को औद्योगिक उपयोग में कैसे लाया जा सकता है।

आरंभिक दौर में प्रफुल्लचन्द्र राय के लिए अपने चिकित्सा उत्पादों को बाजार में लाना एक मुश्किल भरा कार्य रहा। क्योंकि स्थानीय विक्रेताओं ने स्वदेशी दवाओं की बिक्री न होने का हवाला देकर दवा लेने से मना कर दिया। इस कठिन समय में आचार्य राय को अपने सहपाठी डॉक्टर अमूल्याचरण बोस जो एक सफल चिकित्सक थे, का बहुमूल्य सहयोग मिला।

डॉ० बोस भी देशभक्ति के आवेगों से भरे हुए थे और उन्हें इस बात का अहसास था कि मध्यम वर्ग के युवाओं के लिए रोजगार के नए अवसर (जैसे प्रफुल्लचन्द्र द्वारा परिकल्पित योजना) शुरू करना बहुत आवश्यक है। डॉ० बोस ने न केवल प्रफुल्लचन्द्र के उद्यम के लिए कुछ पूंजी प्रदान की बल्कि उन्होंने उनके उत्पादों के पक्ष में चिकित्सा बिरादरी के बीच एक जोरदार अभियान चलाया। इस अभियान के बाद डॉ० राधागोविंद कर जैसे राष्ट्रवादी भावना वाले डॉक्टर, डॉ० नीलरतन सरकार और डॉ० सुरेश प्रसाद सर्वाधिकारी ने प्रफुल्लचन्द्र के उद्यम द्वारा निर्मित दवाओं को लिखना शुरू किया।

वर्ष 1898 में बंगाल केमिकल में बनी स्वदेशी दवाओं को कलकत्ता में आयोजित इंडियन मेडिकल कांग्रेस की प्रदर्शनी में प्रदर्शित भी किया गया। जिसके बाद भारत के विभिन्न क्षेत्रों से आने वाले डॉक्टर इन स्वदेशी दवाओं के प्रति आकर्षित भी हुए।

बंगाल केमिकल के अलावा आचार्य प्रफुल्लचन्द्र ने कई अन्य उद्योगों को संरक्षण दिया, जिनमें से कई उनकी पहल पर स्थापित किए गए थे। जिनमें बंगाल कैनिंग एंड कॉन्डिमेंट, बंगाल एनामेल वर्क्स, बंगाल साल्ट मैनुफैक्चरिंग कंपनी, बंगाल पेपर, बंगाल स्टीम नेविगेशन, आचार्य प्रफुल्ल चंद्र कॉटन मिल्स, नेशनल टैनरीज, एक वजन मशीन निर्माण इकाई (भारती स्केल्स एंड इंजीनियरिंग कंपनी), चटर्जी एंड कंपनी लिमिटेड, खादी प्रतिष्ठान, आदि शामिल हैं।

रोजगार के अन्य अवसरों की बढ़ती कमी के साथ आचार्य राय के उद्यम बंगाल के युवाओं के लिए एक वरदान के रूप में सामने आये। हालांकि आचार्य राय एक उद्योगपति थे पर उन्होंने पूंजीवाद और मशीनीकरण जो गाँवों के विनाश का कारण थे का समर्थन नहीं किया।

वर्ष 1932 में आचार्य चन्द्र की सत्तरवीं जयंती पर कलकत्ता निगम द्वारा आयोजित समारोह में रवींद्रनाथ टैगोर ने अपने अध्यक्षीय भाषण में कहा "उपनिषदों में कहा गया है कि परम सत्ता ने एक से कई होने की कामना की। आत्म विस्तार की कामना सृष्टि के मूल में है। इसी तरह प्रफुल्ल चन्द्र ने अपने रचनात्मक आग्रह से विद्यार्थियों के मस्तिष्क में खुद का विस्तार किया, कई युवा मस्तिष्कों में पुनः सक्रिय हुए। यह तब तक संभव नहीं है जब तक कि किसी में स्वयं को पूरी तरह दूसरों को देने की क्षमता न हो। (मजूमदार, 2011)

महात्मा गांधी ने प्रफुल्ल चन्द्र के सरल एवं सादगी भरे जीवन को रेखांकित करते हुए कहा था कि, "शुद्ध भारतीय वेश-भूषा वाले उस सरल व्यक्ति को देखकर विश्वास ही नहीं हुआ कि वह एक महान वैज्ञानिक हो सकता है"। (मजूमदार, 2011)

आचार्य राय ने पूर्व की सादगी और पश्चिम के जोश का सम्मिश्रण किया। अपने व्यापार कौशल और ऊर्जा से वह भारत में रसायन विज्ञान को एक सफल उद्यम बनाने में सफल रहे। इस प्रकार अपने स्वयं के प्रयासों से व्यक्तिगत स्वतंत्रता और कुछ हद तक धन प्राप्त करने के बाद, उन्होंने आडंबर या प्रदर्शन का नहीं, बल्कि सादगी और परोपकारी सेवा का रास्ता चुना। इसमें उन्होंने पूर्व की सर्वोत्तम परंपराओं का पालन किया। यद्यपि आचार्य राय ने

व्यावहारिक अनुप्रयोगों और धन के सृजन के लिए आधुनिक विज्ञान के उपयोग की वकालत की, लेकिन विज्ञान के नाम पर जो कुछ भी हो रहा है उसका अंधानुकरण भी नहीं किया।

सरल स्वभाव, सादगी भरा जीवन, सफल वैज्ञानिक, उद्योग संस्थापक, समाजसेवी, मातृभूमि और मातृभाषा से सदैव घुल मिलकर रहने वाले 'प्रफुल्लचन्द्र राय' आज भी संपूर्ण भारतवर्ष के साथ-साथ विश्व भर में स्मरणीय हैं। जब भी ज्ञान व विज्ञान की बात आएगी उनका नाम सदैव स्वाभिमान पूर्वक स्वर्णिम अक्षरों में चमकता हुआ आगे आएगा।

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Book Review

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The India Way: Strategies for an Uncertain World, edited by S. Jaishankar, ed. New Delhi, HarperCollins India, May 2022, Pp. 248, paperback edition.

“Tact is the knack of making a point without making an enemy.”

—Isaac Newton

The global community is observing a profound paradigm shift in the current state of world politics. Countries are changing where they stand in the global political system. The general global geo-strategic matrix has changed due to the rise of Asia, Russia's rebirth, Africa's economic potential, and America's policy of turning inward in the twenty-first century. Additionally, the seismic shift in technology and politics has made it so that power must now take into account cyber, digital, and physical connectedness as well as technological research and development in addition to 'hard' military and economic capabilities.

India needs to navigate these turbulent times with both stead and vigour. Against this backdrop, India's External Affairs Minister, and seasoned veteran of politics, Subrahmanyam Jaishankar, has authored *The India Way: Strategies for an Uncertain World* to shed light on the new global political conditions in this impeccably measured, intelligently analysed and invigoratingly researched work in which he dwells on the strategy to be adopted by India if she has to tide over the trials and tribulations of an uncompromising, yet promising change.

It is not a comprehensive account of recent historical events considering these did not have a significant bearing on India. As a result, it is largely quiet regarding the establishment of the Euro Zone, different aspects of the Cold War, or the fall of the Iron Curtain to the extent that these events did not directly affect India. This book's description of India's foreign policy since Independence is extremely fascinating as he effectively borrows from our history to use the Panipat Syndrome to describe India's attitude toward its own national security.

In contrast to what he calls the "political romanticism" (p. 4) of the past, which is implicitly connected with Jawaharlal Nehru and his sense of *moralpolitik*, he advises taking advantage of the new conditions in a *realpolitik* approach. Jaishankar argues that in order to move on from a past encumbered by India's "soft condition," "fatalism," and "lost possibilities", we must reform India's foreign policy to align with its current ambition of becoming a leading powerhouse; this is to free ourselves from the burden of our bureaucratic decisions of the past (p. 74). The call for disruption can be heard on almost every page, and the author, who is undoubtedly a stellar representative of the Indian bureaucracy criticises it for its conservative ideology, though it is unclear precisely what it is being criticised for: "The real obstacle to the rise of India is not any more the barriers of the world, but the dogmas of Delhi (p.73)."

What is it that Jaishankar suggests that our country does not already do? In a nutshell, the solution is to use a transactional logic in all of its interactions in which there are only "frenemies" rather than allies or friends: "In a world of more naked self-interest, nations will do what they have to do with less pretence" (p. 26) and "even partners will always strive for better terms of transactions" (p. 27). Therefore, "realism" (p. 12), "*realpolitik*" (p. 5), and "hard security" (p. 74) are not the only significant phrases, together with "management of differences" (to take advantage of international tensions) and "pragmatic settlement" (p. 27).

It is clear from what he writes that he opposes India entering any alliance system. He also opposes the traditional non-alignment position. To illustrate his thesis, he used Balarama and Rukmi of Vidarbha from the Mahabharata as examples. Both chose to keep out of the conflict, and yet they still had to deal with the fallout. "Despite staying out of it, we are still left with the

repercussions. On some issues, we run the risk of upsetting everybody. It's an appeal for movement. He further asserts that the action is determined by "Krishna's choice" to "follow the dharma of the state," which entails declaring the national interest and achieving strategic objectives using a variety of tactics. In a multipolar world, his wager is on "many engagements," to put it another way. When compared to a previous posture of non-participation or abstinence, it "appears more vibrant and participative."

Few will contest the persuasive case that India must engage in several global activities while maintaining its strategic independence. The issue, however, is that Jaishankar doesn't provide more specific information outside of this framework, probably due to limitations imposed by his position in the administration. *The India Way: Strategies for an Uncertain World* looks more like a diplomat's manual—important for learning how diplomacy works—than a strategic expert's evaluation of the past and recommendations for the future. It has paradoxes as well. Jaishankar places a strong emphasis on the democratic framework, multi-faith principles, and pluralism of India. However, domestically and internationally, the government he is a part of has come under fire for jeopardising India's pluralistic principles.

Nevertheless, for both a worldwide readership and the Indian people, this book provides insight into the current course of India's foreign policy and the South Block's perspective on world affairs. The author makes a strong impression on his audience by describing how India's strategy has been able to successfully elevate its worldwide image as a prospective leader by creating a new model of foreign policy that is inherently driven by realism.

Book Review

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Bullets and Opium: Real-Life Stories of China After The Tiananmen Square Massacre, edited by Liao Yiwu, ed. New York, Atria/One Signal Publishers, May 2019, Pp. 320, paperback edition.

"The China that we see today was born on the eve of the Tiananmen Square massacre on June 3rd & 4th". The marching of armed soldiers, the endless cavalcade of tanks, the clearing of the main square by the armed forces, and the eventual series of brutal killings of young Chinese students & ordinary citizens; finally, the ultimate suppression of revolutionary fervour & political dissent in China is among the few of the most gruesome moments that the author recalls from the year 1989. 30 years after the incident in 2019, *Bullets & Opium* by Liao Yiwu attempts to recapitulate the wrongdoings and the aftermath of the massacre. Yiwu, now living in exile in Berlin, Germany- after escaping the Chinese authorities in 2011, provides the readers with an account of the "*June Fourth Thugs*" i.e. *the ordinary citizens rendered helpless by the Chinese State*, with his collection of interviews & anecdotes. Contrary to popular opinion, the book places emphasis, not on the Chinese students but on the ordinary citizens, who were the main victims of the attack, and were subsequently tortured, imprisoned, maimed, and even executed as "*terrorists*" & "*thugs*".

Liao Yiwu, himself a writer & a musician, hails from the southwestern Chinese province of Sichuan and holds immense love for poetry. He describes how his quest to unearth the realities of June 4th leads him to question & interview several survivors, including the families of murdered & imprisoned protestors, contemporary political rivals such as from the China Democracy Party, practitioners of Falun Gong religion (which was envied by the Chinese Communist Party), as well as local political activists. Yiwu unwillingly also shares the persistent threat to his life (seemingly from the Chinese authorities) from daily police harassment, secret

state surveillance, as well as more hardcore measures such as imprisonment and even house arrest. This piece of investigative journalism interviewed the “*Tiananmen thugs*” over 4 years in jail and involved more than 15 years of travel to remote corners of China, although at a steep personal loss for Yiwu- leading to the dissolution of his two marriages as well as isolation from his first child. The book is an extensive account of how his method of “*gumshoe private eye*” journalism which includes walking, listening and observing- led to possibly the most credible revelations of the post-Tiananmen era for the world outside China.

A central point in the trajectory of the book is in 1990 when the recital of his own poem named “*Massacre*”, which was dedicated to the victims, lands Yiwu in jail. Over the next four years, he is isolated from his family and forced to spend time with his fellow inmates- both ordinary criminals and thugs. A major theme of the book is associated with the recollection of how political tyranny and injustice cause social, emotional and physical damage to the prisoners- mostly young men in their early & late 20s. Yiwu describes in detail the loss of careers & marriages these men faced, and how no human contact (especially with women) led them to develop sexual issues such as erectile dysfunction and sexual trauma. The endless torture and the evil propaganda of the then-Chinese State, including the horrific police violence- have led to the concepts of human & political rights becoming more & more dispensable in China, Yiwu shows.

The book now & then provides references to how China’s rapid economic development originating in the 1960s has sidelined all other aspects of society such as cultural transformation, political inclusiveness, individual liberty, etc which have been crushed by the overarching presence of the State (read as the CCP). A particular instance of this is provided in the case of Hu Yaobang, who was the General Secretary of the Chinese Communist Party till June 1989. Yaobang, an advocate for political inclusiveness, liberty and modern democracy was forced to resign from his post by the more-hardline communists of the CCP. His sudden death just days before June 3rd is often described by many, including Yiwu, to be the ultimate catalyst that led to nationwide protests in different cities in China. In the post-Tiananmen era, the Chinese State has been particularly characterised as one that is hostile to its political & social opponents such as smaller political parties, local activists, religions such as Tibetan Buddhism, minorities in Xinjiang, etc. The welcoming of Western multinational corporations lured by cheap labour,

economic profits and government incentives by the Chinese State, which itself is looking to replace the Western power structures with its economic power- has only led to a worsening state of affairs for the ordinary Chinese. Now the locals, as Yiwu describes, are worried about declining healthcare, an ageing population, depleting natural resources, increased pollution, etc on top of the strong political surveillance of the country under the CCP.

Interestingly, Yiwu has added his signature *poetic* touch to the accounts of the survivors, by coining terms like *bullets* and *opium* as metaphors for CCP's weapons against political dissent in China and for the unprecedented yet unchallenged economic development in China, respectively. A curious reader will here be able to gauge the subtle reference to the "opium wars" fought between China and the Western powers in the 1840s & 50s. Further, his humorous and self-deprecating honesty about his failures & drawbacks in his life makes him call himself a "*rebel poet*", who is caught in a living hell of a failed marriage, emotional instability, sexual dysfunction and of course, the constant threat to life when he is released from prison. As a result, he is best described as a *man on a mission* to interview his fellow *thugs*, or as he casually calls them the *89ers*.

Among others, the brutality of the Chinese prison systems and the state-sponsored "*education through labour*" for uneducated workers stand out as the most prominent examples of human rights violations in China in 1989, that continue today on an equal, if not lesser scale. His interviews & experiences with some of the *89ers* such as the "arsonists" who apparently set army vehicles on fire and the "idealists" who intended to adopt a Western-influenced form of governance in China, provide readers with an accurate account of how Tiananmen was not only a pivoting point in the history of China and the world but also a crucial moment in the significant process of decline of human rights in modern China. It is worth knowing that such revelations have only been made possible by the courage of the interviewees (victims) as well as the persistence of Yiwu himself.

While there are countless instances & stories of grief among the interviewees, the readers should keep in mind Yiwu's desolation over his child which he regrets to this day. Readers may continue to appreciate his courage & modesty, yet the grief of losing his daughter and the failure in two of his marriages also surface repeatedly in different parts of the book. Detailed descriptions of how

he evaded the police multiple times, how he got arrested in 1990 as well as his experience of escaping Sichuan after climbing out his kitchen window to begin interviewing Wu Wenjian (one of his first interviewees) try to bring to light the malicious nature of the police & other institutions under the CCP.

Another essential facet of *Bullets & Opium* is the description of Yiwu's efforts in 2017 to help Liu Xiaobo, a Nobel Peace Prize winner from China, and his wife Liu Xia to escape from China to Germany for the treatment of his malignant liver cancer. Yiwu is said to have exchanged a series of letters with German singer Wolf Biermann, who tried to facilitate Liu Xiaobo's escape by lobbying with the then-German Chancellor Angela Merkel. Although he died in July 2017 in China, his participation in the June 1989 protests and his major contribution to Charter 8 (for the democratic reforms movement in China) ensured that international support was rallied & his wife was able to reach Berlin safely. Interestingly, Yiwu and Liu Xia, both activists, are still concerned about the rights of the Chinese people and continue to raise their voices against CCP-led China.

For first-time readers, *Bullets & Opium* is a fair & trustworthy account of the plight of the June 1989 victims, who continue to bear the brunt of the wrongdoings of the Chinese State. For those who are regular readers & thinkers on Chinese issues, this book spills the beans on how the official Chinese estimates of deaths are grossly underreported and how hardcore communists were the main perpetrators of the Tiananmen Square massacre. Regardless, Yiwu's writings of his experiences of 30+ years, the domestic political discourse in China, and the destitution of the *thugs* make this a fascinating read. While some of the details are indeed horrifying (especially the police brutality and the sexual trauma of the prisoners), they provide perhaps one of the most realistic accounts of modern China's domestic realities to date, which correlates with what Yiwu notes- "*the regime that committed the massacre is still in power*".

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