

School of Design and the Built Environment

**Making a difference to primary education in rural India: A case study of
a non-resident association**

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**This thesis is presented for the degree of
Doctor of Philosophy
of
Curtin University**

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Author's Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where appropriate acknowledgements have been made.

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

Sandeep Sharma

Statement of Contributors

The author acknowledges the financial contribution of Curtin University towards editing this thesis and submission of a journal paper emanating from this work under the PhD research consumables budget.

Abstract

India is a signatory to major global compacts supporting education for all, including the 1990 Jomtein Conference, the United Nations Millennium Development Goals and their successor, the Sustainable Development Goals (SDGs). Over the last two decades, the country has made considerable efforts in enhancing children's access to schooling, particularly in rural areas where approximately 70% of the 1.3 billion people are living. Under the flagship initiative of "Sarva Shiksha Abhiyan" (SSA) or education for all, supported by constitutional amendments and substantial budgetary allocations, the country's aim is to provide free and compulsory education to all children in the six to fourteen year age group, estimated at around 200 million.

India's primary education covers eight years. While the number of schools and enrolment in commencing primary education has improved, progress beyond year V is inadequate. One third of children in rural areas drop out of school by that time and this increases to almost half by year VIII. This situation is particularly pronounced in rural India where parents and children are facing additional challenges due to poverty, and social and cultural complexities as well as the conditions in primary schools. Private schools are perceived as providing a better education than government schools, but rural families cannot afford the fees. The efforts of non-governmental organisations (NGOs) operating in India are largely invested in the private system while government schools remain deprived of such assistance thereby enhancing the inequity of the economically most deprived.

The status of primary education in rural India is of concern not only to the country's government but also to the wider and global Indian community. India has a large diaspora with around 17.5 million living overseas, including an estimated 700,000 in Australia. Many contribute to the overall cause of education in India, mainly through international and local NGOs. Inspired by a similar ethos, in 2008, an association was established under the Western Australian Associations Incorporation Act 1987, namely India Rural Education and Development Inc. (IREAD). Since then, this Association has engaged in a range of educational and community activities in the village of Lakhnu in Hathras District, State of Uttar Pradesh (UP). Initial access

to the village was provided through personal ancestral ties, but over the last decade this trust has been maintained through regular visits organised by IREAD members and visible benefits to the local schools. Within this overall context, the contribution of IREAD to school attendance and learning can be explored.

This thesis uses the IREAD activities as a means for action research to analyse the conditions related to primary education in Lakhnu and understand the factors that influence participation and learning of children. A 2011–2019 longitudinal case study approach, focused on one village school, is used to investigate the impacts of a novel model wherein non-residents engage in supporting educational activities through time-limited interactions of one to two weeks annually, maintained consistently over multiple years. Data from the activities of IREAD, researcher observations, interviews, photographs and infrastructure evidence, are analysed using an innovative framework. A grounded theory emanating from data is proposed and areas of focus to improve educational outcomes suggested.

Lakhnu is a microcosm of India's most populous state of Uttar Pradesh and the case study findings can inform other culturally consistent areas. The case study shows that there are reasons to feel optimistic as IREAD has been able to positively influence the educational environment in Lakhnu. Its way of engagement with the local community and stakeholders is explained through the lens of a new model that clearly defines the areas of possible and practical influence without interfering with the delivery of the educational content. This model strengthens the local capacity of the government school to provide better opportunities for rural children. The IREAD approach also appears to be congruent and aligned with the aims of the new education policy released by the Government of India in 2020.

This research is accretive to the existing body of knowledge on education in rural India. The analysis of the role of an expatriate organisation, such as IREAD, is original as are the data collection methodology and framework for analysis. While the research concludes that a major shift is difficult to achieve, it acknowledges that IREAD's contribution delivers small steps in the right direction to improve educational opportunities and outcomes for rural school children in India. For non-

resident expatriate Indians wanting personal engagement in contributing to rural education, the IREAD model is certainly worth consideration.

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For me, writing this thesis is an important milestone in an ongoing journey towards achieving better educational outcomes for the children in Lakhnu village. The school children, the teachers, the parents and the broader community have put their trust in the Western Australian India Rural Education and Development (IREAD) association which strives to continue its effort to the best of the members' abilities. Getting to know the rural community of Lakhnu has been a privilege. It has been a humbling experience and I have learnt to better appreciate what I have and to take joy in small things.

While the research objectives remained consistent, the pathway of this research was illuminated through discussions with my supervisor Professor Dora Marinova. She was always encouraging and managed to draw out creative responses from me, while not letting me divert my focus from the central topic. For an engineer embarking on research in humanities, the importance of not seeing everything in black and white but appreciating nuances cannot be underestimated. I will always be grateful for that guidance and the countless hours she spent in reviewing my thesis drafts. My co-supervisor Dr Diana Bogueva's efforts in critiquing and editing my work were critical to this thesis being completed and I would like to thank her for that. I would also like to acknowledge the efforts of the Curtin University Robertson Library staff in helping me with the research strategies and data base accessing techniques, without which this task would have been much harder.

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Dedication

I wish to dedicate this work to the countless people working to improve education in rural India. These individuals and organisations are an inspiration and one day, slowly but surely, a rural child in India will have the same opportunities as their urban counterparts.

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Glossary of Terms and List of Abbreviations

ASER:	Annual Status of Education Report produced by the NGO Pratham.
AUD:	Australian Dollars.
Block:	An administrative division of a District Tehsil in India. A Tehsil comprises Blocks which are sub-divided into Gram Panchayats.
BSA:	Basic Shiksha Adhikari, Head of primary education at a District level.
CLTS:	Community Led Total Sanitation - An educational initiative to allow villagers to self-govern and eliminate open defecation under the Swachh Bharat Abhiyaan.
CREATE:	Consortium for Research on Educational Access Transitions and Equity, University of Sussex, UK.
CRORE:	A numeric equivalent of ten million.
CSO:	Central Statistical Organisation.
District:	An administrative subdivision of a State.
DISE:	District Information Systems for Education.
DIET:	District Institutes of Education and Training.
DM:	District Magistrate, the most senior administration official in a District.
DMIRS:	Department of Mines, Industry Regulation and Safety. Government of Western Australia; IREAD is established under its regulation.
ECCE:	Early Childhood Care and Education.
GAR:	Gross Attendance Ratio; this is the ratio of the number of persons attending a particular Year-group to the total number of persons in the age-group (GOI NSS, 2014, p. 17).
GER:	Gross Enrolment Ratio; this is the ratio of the number of persons enrolled in a particular Year-group to the total number of persons in the age-group.
Gharhi:	A fortress used as a residential dwelling by wealthy landowners in the village pre-independence in 1947.

GOI:	Central (Federal) Government of India.
Gram Panchayat:	Village level local government.
INR:	Indian Rupees.
IREAD:	India Rural Education and Development Inc. An association registered in Western Australia under the Associations Incorporation Act 1987 (Section 9(1)) for supporting education related activities in India. Registration Number: A1013657V.
ICDS:	Integrated Child Development Services focusing on children in the year group of 3–5 years.
Lacs:	A numeric equivalent of one hundred thousand.
LCSDP:	Lakhnu Community Sustainable Development Project led by Curtin University, Perth, Western Australia.
Manyata:	A Hindi word which means “mindset” or belief system of the individual.
MDG:	Millennium Development Goal (United Nations).
MGNREGA:	Mahatma Gandhi National Rural Employment Guarantee Act, 2005 (India).
MHRD:	Ministry of Human Resource Development, Government of India.
NAR:	Net Attendance Ratio. This is the ratio of the number of persons in the official age-group attending a particular year-group to the total number of persons in the age-group (GOI, NSS, 2016, p. 17).
NEP 2020:	Education Policy released by the Government of India in 2020.
NER:	Net Enrolment Ratio; this is the ratio of the number of persons in the official age-group enrolled a particular Year-group to the total number of persons in the age-group.
NGO:	Non-Governmental Organisation.
OBC:	Other Backward Class.
Pradhan:	Head of the Gram Panchayat (elected).

RTE:	Right to Education Act, 2009 (India).
SC:	Scheduled Caste.
SDG:	Sustainable Development Goal (United Nations).
ST:	Scheduled Tribe.
SSA:	Sarva Shiksha Abhiyan or Education for All initiative by the Government of India.
Swachh Bharat Abhiyaan:	Clean India Scheme, launched by the Prime Minister of India in 2015 to make India open defecation-free by 2019.
Tehsil:	An administrative division of a District in India. A Tehsil comprises of Blocks which are sub-divided into Gram Panchayats.
UP:	Uttar Pradesh (State in Northern India).
UPE:	Universal Primary Education.
USD:	United States Dollars
Zamindar:	Landlord in pre-independence India; a significant landowner in a rural area responsible for local tax collection for the British.

Preface

Since gaining independence in 1947, India has made considerable efforts in enhancing children's access to schooling and has targeted enrolment across the country of around 200 million children in the age group of six to fourteen years old (Government of India, Census, 2013). While under the various government initiatives the number of schools has increased, success is varied and many children leave school before completing their primary education or having done so, do not transition into secondary level. Even more troublesome is the fact that learning achievements are low and not improving (Annual Status of Education Report, 2016). Unacceptably low levels of literacy, significant attrition and a small percentage of children transitioning beyond primary school are exacerbated in rural areas (Government of India, National Sample Survey, 2014). Private schools are perceived as providing a better education than the government system but as they charge fees, many financially marginalised rural residents cannot afford them. The efforts of domestic and international non-governmental organisations (NGOs) are largely invested in private schools located in urban areas and rural government education remains bereft of such assistance thereby exacerbating the inequity of those already disadvantaged.

My wife and I are ethnically Indian but moved overseas for work reasons in the early 1980s and have been expatriates ever since. We have been living in Australia since 2000, are now citizens and settled in this country. My background is in engineering whereas she is an interior designer and has principally been a homemaker. As is common amongst many migrants, there is a desire to contribute to one's country of birth. Knowing that education allowed us to progress, so as a couple, we decided to focus in this area and look at providing opportunities in rural India where children significantly lag behind their urban counterparts. It takes a visit to a remote or difficult to access village to experience these differences. Poverty is noticeable, lack of basic amenities, such as running water and toilets in homes, is apparent and the number of young people with no or limited employment is overwhelming. Children who should be at school are seen playing in the streets or working in the field.

Our decision to focus on education was not driven by an ideology, other than a recognition that we benefited from being born in households where education was valued and our parents had the means to educate us. The family's links to rural India, allowed a level of visibility of the issues not normally seen by non-resident expatriates in a visit to a large city. This became a motivation and aspiration to contribute in the domain of education in rural India.

The challenge for an aspirational Indian diaspora is to find a suitable model wherein they can contribute both time and money within their individual constraints. How can one understand the key issues and make a difference without being a resident in a particular locality? In 2008, an association was established by expatriate Indians under the Western Australia Associations Incorporation Act 1987, namely India Rural Education and Development Inc. (IREAD). Since then, through this Association, we have been involved in a range of educational and community activities in the village of Lakhnu in Hathras District, State of Uttar Pradesh (UP) of North India. My wife's ancestors are from Lakhnu village where her great-grandfather, Raja Man Singh, was a significant landowner and a major benefactor. Her parents and siblings no longer own any land in the village but her extended family still has landholdings in the area. The family's good name and engendered trust have allowed access to the village for IREAD activities. Without doubt, we are privileged in the rural Indian context, being educated, comparatively wealthy and belonging to an upper caste. This has proved advantageous, both in terms of getting the attention of the government officials and engendering belief and trust in the community that we could help. Over the last decade this trust has been maintained through regular visits and visible benefits to the schools. Many family-led activities preceding 2008 are now consolidated under IREAD and we remain welcome in the village.

India has not been able to achieve a consistent improvement in the literacy rates of its rural school-age children over the last two decades despite a reasonable level of investment, around 3% of GDP. Is it possible to establish a village-based, community supported mechanism to encourage education amongst the poorest of the rural people? This is what my PhD is about. My thesis aims to use the IREAD activities conducted over many years in a collaborative and trusting relationship with

the people of Lakhnu village to analyse and understand the conditions and factors that influence the participation of children in primary level schooling and their possible progression beyond. The aim of the research is to understand the impact of a new model of educational support through the work of a non-resident association like IREAD.

The IREAD activities provide a unique access mechanism and collaborative pathway to the community. If successful, these can be adapted to provide new insights into the causal factors leading to the current unsatisfactory educational outcomes. I am hoping that this research can support the development of remedial strategies based on an improved understanding of the local environment and root causes for low educational achievements of the village poor.

Chapter 1: A Village in North India

1.1 Introduction

The aim of this study is to understand how a community-based collaborative relationship with non-residents, including expatriate Indians, through an association established and registered in Australia, namely India Rural Education and Development Inc. (IREAD) can be used to facilitate the uptake of primary education by the rural poor in India. Established in 2008, IREAD has been active in the last twelve years, promoting education in a government school in the village of Lakhnu (Hathras District, State of Uttar Pradesh, North India). Initial access to the village was provided by personal ancestral ties to this area. Over the last decade the trust that was developed has been maintained through regular visits and visible benefits to the schools. This research is constructed as a longitudinal case study, carried out over nine years and focused on the IREAD activities on one government school. These activities are used as a means for action research to analyse the conditions related to primary education in Lakhnu village and understand the factors that influence participation and learning of rural children.

Each country has a unique contextual setting which needs to be understood as part of developing a deeper insight on a particular issue. India is very diverse with significant variations in language, culture, food, livelihoods and economic development across the country. This diversity aspect enhances the importance of understanding the local environment. In the following sections of this chapter, a picture of Lakhnu and its place within UP, North India are outlined. The research question is then formulated within this overall context and a workflow for the thesis constructed.

1.2 Background: India, Uttar Pradesh, Hathras

Uttar Pradesh is India's most populous state with approximately 15% of the country's population or around 200 million residents (GOI, Census, 2013). Located in the North, with a total area of around 243,920 square kilometres, representing 8% of India's land area, it is the fourth largest state in the country (<http://up.gov.in/>, 2019). Uttar Pradesh (UP) used to be larger but there have been divisions since India's independence in 1947 and new states were created. Irrespective of this, the

influence of UP on India's culture and politics remains very strong. The two major rivers of North India – Yamuna and Ganges – flow through the State and their plains provide rich agricultural land. Not surprisingly, the economy is predominantly agrarian characterised by marginal and small landholdings. Infrastructure is poor, the State has a small manufacturing sector and as a result UP contributes under 7 % of India's overall GDP (<http://www.brittanica.com>, 2019).

The people of UP are described as Aryans. As India historically was invaded through the North West mountain passes, the people are a mix of different cultures and genetically close to Middle Easterners, Central Asians, and Europeans many of whom came and settled in this place (Moorjani et al., 2013). Approximately 79 % of the population is Hindu, 19 % Muslim and the balance 2 % comprising of Sikhs, Jains, Buddhists and Christians. Of the Hindu population, approximately 20 % are categorised as being from a Scheduled Caste (SC) (GOI, Census, 2013).

The caste system amongst Hindus wherein people were divided along the lines of their work is historically entrenched. The upper castes are the Brahmins (scholars and priests), Kshatriya (Kings and warriors) and Vaisya (traders). Shudras (workers, servants) comprise the lower or backward caste. In addition to the above four castes are the Harijans or Dalits who were outside the caste system and were at one time considered untouchables and oppressed by the upper castes. While there are many categories within each caste, the government has agglomerated these (Barooah, 2005). Today the Dalits fall in the Scheduled Caste (SC) category. Further to these classifications, tribes who have lived in the forested areas are lumped together under Scheduled Tribes (ST). Very few STs can be found living in UP. Similarly, all the backward castes are categorised as Other Backward Castes (OBC). These Scheduled Castes (SCs) and Scheduled Tribes (STs) are formally designated groups recognised in the Indian Constitution and represent the most disadvantaged socio-economic groups in India.

Being the most populous state in India, UP's enormous population affords it the largest number of seats in the lower house of parliament (Lok Sabha). It is often referred to as the Hindi heartland and has given India eight of its fourteen Prime Ministers since the 1947 independence. Hindi in its various dialects is the principal

language of UP (<https://in.one.un.org>, 2019). Despite this prominence, the state has been economically anaemic and fraught with political, caste-based and religious conflicts between Hindus and Muslims. Some of these conflicts have deep historical roots. As an illustration, Ayodhya, the birthplace of the Hindu God Rama is in UP and is where the Mughal King Babur constructed a mosque in the sixteenth century, apparently on top of the birthplace of Lord Rama. The site has been contentious for over a hundred years and has seen many conflicts. In 1992, a group of Hindu activists destroyed the mosque and the issue was politicised and subsequently fought in the legal arena, finally being settled in 2019 when the Supreme Court of India entrusted the site exclusively to Hindus (<http://www.britannica.com>, 2019).

Corruption within the public system in India is endemic with Transparency International giving the country's public sector a score of 41/100 in 2019, with zero representing the highest level of corruption (transparency.org). It is almost as if corruption is institutionalised, "the openness with which money is extracted and the brazenness of the officers is a direct reflection of the low moral standards" (Ratha & Mahapatra, 2013, p. 8). The State of UP has seen a similar deterioration in the political and administrative systems with persistent nepotism and corruption, likely to be causal to its lack of economic development (Ratha & Mahapatra, 2013).

Hathras¹ is a typical town in the state of UP in Northern India. The Hathras District includes the town and over six hundred villages within its administrative boundaries. The population of the District is around 1.5 million, with over 70 %

¹ During the early and middle part of the 20th century, Hathras was an industrial hub. There were cotton mills and readymade clothes were manufactured and exported all over the country. There is now limited manufacturing of ready to wear garments, edible oil and metal handicrafts. Agricultural produce and services form the major components of the economy. Interestingly, Hathras remains the largest centre for trading the spice *asafoetida* which is an essential part of Indian cooking. Until the 1950s, Hathras town's cotton mills and garments industry served as a supporting source of employment for people from the nearby villages. Subsequent to the reduction in industrial activity, agriculture is the main business as the soil is productive and the water table fairly shallow, at twenty metres.

living in rural areas. The key indicators for health and child welfare are poor with only 11.7 % of children in the age group six to twenty-four months receiving an adequate diet (GOI, NFHS, 2018). Poverty is rampant and literacy levels are low, reported as 66 % for women and 87.8 % for men (GOI, NFHS, 2018). From the Government's perspective "a person is considered literate if he or she can read and write a simple sentence in any language with understanding" (GOI, NSS, 2016, p. 13). These numbers can be optimistic as functional literacy and numeracy skills are likely to be lower. The population sex-ratio at birth is assessed as 951 females for every 1000 males (GOI, NFHS, 2018), while a different government site lists the lower number of 879 for 2015 (GOI, Niti Ayog, 2015). Such differences are not uncommon in published information as the responsible departments probably have different sources. Notwithstanding, it would suffice to say that the ratio is skewed in favour of males, most likely because of social customs wherein girls are considered a "burden" and parents have to give a sizeable "dowry" to get them married.

Four railway stations serve Hathras and are part of the national railway network. Regular bus services also run to the nearby larger towns of Agra (60 kilometres away), Mathura (52 kilometres) and Aligarh (35 kilometres). Road conditions vary but in general roads are in poor repair. Traffic jams are normal and unless one travels very early, it can take between two and two and a half hours to cover the distance between Mathura and Hathras. Figure 1.1 locates Hathras on the map of India relative to the capital New Delhi and the other well-known cities of Agra and Mathura.



Figure 1.1. Map showing the town of Hathras in North India, just south-west of the capital New Delhi. Figure reproduced from <https://www.mapsofindia.com/>, 2017 and <https://www.google.com.au/maps/place/Hathras>, 2019.

From a governance perspective, based on its land mass (1800 km²) and population, Hathras is considered a District-level settlement (<https://www.hathras.nic.in/>, 2019). As in other parts of the State of Uttar Pradesh, and India, the Hathras District is spatially divided into Tehsils, Blocks and Gram Panchayats, or village-level governance committees, comprising of one large village or a grouping of small villages (GOI, NFHS, 2018). The rural landscape within this overall context is discussed in the subsequent sections.

1.3 Lakhnu Village: Contextual Setting

In considering the village of Lakhnu as part of rural Hathras, it is important to understand two aspects of data from India's National Family Health Survey 2015–16 as they relate to education, the focus of this research. First, the rural population is young with 33 % of the community being under 15 years old. Secondly, around 32 % of the female population over six years old have never attended school (GOI, NFHS, 2018). These factors impact children's education and a vast majority of them going to government schools would represent the first generation attending any learning institution.

1.3.1 A Typical Hathras District Village

Lakhnu is a typical village in the Hathras Block of the Hathras District² in the State of Uttar Pradesh. Its local government (village Gram Panchayat) serves three proximal villages: Lakhnu, Akhoya and Nagla Khosali. The head of the Gram Panchayat can be appointed from any of these villages. Figure 1.2 combines two images, a map view which shows that the village is around 13 kilometres from Hathras and a satellite view which shows the village dwellings in the midst of agricultural land (<https://www.google.com.au/maps/place/Hathras>, 2019).



Figure 1.2. Satellite view of Lakhnu Village. Reproduced from <https://www.google.com.au/maps/place/Hathras>, 2019.

² The area has four seasons with cool dry winters and hot summers, where the temperatures can exceed 40°C. Most of the rainfall occurs between June and September. Three types of crops are typically grown: wheat, other grains, barley, chick-peas and mustard (November–March); millet, maize, gram, oil-seeds (June–September) and watermelons, melons and cucumbers during the summer months (April–May). In recent years chilli has become popular and is harvested in the autumn and winter months (October–December). In addition, potatoes are planted in October and November and extracted in February and March.

Lakhnu covers approximately 17 km² whereas the other two villages are smaller. The total population of Lakhnu is estimated at 4000 people, including approximately 3000 adult residents and around 1000 children (GOI, Census, 2013; GOI, NFHS, 2018; and <http://www.hathras.nic.in>, 2019).

This village population is divided along religious and caste lines. Predominantly Hindu, it has a small percentage of Muslim families living there as well. This mix between Hindus and Muslims changes from village to village in the region but on an agglomeration basis it would be consistent with the broad averages of 79% Hindu and 19% Muslims (GOI, Census, 2013). The Hindu society is divided along caste lines with the upper castes being generally economically better-off, owning more land and having more influence in village affairs. Muslims live on the outskirts of the village in proximity to one another. Places of worship and other shrines exist in the village. Lakhnu has no registered health workers and no functional medical clinic. There is a local Yunani medicine centre (traditional medicines) but it is generally closed with no dedicated staff. For all medical needs people must travel 13 kilometres to the town of Hathras. There is no railway line and the primary transportation is by bus, which runs a few times per day.

There are two main logistical connection points between the village and the nearby villages of Ladhpur and Pura. A sealed road connects Lakhnu to the much bigger village of Ladhpur on the way to Hathras. The village roads are not sealed (kuccha) and the main artery goes south-east towards the village of Pura. All commercial activity, shops, farming-related and other activities are proximal to this transport pathway.

As can be seen in the map in Figure 1.2, the village residential area is concentrated in a compact zone (300m by 200m) and is surrounded by farmland. The residential density is high, and the village blocks are largely segregated by caste and religion. Muslims generally live on the north-western side and the lowest caste Hindus (the “SC or harijans”) are mostly on the periphery. The village has two government schools, one private school, two temples and one mosque. While the older buildings have some historical significance, the newer ones have been built as

desired by community members. The populated area is sketched in Figure 1.3 and shows the relative location of important landmarks (Tiwari et al., 2012).

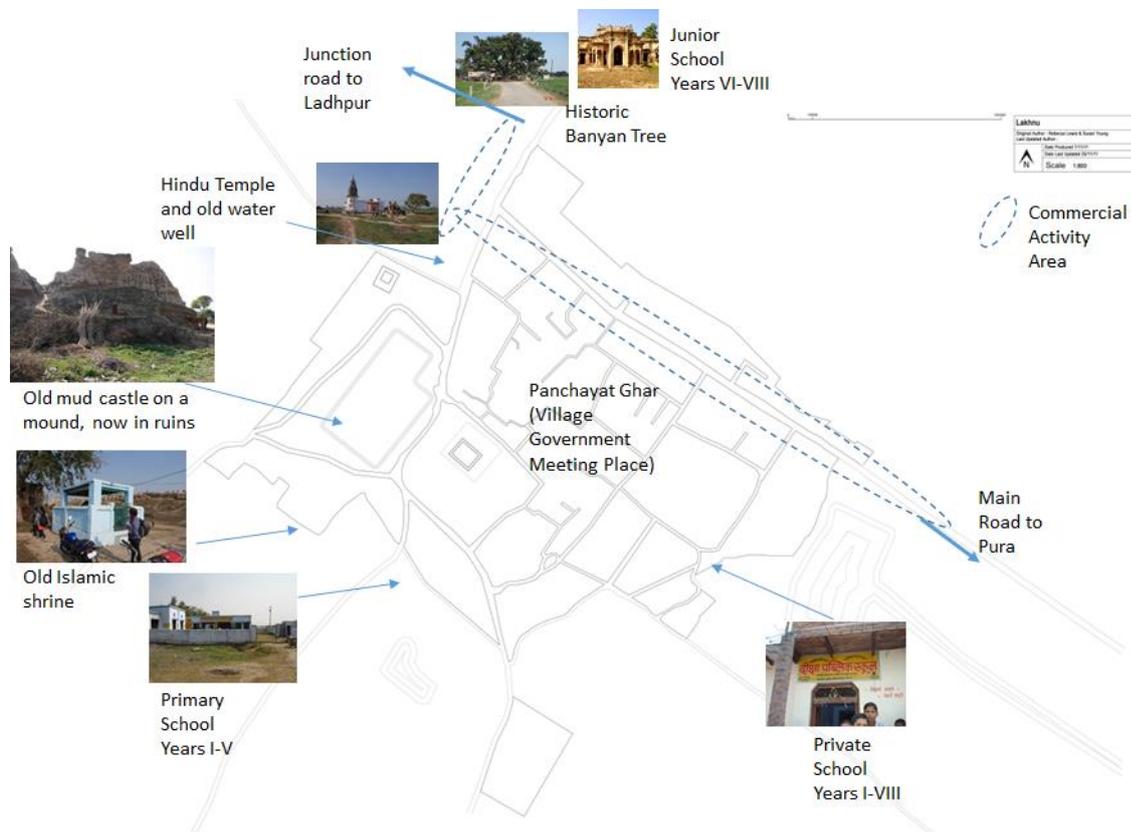


Figure 1.3. Layout of Lakhnu Village. Adapted from Lakhnu Project Preliminary Report, by R. Tiwari, J. Stephens, D. Smith, J. Schapper, 2012, Curtin University Report, p. 18. Copyright 2012 by Curtin University.

It is interesting to note that a detailed internal map of the village does not seem to exist in any official records. The formal map shows only the land demarcated for the village residences and has all the details of the cultivated areas (Figure 1.4).



Figure 1.4. Layout of Lakhnu Village as shown in Hathras District land records. Reproduced from the map of Lakhnu, Hathras District Land Office, 2016.

1.3.2 *Commerce in Lakhnu*

Over the last few decades, Lakhnu like other villages in the area, has gone from being largely self-contained and insular to becoming part of an integrated economy. Traditional occupations are becoming redundant. There are fewer iron mongers (Lohar) and oil extractors (Teli). Tilling with tractors has increased vulnerability to diesel and fuel prices and bulls, previously used as beasts of burden have become idle and migrated out of the villages to the cities. Unemployment is high (anecdotally 40%) and apart from managing one's own lands, the most common form of work is as a daily wage-earning labourer. Men from some families work interstate in the defence forces or other jobs and send money home. Wives typically stay back in the village and several generations live together in a joint family system.

The principal village activity is linked to agriculture and during the peak picking seasons for crops like potatoes and chilli, the entire family is engaged either on their own farm or as contract workers for other farmers. Land packages under individual ownership have become smaller as a result of partitioning between brothers over generations. Anecdotal evidence and preliminary research suggest that some are as small as one acre but that is enough to provide food for the family for a

year. Salaries are low and a labourer earns around INR 250 (AUD 5) for a day's work (based on local information). The minimum wage set by the government in UP is INR 228/- per day (AUD 4.5) (<https://www.im4change.org>, 2019). Work is sporadic and seasonal, so financial stress and poverty are widespread and visible. A survey of the households of the children studying in Lakhnu Junior School by Curtin University students in 2011 mapped the various income generating activities in the village. As can be seen in Figure 1.5, farming and related activities dominate with the other services supporting daily living. A significant number of the villagers are employed as labourers in the fields and hence face uncertain work patterns.

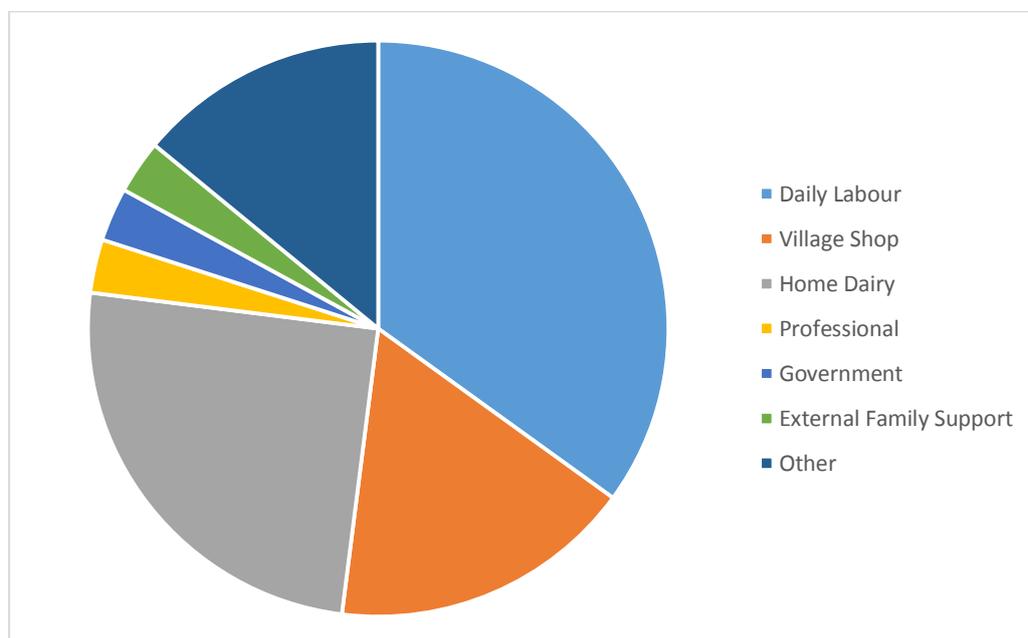


Figure 1.5. Breakdown of activities. Adapted from *Lakhnu Project Preliminary Report*, by R. Tiwari, J. Stephens, D. Smith, J. Schapper, 2012, Curtin University Report, p. 20. Copyright 2012 by Curtin University.

Some relief is available through the Government's Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA), which is a labour law and social security measure that aims to guarantee the right to work (GOI, MGNREGA, 2005). The law is aimed at providing livelihood and enhancing security in rural areas by guaranteeing at least 100 days of paid manual work to every household in a financial year. This employment is managed through the gram panchayats and is designed to support rural infrastructure projects such as roads and water wells (GOI, MGNREGA, 2005).

In Lakhnu, almost all families participate in the MGNREGA scheme to augment their incomes. As the daily wage rates are governed by the State and not the centre, there is a variation across the country. In UP the rate is INR 175/day (AUD 3.5) lower than the rural minimum wage which is INR 228/day (AUD 4.5) (<https://www.im4change.org>, 2019). Notwithstanding the right-to-work legislation, it is not unusual to see young people in the village with apparently very little to do except in specific seasons.

1.3.3 *Historical Context*

Lakhnu is said to be named after an army officer called Lakhansi, who was in the service of the King of Kannauj. The area and surrounding lands were given to him by the King probably as a gift for his service. His heirs became the “Zamindars” or landlords who managed the agricultural production and paid taxes to the British Empire for at least 150 years preceding independence in 1947.

One of the most famous of these landlords was Rai Bahadur Raja Man Singh who managed the affairs of the estate around 1883. He was a visionary and very community minded. Rai Bahadur Raja Man Singh established scholarships to encourage education, particularly for girls for whom he founded a dedicated school. His vision for the social amelioration of the community is contained in a book called “Man Prarthna” authored by him. He was conferred the title of “Raja (or King)” by the British Governor General in 1924 (Singh, 1924).

A few historical buildings remain in the village, even if derelict. The main fortress included accommodation for the Zamindars, their families, servants and guesthouses for visitors. Almost completely decayed, the main “Gharhi” (fortress) in Lakhnu is barely recognizable (Figure 1.6). Only an ornate door remains as a reminder of the grand structure for which it would once have been the portal.



Figure 1.6. Broken edifice of the Gharhi or Fortress.

The past glory of the Kachahri (or court) is more recognizable (Figure 1.7). It was erected for the visiting magistrate or officials who would stay there and preside over any legal cases that would be brought to their attention. The building was artfully constructed and decorated. A U-shaped curved driveway allowed access to the horse carriage and there were orchards in the gardens behind. The backyard had a water pool for the officials to sit around and relax in the evenings.



Figure 1.7. Lakhnu Kachahri building which later became the village school.

One of the key issues that the writers of the Indian Constitution had to consider was India's feudal set-up, which had resulted in a concentration of land ownership with a few zamindars. These people were wealthy and powerful while the vast majority of the others became indentured labourers with limited rights. After India's independence in 1947, the zamindars' status was abolished through the Zamindari Abolition Act, 1950. The then Zamindar Raja Man Singh donated the site and building to the Government for the purposes of a school.

1.4 Education in Lakhnu

The Lakhnu Kachahri building (Figure 1.7) remained functional as a government school until 1997. At that time, the State Government constructed a new school building in the same compound as the repair and upkeep of the old building were expensive and due to water leakage the ceiling was becoming weak and unsafe. Today this building is derelict. Several people in the village who are around 40 years or older have memories of studying in the grand old building. The new school is built like a barrack with four rooms and an office with little architectural beauty.

At present there are two government schools, one private school and a Muslim Madrassa in the village. Under the norms of the Sarva Shiksha Abhiyan, India's "education for all" initiative, the primary school (school years I-V) has to be within one kilometre of the village and so is built within its habitat. The upper primary or junior school (school years VI-VIII) is approximately one km away in the compound of the old Kachahri building.

1.4.1 Government Schools

The two government-run schools are co-educational. These schools charge no fees and enrolments, based on discussions with the school Principal (and records), are as shown in Table 1.1. The year 2011 has been selected as it marks the start of this research work.

Table 1.1

Enrolments in the Lakhnu Government Schools in 2011-2012

	Lower Primary School	Upper Primary (Junior) School
Classes	Years I to V	Years VI to VIII
Number of students	117	73
Ratio - Boys: Girls	50:50	56:44
Number of teachers	1 (plus 2 Siksha Mitras ³)	2
Number of classrooms	3	3

Note: Adapted from the school records, 2011.

Most of the enrolled children are from Lakhnu itself but some students in the junior school come from nearby villages, mainly Akhoya and Nagla Khosali. These villages are part of the Lakhnu Gram Panchayat and are smaller in population than Lakhnu (<https://hathras.nic.in>, 2019).

In 2011, when this research began, there was no running water or electricity and only very basic toilet facilities were available. Midday meals are cooked on site in a recently completed kitchen and are served to the children. Until very recently there were no tables and chairs and children sat on jute mats on the floor. The Junior School now has benches in the classrooms for the children to study and use during meals.

School hours are Monday to Friday from 9:30 am to 4 pm. Each day begins with half an hour devoted to classroom cleaning followed by discussions on current events. Formal classes commence at 10 am and each period is 45 minutes long. After four periods there is a lunch break from 1 p.m. to 1:30 p.m. The children normally eat at school under the Mid-day Meal scheme, a government initiative under which

³ Shiksha Mitras are teachers hired on a contractual basis for supporting the assigned teaching staff in government schools.

free food is provided to the children (Chauhan, 2004). Subsequently classes resume and conclude at 4 p.m.

The school year is from July to May with summer holidays in June. Final examinations are held in early May. These were brought forward to March in 2017 in an attempt to standardise dates across the country. In addition, the school is closed on all national and state holidays, around 22 days in a year. Subjects taught are Hindi, Mathematics, Sanskrit, Science, History, Geography, Environmental Studies, Physical Education and Agriculture. The curriculum is set by the State of UP and free books, school uniforms and other amenities are received through the District Office.

Initial anecdotal information indicates that attendance continuity in the schools is poor and dropout rates high. Conversations with the school teachers indicate that the parents often prioritise their children working in the fields, especially at harvest times. Information on teachers and their challenges is presented in Chapters 2, 5 and 6. Their education thus suffers and their intermittent attendance makes it is very hard for schools to follow a defined curriculum. Figure 1.8 shows the Junior School and Figure 1.9 the Primary School in Lakhnu.



Figure 1.8. Lakhnu Upper Primary (Junior) School.



Figure 1.9. Lakhnu Lower Primary School.

Typical classrooms are shown in Figure 1.10 and 1.11 respectively. The Junior School classrooms (Figure 1.10) now have benches (installed in 2009) whereas in the Primary School children sit on the floor (Figure 1.11).



Figure 1.10. Junior School classrooms have benches (installed in 2009).



Figure 1.11. Typical classroom, Primary School children sit on the floor.

1.4.2 Private Schools

There is one private school named Deeksha located in the village (Figure 10). It has been running since 2004 and in 2009 received official recognition up to Year VIII. Its Principal runs the school from his house and over the years has expanded the space to accommodate more children. Since 2011, the Principal's family has lived on a newly constructed first story of the building while the ground floor rooms and courtyards are used as classrooms.

The enrolment stands at 297 children, 178 boys and 119 girls. There are 11 teachers including the Principal. Fees of INR 100 (AUD 2) are charged on a monthly basis and if three children from one family are registered in the school, the tuition of one is free. Children come from Lakhnu and other nearby villages up to around three kilometres away (Akhoya, Nagla Khosali, Majhola and Jaffarabad). The facilities are very basic—children sit on the floor on jute mats, lighting is poor, and airflow is limited. Some of the rooms are quite small and therefore densely crowded with children.

According to the Principal, economically the school barely breaks even. The school does not receive any government or other grants. Inflows of funds from fees are estimated at around INR 30,000 (AUD 600) a month. Teachers are paid salaries of between INR 2,000-2,500 (AUD 40-50) per month, so almost all the funds are exhausted in paying the wages. The Principal appears to be passionate about the school and has ambitions to expand the facilities on new land that he owns just outside the village habitation area. He is an upper-class farmer and admits that some of his farming income actually goes towards keeping the school afloat.

There are no toilets in the school and no play areas. The education is provided in Hindi and English and this attracts families who can afford the fees. Figures 1.12 and 1.13 show the school and a typical classroom.



Figure 1.12. The Deeksha private school functions from the Principal's house. The board above the doors states that education is provided in Hindi and English.



Figure 1.13. All children sit on the floor to study in the Deeksha School.

Lakhnu has one Islamic Madrassa focused on religious studies. There is one teacher and there is no evidence of records of attendance. Funding for this school, including the teacher's salary, comes from the Jama Masjid in Delhi. During visits, between 10 and 15 children from the surrounding Fakir community (Muslims) were observed there. Most of the time the school appeared to be closed—it seems to function only when the teacher is present.

These descriptions reflect the setting within which IREAD commenced operation. The following sections describe the organisation's role and activities in Lakhnu, followed by the formulation of the research question and overview of the thesis.

1.5 IREAD Role and Activities

In Lakhnu, IREAD activities commenced in 2008 and members developed a relationship with the above schools and the broader community. The IREAD Association is promoting the benefits of education and its activities fall into several categories, all connected with education and the community. The two are intertwined as the home and community influences on a child have a very significant impact on what happens at school.

1.5.1 Ongoing and Episodic Activities

Regular IREAD activities include giving prizes to children in the government schools who perform well academically. Each year prizes are given to students, both boys and girls, studying in Year V and VIII, who stood first and second in their exams in the previous session. The IREAD Association recognises that for children to do well, they need the support of those around them. Thus, parents, teachers and the village officials are also felicitated with watches, bags and other small functional gifts. As this is done in a formal ceremony, it is an opportunity for parents to feel proud of their wards. Simple speeches are given highlighting the importance of education and building awareness of how this is the cornerstone of personal development. Children are also encouraged to support their friends and those from the village who are either not in school or delinquent.

On an episodic basis, other educational and community activities are also supported by IREAD. Books have been provided for the library, general health (eye) and dental educational camps conducted and the use of computers demonstrated. Noting the importance of computers as a training aid, the schools have been provided with laptops preloaded with educational programs. Unfortunately, none of the school teachers are computer literate. Hence, a private teacher was engaged and paid for by IREAD to teach the children how to use computers. The exercise of trying to engage a qualified teacher highlighted the difficulties posed by the remoteness of the village. Possible candidates from Hathras are not interested in coming to the village and it is difficult to find qualified people locally. Several applicants had certificates of completion showing proficiency in basic computer skills and use of word processing and simple spreadsheets. However, they were unable to demonstrate this competence and their level of knowledge was very poor. One reasonable candidate taught in the school from September 2014 to August 2016, but then had to leave following her marriage.

The old school heritage building was considered as a potential future site for a vocational training facility where a range of courses from computers to knitting and sewing could be taught. The aim was to build local capacity in providing the above improvements by working closely with the local community sharing and developing skills. For example, training courses could be developed in line with local requirements for job creation opportunities outside the agricultural sector.

As the building was in neglect and deteriorating, an architect (Dr Rajat Ray) from the Ansal Institute of Architecture, Gurgaon was contracted by IREAD to review its structure and develop a rehabilitation plan. He visited the school building on February 15, 2010 to carry out a preliminary survey and subsequently returned with a surveyor and a structural engineer to develop plans and assess the restoration work requirements. This report was finalised in 2012 and outlined a very significant budget to carry out the restoration activities. Any action was deferred until such time that an end use plan for the facility could be finalised. The building is still not repaired or used.

1.5.2 Facilitated Activities: Curtin University Community Projects

IREAD has been engaged with Curtin University of Australia since 2010 and its students and staff have been working on projects in Lakhnu since 2011. Visits are conducted on an annual basis. Each visit is typically around ten days and focused on development based on community needs.

The Curtin University (Curtin) team normally comprises three to four staff members and around thirty undergraduate and postgraduate students (two-thirds of the group is female and one-third male). They are assisted by some Indian students from a local university where Curtin has collaborative programs. These students help with interpretation and communication with the community and work integrated with the Curtin teams.

During the first visit in November 2011, initial baseline surveys linked to understanding the village layout, principal economy and demographics were conducted. Dwelling surveys allowed insights into home designs, construction materials and potential issues associated with safety, air circulation and light. These would provide the basis for targeted projects aiming to improve the built environment of the village.

In the second visit in November 2012, the surveys were completed and village maps updated. Following a review of the Rajat Ray report and an inspection by Professor John Stephens from the Curtin School of the Built Environment, it was decided to repair the roof and prevent water seepage as it was the principal cause of degradation. A pond behind the building was excavated and restored. The Junior School students were informed of the history of the building and the pond and made to feel proud of their heritage. Community meetings were held with the Pradhan (village head), teachers, a few men and women about the survey findings and potential projects for the future.

The visit during February 2014 built a common education and play area for the children in a location allocated by the community. A “needs” workshop highlighted public toilets as the highest priority. Two sites were shortlisted for the community project and the final would be subject to approval from the

administration. Three sites for cluster toilets were considered and in two of them the property owners were willing to both offer and share land with the rest of the cluster. Unfortunately, the members of the Fakir community felt uncomfortable and refused to allow construction on their land even though they are among the lowest socio-economic category and do not have access to toilets. The sites were measured for design and construction plans and budgetary purposes.

The February 2015 visit initiated the construction of the toilets. A community toilet and one cluster toilet were built. Figure 1.14 shows the completed public toilet bank which includes two toilets, a water pump and a storage room for cleaning supplies. In addition, several targeted home improvement projects looking at enhancing airflow, increasing lighting and waterproofing were completed. One community common space, the old water well, which was falling apart and becoming unsafe, was rebuilt and de-waterlogging modifications were made. Community groups agreed to undertake the maintenance and upkeep of the public facilities.



Figure 1.14. A two-seat toilet block built specifically for women.

In December 2016 the visit was focused on community workshops as the toilet facilities were not being used. Root causes related to maintenance and privacy were unearthed and solutions found to ensure access was not restricted. The IREAD Association supported the costs for a cleaner for one year to ensure the community toilets were kept clean with the understanding that the village would pay directly afterwards. To educate the community regarding the benefits of sanitation, traditional theatre techniques such as “nukkad natak” (street theatre) were used wherein Curtin students and local school students performed together to pass the message. There has been a hiatus in the Curtin University trips since 2017 due to lack of success in securing funding.

1.5.3 *Facilitated Activities: Other Community Projects*

Other projects being supported by IREAD are linked to the community. In 2016, the first government-organised, community-lead total sanitation workshop (CLTS) was held in Lakhnu at the request of IREAD. Run under the government scheme of Swachh Bharat Abhiyaan (Clean Indian Program), the purpose was to raise awareness on sanitation and create a self-governing system to eradicate open defecation by 2019.

In 2019, Professor Trilochan Sastry, a leading proponent of farmers’ cooperatives held a workshop with villagers from small and large farms in Lakhnu regarding the benefits of forming and managing a cooperative to secure better return on their produce. He gave examples of successful projects in Southern India and invited Lakhnu farmers to visit and discuss with their southern India counterparts directly. While the message was very well received, no action has been forthcoming as yet. People are conservative in their behaviours and change comes with gentle persuasion. It is envisaged that IREAD will continue to pursue the effort of establishing cooperatives.

1.5.4 *Small Steps Forward*

The IREAD activities are well regarded by the community and after more than a decade visible progress can be seen. Computers and tablets have been introduced in the school and other infrastructure improved through direct support and indirectly through persistent representations to the district administration.

On average, IREAD meets with the District Magistrate (DM) of Hathras once or twice a year to raise the pending issues that need support and resolution. Below are some examples. Even though the village had electricity, the school was not connected. The school boundary wall was incomplete and needed to be finished to prevent vandalism and animals from wandering in. These seemingly simple tasks take a lot of lobbying and after years of effort, money for the boundary wall was made available in 2015 and the school electrified in 2016. Staffing levels have improved, and additional teachers have been assigned as a result of such interactions, letters of appeal and requests.

In facilitating the Curtin University projects, in-depth insights have been developed into the thinking of the community. The complexities of India's caste and class system, the lack of a concept of communal responsibility, and historical experiences are some of the reasons why projects do not achieve all of the desired outcomes. For example, the local experience with the non-utilisation of the toilets that were constructed there and are perfectly useable is a microcosm of larger efforts in the development domain, such as the UN sponsored Clean Cookstove Project and the Indian Government's Swachh Bharat Abhiyan (Clean India Campaign). Through discussions with the State officials, Lakhnu was elevated to be an early pilot for the community-lead total sanitation scheme (CLTS). The Prime Minister of India had declared a target to get India to be open defecation-free by 2019. Toilets were being built in rural areas but utilisation rates were minimal. This CLTS scheme was designed to educate the community and then train local participants and influential members of the public to help in enforcing the scheme. The challenge of changing entrenched habits is hard whether it is one toilet bank or several. Similar challenges exist in forming a farmers' cooperative society. Persistence by IREAD may see some change over time.

1.5.5 *Complementarity to other Models*

Outside (expatriate) participation through direct involvement with the community in rural education has several forms. In general, such expatriates (including ethnic Indians) have identified an area where they have access and set up their own school. The area is usually selected based on their family history and local roots which allows them an opportunity to conduct activities and build on the initial

level of trust afforded by the community. Such models can have two variations: one in which the expatriates move back to the area and one in which they make periodic visits but do not relocate to the area.

In the case of the Pardada Pardadi Trust (<https://education4change.org>, 2019), the principals moved back to the area and managed the process of school construction and education development. It is extremely successful, but it has taken a very philanthropic person to relocate from the USA where his family still reside. A second model was used by the India School Fund which set up two schools in Rajuvella (<http://indiaschoolfund.org>⁴, 2019) in the Mathura District which is adjoining to the Hathras District where Lakhnu is located. Here the schools were constructed on private land and local staff hired to run them. Unfortunately, after a few years, the schools had to be shut down principally because of the lack of committed management and staff. The proponents while in India were not able to relocate to the village and manage the process.

The IREAD model considers government schools and leverages the administration to get things done and outcomes improved. Private funding can be used to enhance education through the provision of extra facilities but the management of the school will always be in government hands. This makes the IREAD model complementary to, but distinct from the other two and should make the approach more sustainable. The experience gained from the Pardada Pardadi Trust and the India School Fund is that for private schools you need to partner with a local person with the right motivations. Activities provided by IREAD permit a continuous exposure to the village and thereby allow assessing potential candidates more judiciously. The IREAD model can thus apply to private schools as well, though in this study the focus is on government schools.

⁴ The website is not active in 2020 but a link is available through <https://www.crunchbase.com/organization/isf>

1.6 Overview of the Thesis

India is yet to achieve consistent improvement in the literacy rates of its rural school-age children. After over ten years of continuous engagement, IREAD and its members are welcomed in the village and trusted insofar as their proposals and projects are concerned. Within this overall context, the causes for poor school attendance and learning can be explored through the activities of IREAD. This is a novel approach in education, qualitative longitudinal analysis over several years attempting to understand the root causes behind the poor educational outcomes at a primary school level. Thus, using the case study of a government school in the village of Lakhnu, this thesis analyses the impact of a new model of educational support through the work of the non-resident association India Rural Education and Development Inc.

1.6.1 *Formulating the Research Agenda*

Social constructs, a feudalistic society, extreme poverty, entrenched bureaucracy and marginalised people are the principal factors influencing the primary education system in India. Numerous approaches have been considered by governments, NGOs and other social organisations but have fallen short of expectations. There is thus room for considering alternative methodologies and models to understand the causal factors from a different angle and that is what this research intends to perform.

The aim of the research is to understand how a community-based collaborative relationship with non-resident Indians through the observations and activities of an association like IREAD can be used to improve the uptake of primary education in rural India, using Lakhnu as a longitudinal case study over the period 2011-2019. A case study approach through IREAD provides an opportunity to focus on one village government school, Lakhnu Junior School, over many years and use a methodology based on grounded theory and a bottom-up exploratory approach applied to the same target audience. Such an approach has not been considered in the literature related to education in India. Anchored in an understanding around the policy initiatives both local and global, the research focused on the drivers of education and discerned those most influential in Lakhnu.

Such an established presence and trusted relationships between IREAD and the Lakhnu community allowed for access to stakeholders and consideration of the following:

- investigation of the current state of the existing policy led primary education options and models in rural North India and Lakhnu;
- participatory research in Lakhnu, based on IREAD activities centred on Lakhnu Junior School, collecting information on the factors impeding the uptake of primary education;
- the contribution of the IREAD model towards the uptake of primary education including zones of applicability and constraints;
- development of strategies for improving education in government schools in rural India including identifying areas that need additional research.

In addition, the research also examined the validity of an IREAD model for the expatriate Indian diaspora to consider as a pathway to supporting the cause of education in their country of origin. This approach will likely sit within a seriatim of options for the diaspora to judge, each with their areas of applicability and constraints.

Succinctly, the research question this thesis addresses is: How can a non-resident organisation make a difference to primary education in rural India?

The village of Lakhnu is a microcosm of rural areas for the state of UP and there is no reason why the case study findings would not be scalable across culturally and administratively consistent areas. Any outcomes should benefit the local children and be useful for potential revisions to the administration's current top-down educational policies as the delivery of the various programs has fallen short of expectations.

1.6.2 *Workflow for the Thesis*

The contextual setting of the village of Lakhnu within the Hathras District of the North Indian State of Uttar Pradesh was described in sections 1.2 to 1.5. To address the research agenda, a workflow was defined as illustrated in Figure 1.15. In

defining a workflow for the thesis, flexibility of an iterative process is retained to address any inconsistencies observed. At this stage, no preconceived hypothesis is being postulated and the workflow supports the grounded theory approach towards determining responses to the research question.

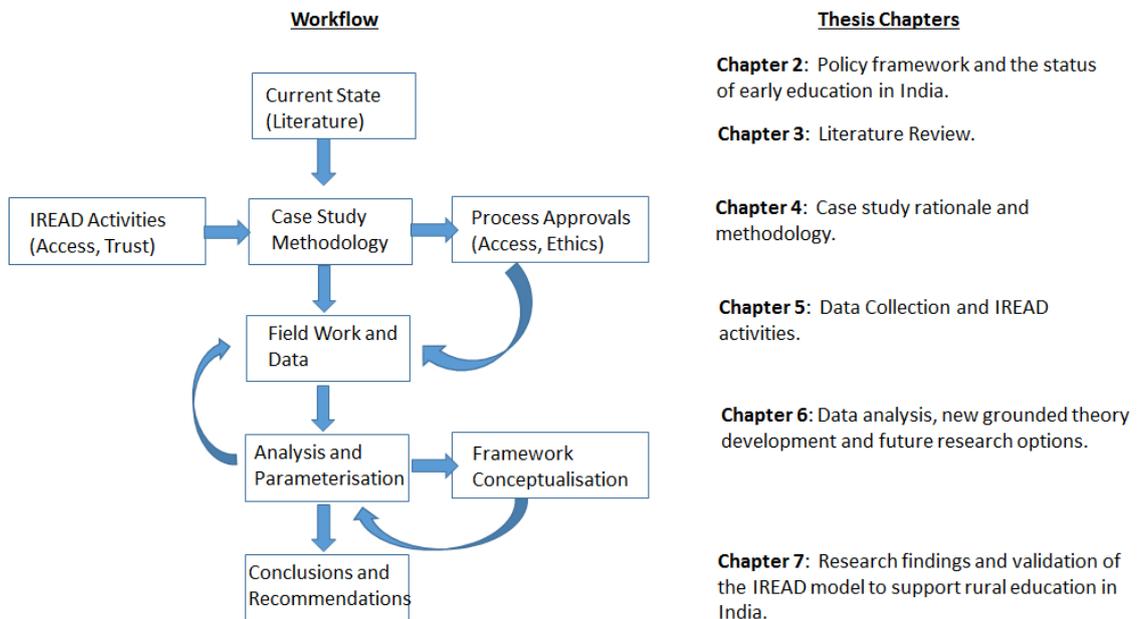


Figure 1.15. Workflow for the grounded theory-based approach. Adapted from *Classic grounded theory: a framework for contemporary application*, by J. Moore, 2010, *Nurse Researcher*, 17(4), p. 43. Copyright 2010 by ProQuest Central.

In Chapter 2, India’s education policy framework is first reviewed and the current state of primary education is examined. India is also a signatory to multiple international programs and is required to conform towards achieving the agreed outcomes in education. Here, government responses and those of public interest organisations often differ and those areas require examination. Current metrics for gauging success are scrutinised, as while they are being largely achieved, the learning outcomes for children are not increasing in tandem. This chapter thus helps set the empirical context for the thesis.

The existing research knowledge base is reviewed in Chapter 3. This includes the principal sources of input information and the methodologies used to consider and evaluate the data. Research gaps are identified and the principal factors impacting education in Lakhnu isolated as a starting point for this case study.

Chapter 4 presents the research methodology used in the thesis. Furthermore, the rationale for a grounded theory is justified and a unit of analysis identified for this case study. The data collection process is framed and guidelines for approaching the field work created. An iterative data collection and analysis schedule is also developed consistent with the workflow.

The case study field activities and accompanying data collection are detailed in Chapter 5. This includes explanation of the multifaceted data emanating from IREAD activities and IREAD facilitated projects which was collected and recorded. A data validation approach is postulated through a focused field trip to allow confirmation of any key learnings as gleaned through the iterative data collection and analysis process.

As in any research process, the collected data needs a framework for analysis and a logical process through which some new insights can emerge. This is developed in Chapter 6, granulating the research inputs to identify the influencing factors affecting the demand and supply drivers for providing education to children and conceiving a theory consistent with the grounded methodology. The role of the IREAD model is discussed and the niche it can occupy in benefiting the learning of primary school children identified. Concluding thoughts identify future research directions and areas in which the IREAD scope can be expanded.

The original research question is revisited in Chapter 7 in light of the research findings. Stakeholder influences are summarised and the IREAD zones of influence and limitations tabled. The IREAD model is one way in which non-residents can support education in India. Other options exist and they each occupy a space within an overall portfolio. In conclusion, the original contributions of this longitudinal study to the overall knowledge base of education in rural India are considered along with how the IREAD activities incrementally benefit the village children.

Chapter 2: Early Education in India

2.1 Introduction

This chapter outlines educational policy development in India and reviews the country's response to global policy initiatives such as the United Nations Millennium and Sustainable Development Goals (MDGs and SDGs). Differentiated views on progress as outlined by the government have been tabled by non-governmental and other such organisations, challenging the reports and highlighting areas that need more attention. As the number of children in India is very significant, the scale of the educational problem is immense. The total number of children in the age group six to thirteen years is around 200 million, of which six million have been estimated as being out of school (GOI, NSS, 2016; Bajpai & Sachs, 2011). As any analysis is predicated on reliable information, it is critical to consider the base data sources and their veracity. The metrics for measurement across the country and mechanisms for data collection thus become important as they can influence the conclusions and drive initiatives. Within this, the roles played by India's central government and the states are considered as the implementation is done at a local and community level.

The role of the bureaucracy and the implementation challenges in the face of the deep social and cultural value systems that exist are hurdles which impact educational outcomes and the variation that is seen across states at a pan-India level. Tharoor (1997) explains that "the Indian mind has been shaped by remarkably diverse forces: ancient Hindu tradition, myth and scripture, the impact of Islam and two centuries of British rule. The result is unique, not just because of the variety of contemporary influences available in India, but because of the diversity of its heritage" (Tharoor, 1997, p. 9). Various parts of the country developed under different systems during British colonial times. As an example, for land-revenue collection, some areas had Zamindar or local landlords who were responsible for local tax collection. In other areas, the landowners were responsible for their own taxes (Rayatwari System). The ripples continue post-independence and the social structures are more entrenched in the zamindar states (Banerjee & Iyer, 2005). The state of UP, including Lakhnu, had the zamindari system until it was abolished by the

Government in 1950 but the social systems of class and religion remain deeply entrenched (Banerjee & Iyer, 2005).

The research process needs to be contextualised within the current state of primary education from policy to delivery. An understanding of the policy settings and implementation lacunas can support the framing of the current research literature review to illustrate the gaps that exist and pinpoint the focus area for new information. This can help define a research methodology and data collection scheme leading to new insights in the overall understanding of the unsatisfactory educational outcomes, particularly in rural North India where the case study for this research is located.

2.2 Background

Industrialization, based on tremendous developments in science and technology has been the engine behind the multi-faceted accomplishments of the twentieth century. According to a number of indicators, India has progressed well. Economic wealth has increased, life expectancy has improved, infant mortality has dropped and food production has expanded faster than the population growth (WCED, 1987, p. 2). The list of achievements is long. There were two major wars and each caused their geopolitical changes; the British Raj ended; fascism and communism came and went (Mazaar, 1997, p. 1), while the world population quadrupled and democracy became more prevalent. Paradoxically, we have simultaneously seen the gap between the rich and poor widen across the world and in absolute numbers there are more people living in poverty than ever before. Even in wealthy countries like the USA it was reported that this expanding gap between rich and poor is widening to the point that it is effecting longevity with the wealthy leading longer lives and the socially weak having shorter lifespans (US GAO, 2019).

These changes notwithstanding, social institutions did not alter much and structures of government, education, business, and religion remained time-honoured until the mid-1990s. In the words of Peter F. Drucker “every few hundred years in Western history there occurs a sharp transformation. Within a few short decades, society rearranges itself – its worldview; its basic values; its social and political structure; its arts; its key institutions. Fifty years later, there is a new world”

(Drucker, 1992, p. 1). At present, we are seeing this profound shift from industrial production of goods to one where the primary social good is knowledge (Mazaar, 1997, p. 2). Education thus becomes a critical pillar for this transformation with creation and dissemination of knowledge the focus of present-day society.

On this basis the United Nations (UN) in its 2000 Millennium Summit, proposed the Millennium Development Goals (MDGs) to which over 190 countries became signatories. These goals aimed at addressing significant challenges including poverty, hunger, women's rights and universal education amongst others. For each of the MDGs, a set of strategies, metrics and targets were proposed and accepted. Donor countries committed to providing 0.7% of their national incomes as official development assistance (ODA) towards this effort. This would be tantamount to around USD 200 billion as compared to the approximately USD 70 billion that was flowing through in the year 2000 (Sachs, 2005, p. 218). Together with many others, India participated in the process and was a signatory to the program.

India is a diverse country with multiple languages, cultural nuances and societal beliefs. The country has been shaped by history and has both absorbed and assimilated the cultures of the various invaders who passed through the centuries. Settlements were largely agrarian and the economy sustained by trade of silk, cotton and spices, which made India a very wealthy country in the sixteenth century. Around that time the British East Indian Company started as a trading outpost leading to occupation and the British Raj in 1757. At the time of independence in 1947 following around 200 years of British occupation, India had been systematically deprived of its wealth and skills and reduced to an impecunious state with extreme poverty and a literacy rate at around 16% (Little, 2010). Policies focused on education were introduced by successive governments of independent India – some incremental, some transformational. In the field of education, synchronously with the MDGs, in the year 2000, the Prime Minister of India in his Independence Day speech stated that “the most valuable investment India can make in its future is to ensure that every child gets education” (Bajpai & Sachs, 2011, p. 3). That led to a number of policy directives and implementation programs at the central and state levels with particular focus on rural children, the poor, underprivileged and girl-children.

Private foundations and NGOs too have been vigorously supporting the educational initiative – both in terms of complementing government efforts and working independently in localized areas (<https://www.pratham.org/>, 2019; <https://education4change.org>, 2019). They have set up new schools and aim to ensure that children attend classes and learn skills which will allow them to become economically productive, have better employment opportunities and improve their quality of life. Being private institutions, they have more control and flexibility in terms of their operations. Their coverage however is limited and largely urban-suburban. In rural areas, low fee paying (LFP) private schools have mushroomed over the last decade but are generally not accessible to the poorest 40% of the population (Harma, 2011). Notwithstanding, the majority of the schools are government run and as they do not charge fees, are the only choice for the most economically marginalised. In these schools, attendance rates are poor and the problem of retention is more acute (Siddhu, 2011).

The problems of attrition and low levels of transition beyond primary school are further exacerbated in rural areas. Non-governmental efforts are largely directed towards private schools which are often perceived as providing a better education. However, even nominal fees become a barrier to obtaining education for the very poor. An unintended consequence of such NGO support for the private sector is that government schools remain deprived of targeted educational interventions thereby widening inequity between children based on their family wealth. Progressive NGOs like Pratham are now starting to work with government schools as well, but given the sheer scale of the challenge, measureable progress will take time. This creates an opportunity and the need for smaller-level contributions targeted at individual villages and schools. For example, the India School Fund (<http://indiaschoolfund.org>, 2016) and Pardada Pardadi Trust (<https://education4change.org>, 2019) opened their own schools in selected villages. By comparison, the India Rural Education and Development Association (IREAD) approach is aimed at enhancing the existing government school in Lakhnu.

This study explicitly tackles the problem of government-run primary schools in rural areas in India. It develops a new approach where a non-government and non-resident organisation focusses on improving the learning opportunities for

underprivileged children by working in partnership with the local community and school to achieve better educational outcomes. This is to be accomplished by maintaining a continuity in visits and participation from the organisation's members on an annual basis, even if each visit is only a day or two. However, before this issue is outlined and discussed, there is need for better understanding of India's primary education system and the challenges it poses.

2.3 Primary Education in India

India's founding father, Mahatma Gandhi, believed that education is the basic tool for the development of consciousness and the reconstruction of society. Post-independence, a number of central government programs were initiated to address illiteracy in both rural and urban India. While these policies for education were instituted, the responsibility of implementation and financing was left to the individual states.

Individual states within the Indian union have considerable autonomy and are responsible for operational aspects within the government school system. It has been recognised that there is a significant variation in metrics of enrolment and educational outcomes across the states, with larger states in the North of India, like Uttar Pradesh and Bihar, generally lagging behind the smaller states in the North, like Himachal Pradesh, and those in Southern India (ASER, 2016). The colour-coded map of India as shown in Figure 2.1 illustrates these sub-national variations by state by representing the percentages of "out of school" children. It is clear that the Hindi speaking heartland of North and Central India is performing worse than the national averages (GOI, NSS-SRI, 2014). While poverty may be an important consideration, at a pan-India level states such as Kerala and Himachal Pradesh have achieved better results, ostensibly with similar resources. This success deserves investigation. However, what this study does is look at a typical area in UP where primary education continues to lag.

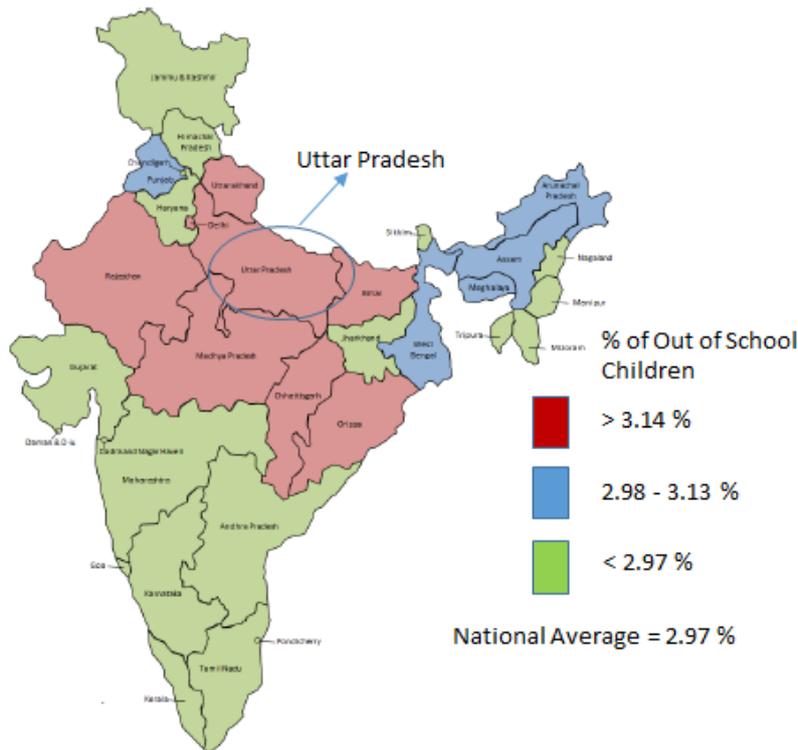


Figure 2.1. Out of school children by State in the peninsula of India. UP is marked as a “red” state with over 3.14% children out of school. Adapted from *National Sample Survey on Estimation of Out of School Children*, Contracted research conducted by the Social and Rural Research Institute, 2014, p. 8. Copyright 2014 by Social and Rural Research Institute.

Policies and budgetary allocations are core to any educational system. However, in India, some quasi/unique characteristics make the challenge greater. One of these is the deeply inculcated and established social values and casteism that create and maintain inequalities. The Indian caste system is divisive and discriminatory against the lower castes. This has necessitated legislation and affirmative action in the form of reservation to uplift these sections of society from social and educational backwardness. As discussed in Section 1.2, the principal caste categories are: (i) Scheduled Tribes (ST) who are the most socially and educational backward community and live in tribal areas; (ii) Scheduled Castes (SC) also socially and educational disadvantaged and widespread across the country and (iii) Other Backward Classes (OBC) who have also been historically disadvantaged in their geographical area (Barooah, 2005). The Constitution of India includes provisions for these disadvantaged classed and the Parliament may by law include or exclude others as they deem fit. Ironically, due to reservation benefits, some people have sought to

be classified under these categories to access better educational and job opportunities.

Bureaucratic mechanisms that impact the delivery of education as a service to the people is the second such unique characteristic. There is an arbitrariness in the way policies are viewed and implemented by the state bureaucracy. The implementation of the protocols and practices through which state officials construct policy linkages with the community vary from state to state (Gupta, 2012). This often disadvantages poorer states where the levels of literacy are lower and compliance with government policies more bureaucratic.

Another facet of the bureaucracy is the high level of corruption in the public sector at a service delivery level. As stated in Section 1.2, in 2019 Transparency International which ranks 180 countries, allocated a score of only 41 to India, on a scale of 01-100 with lower figures indicating increased corruption at a public-sector level (<https://www.transparency.org/en/>, 2019). It has also been asserted that corruption is trending upwards since independence (Parry, 2000). Such corruption undermines democracy and often exacerbates poverty by excluding the neediest from free governmental services, even though such amenities are within the national agenda. In essence, the policy effect becomes paradoxical with “the very gestures of inclusion to produce an outcome that is the opposite” (Gupta, 2012, p. 110). Gupta argues that the nexus between the political and bureaucratic elites leads to “a bureaucratic culture in which failures of implementation are not merely tolerated but expected” (Gupta, 2012, p. 275). Corruption thus seems to have been institutionalised with the public acceptance of a small percentage of misappropriation of public funds (Gupta, 2012). Both the cultural divide and the bureaucratic limitations are more entrenched in the educationally lagging states (Mangla, 2013).

As we explore the national educational policy settings and their evolution in the subsequent sections, the context has to be kept in perspective. The beneficiaries are mired in social and caste-based divisions and the implementation system is handicapped by bureaucratic unpredictability and corruption.

2.3.1 *Brief History of Early Educational Policies*

Faced with low levels of literacy at the time of independence, India's first Prime Minister, Pandit Jawahar Lal Nehru, had a significant challenge. The British had not implemented any policies to educate the masses, instead grooming a select few to help them with the administration tasks. Their colonial philosophy was to divide and rule and this included creating a group of anglicised Indians who could be effective in carrying out the wishes of the rulers on the oppressed millions (Tharoor, 1997). This approach went back to the times when the East India Company was established and its role extended to education by Lord Macaulay in his Minute on Indian Education (1835) wherein he wanted to teach English to the people of India and not Sanskrit or Persian (Cutts, 1953). The policies favoured the upper classes and led them to positions of power and authority on the basis of education in English. Zamindaris and other revenue collection activities also fostered and strengthened feudalism and embedded the class differences even more deeply (Banerjee & Iyer, 2005). These gaps are enhanced in rural India and while they have narrowed over the years, the progress amongst this set of demographics is tracked even today as entrenched social systems take a long time to change (Table 2.1, GOI, NSS, 2016).

Table 2.1

Percentage of literates by social group. Caste and gender-based tracking systems are considered as part of National Surveys

Social Group	Rural %		Urban %		Rural and Urban %	
	Male	Female	Male	Female	Male	Female
ST	73	55	90	76	75	57
SC	75	56	86	72	78	60
OBC	81	61	90	78	84	66
Others	87	73	95	88	90	79
All	80	62	91	81	83	68

Adapted from *National Sample Survey 71st Round, Report 575*, Ministry of Statistics and Program Implementation, 2016, Statement 3.2, p. 21. Copyright 2016 by Government of India.

India's National Council of Educational Research and Training (NCERT) was set up in 1961 as an autonomous organisation to advise the central and state

governments on formulating and implementing education policies. In 1968, the first national policy on education was issued outlining a uniform pattern across the country consisting of ten years of general education program followed by two years of diversified schooling. An interesting feature was the proposed three language curriculum with Hindi, English and a regional language in the non-Hindi speaking mainly southern states. While this directive was not followed, it highlights the complexity created by India's diversity and lack of a unifying language, a feature that has probably contributed to English being used more widely across the country (Weinstein, 1990).

With the 1986 and 1992 updates of the national education policy, emphasis was placed on providing equal opportunities for women and classes, who historically have been disadvantaged within India's social construct. The importance of starting early was recognised and initiatives to improve primary education, such as "Operation Blackboard", were launched. Information technology (IT) was acknowledged as being crucial in promoting education equality.

While these policies for education were instituted nationally, the responsibility of implementation and financing was left to the individual States. It was only in 1976 that education was deemed to be a concurrent responsibility between the Central and the State Governments with a goal of building uniformity across the country. These early post-independence policies and their focus areas are summarised in Table 2.2.

Although the policies were promulgated, implementation was problematic and not effectively tracked. Suitable levels of funding were not available either and financing for primary education remained at low levels. The education budget remained around 2% until the mid-1980s, only increasing to between 3–4% of GDP following the 1986 NPE update as opposed to the 6% recommended by various committees constituted by the government (Venkatanarayanan, 2015). Operation Blackboard did improve the infrastructure and facilities and also allowed for the hiring of extra teachers by the states.

Table 2.2

Early Post-Independence Education Policies

Time Period	Key policies	Focus areas
Post-Independence: 1947-1976	<ul style="list-style-type: none"> - Article 45, Constitution of India (1950) - Kothari Commission leading to National Policy on Education (NPE, 1968) 	<ul style="list-style-type: none"> - Free and compulsory education until age 14 - Three languages including a regional language as a medium of instruction
Intermediate Phase: 1976 – 1993	<ul style="list-style-type: none"> - NPE updates (1986, 1992) - Operation Blackboard (1987) 	<ul style="list-style-type: none"> - Establish rules for shared responsibilities between central and state governments - School infrastructure requirement definitions

Compiled by the researcher from a range of literature.

Overall, the policies themselves and their implementation were patchy. It must be recognised that the macro-economic situation in India in the 1980s was difficult with a slow rate of growth and rising external debt. The economy was liberalised in the early 1990s which saw a partial float of the currency, incentives for industrial development and a high single-digit growth rate by the end of the decade (Tharoor, 1997).

The principal beneficiaries of the improved economy were the people living in urban areas, including educated professionals who could converse in English. Call-centres mushroomed in cities and offered employment opportunities to the youth. India remains a land of disparities, having the largest number of billionaires in Asia while millions live in poverty (Tharoor, 2007). Benefits have not percolated fast enough to the villages and development in the rural sector is subtle. It is obvious to regular visitors of our study area that the road to Hathras, one we have been traversing for the last decade in going to Lakhnu, remains pot-holed and traffic jams occur regularly. Travel time from Mathura has hardly changed, while in contrast a multi-lane highway has been developed connecting Delhi to Agra, where the tourist attraction of the Taj Mahal is located, reducing travel time to under three hours. Education and ostensibly English seem to hold the key to progress.

2.3.2 *Evolution of Educational Policies*

The 86th amendment to the Indian Constitution (2002) recognized free and compulsory education in the 6–14 age groups as a “Fundament Right”. A new article 21A was inserted which made the right to education fundamental for children between 6 to 14 years with no child liable to pay any kind of fee for this education. However, the formal bill, the Right to Education Act 2009 (RTE) was passed only in 2009 by both houses of parliament (GOI, MHRD, 2009) delaying further improvement in the educational outcomes.

Under this new legislation, every child in the prescribed age group has to attend school. Education has to be provided free of cost and primary schools for small children should be located in the neighbourhood within one kilometre of the commune or village. There is to be no discrimination and children have to be admitted as appropriate for their age. The roles and responsibilities are shared between the state and central governments and the onus is on the respective state governments to ensure facilities and support compulsory attendance and completion. Guidelines and norms are prescribed for student-teacher ratios, school architecture and teaching schedule. Teacher qualifications and training requirements are specified and private tutoring by school teachers to their pupils is specifically prohibited. This was likely in response to the prevalent practice of teachers offering private sessions after school to better prepare students for taking exams.

The regulatory institutions were strengthened and it was mandated that all schools needed to be licensed and approved. Curriculum development was broadened to focus on the all-round advancement of the individual with child-centred learning through the inclusion of physical training and co-curricular activities. Some fundamental changes were also made. Physical punishment was prohibited with a view to develop talent without imposing any burden of anxiety or fear on the child. State governments tasked the district administration for measuring performance with granularity at a school by school level to measure impacts.

There has also been some criticism of the amendment and associated articles, wherein it appears that the constitutional onus of free and compulsory education has been moved to the parents by tasking it as a Fundamental Duty under Article 51A (k)

whereby they have to provide educational opportunities to the children in their care (Chowdhury & Bose, 2004). While this may appear innocuous, in subsistence communities, children work to help the family cope, whether it be in the fields collecting firewood or picking chillies and other vegetables during harvest season.

While the RTE Act does not cover children below the age of six years, the planners instituted preschool year schemes such as the Early Childhood Care and Education (ECCE) and Integrated Child Development Services (ICDS) focusing on children in the year group of 3-5 years. Schemes such as Aanganwadi (crèche) and Asha (pre- and post-natal care) are deployed in rural areas for this purpose. The Aanganwadi have been active since 1975 under the public healthcare system and intended to provide basic medical services, nutrition education and supplements, as well as pre-school activities. More recently, the Asha scheme was initiated in 2005 to support health-related, mainly pre- and post-natal issues, faced by women and young children from the economically deprived sections of the village. The expansion of Aanganwadi from just being day-care centres to becoming a pre-school was mandated by the administration which wanted to see these centres co-located in the primary school premises. All workers are also supposed to receive training from the education department for their pre-school teaching roles, however their evaluation metrics relate to health such as birth weights and immunisation levels (Mangla, 2013). This is but one example of the administration taking a holistic view across health and education functions which appears logical but is very hard to implement and creates confusion in the field (Mangla, 2013).

At a national level, the Government has been considering formulating a new education policy to better align the country's capabilities with the requirements of the 21st century. This new policy would focus on developing skills and is to be consistent with India becoming a knowledge superpower (India Today, 2015). A range of policy inputs was drafted in 2016, recognising the importance of education quality, aligning previous policy recommendations and outlining future needs. This document stressed India's heritage in education going back thousands of years in a system that was "teacher-centric" and reinforced the historical concepts under which pupils were subject to strict rules and obligations towards teachers (GOI, MHRD draft NEP 2016, p. 3). A policy update is to be released in 2020 and there is an

expectation for more emphasis on integrated learning from pre-school onwards to improve the quality of education (Banerji, 2019).

Aanganwadi and Asha schemes are active in Lakhnu but their effectiveness is questionable. During the numerous visits, the IREAD members have not sighted any Aanganwadi workers in the primary school. On one occasion, these workers were called to a community meeting in the village with the Sub-District Magistrate (SDM). It was clear from the complaints voiced by the attending women that the crèche was not functional and the distribution of nutrition supplements to the pregnant ladies as part of pre- and post-natal care was not being done to their satisfaction. The workers also voiced their dissatisfaction stating that they had not received supplies and also complained about not being paid their salaries. The SDM said he would look into the situation and asked for cooperation, but the matter ended there.

2.3.3 *The Flagship Initiative: Sarva Shiksha Abhiyaan*

The flagship initiative of “Sarva Shiksha Abhiyan” (SSA), or education for all, was launched by the then Prime Minister of India in 2000. Its objective was that by 2010 every Indian child was to get an education up to Year VIII (GOI, SSA, 2002).

A gigantic task, the SSA was to be implemented by the Centre in partnership with State Governments to cover the entire country and address the needs of circa 200 million Indian children. The SSA objectives were aimed at providing equal educational access to all children in the target age group, irrespective of caste and social background. This was to be achieved by opening new government schools across the country and improving the infrastructure through grants for extra classrooms, teaching materials and facilities, such as drinking water and toilets.

Ambitious targets were set to be met by 2010. The key ones are listed below:

- a) universal access and enrolment for all children between 6 and 14 years;
- b) universal retention of children up to 14 years of age;
- c) a substantial improvement in the quality of education to enable all children to achieve essential levels of learning; and

- d) bridging of gender and social category gaps in enrolment, retention and learning.

The SSA has been operational since the year 2000-2001 and has supported a range of initiatives to achieve universal access and improve retention rates particularly amongst girls and the economically disadvantaged. Funding was proposed through the Majumdar Committee and it recommended an outlay of INR 137,000 Crores (AUD 27 Billion) over a ten-year timeframe. The SSA began with a modest budget of INR 150 Crores (AUD 30 Million) with allocations set to increase each year. This never materialised and published government reports indicate that around INR 16,000 Crores (AUD 3.2 Billion) only or 11% of the initial recommendation was expended (Chowdhury and Bose, 2004). Given the scale of the gap, in 2004 following federal elections, the Government of India changed and an educational cess (tax) of 2% was levied on all central and state incomes. Expansive funding became available and in the year 2010 - 2011 the annual allocation was more significant – INR 20,000 crores (AUD 4 Billion) (Bajpai & Sachs, 2011). New schools were constructed, existing educational facilities upgraded with new classrooms, toilets and drinking water. More teachers were hired and academic resources increased.

Following the RTE Act, the SSA program evolved to be consistent with the legal framework. There were no fees and free textbooks, uniforms and other accessories were incorporated for achieving the holistic learning achievements and developments envisaged. The concept of equal opportunity was expanded to ensure that the weaker sections of society, the disadvantaged SC/ST and OBC classes and tribes in India's historic and deep-rooted class system could actually use the opportunities. This meant a deeper understanding of the local issues and predicaments faced by this cohort, such as access and other societal imposts. States were charged to empower the local District administration to ensure that the philosophy of the RTE was understood by the parents who, together with the teachers would feel vested in their children attending school and learning.

Some very significant changes to the teaching environment were made. This included a distinctive move away from any form of corporal punishment and other punitive measures. A more inclusive and supportive system was considered with the

underlying assumption that without threats and pressure children would enjoy learning and would be keen to attend school. Timings were altered to make it easier for girls to attend keeping their safety in mind. Midday meal schemes were started to provide the minimum nutritional needs and also act as an incentive for the poorest of the poor to send their children to school. For the program initiators, the SSA ethos and education management were viewed as being convergent and centred on the child to support a wholesome and innovative learning environment.

The SSA has helped India make a step change in the elementary education sector with opening of a large number of schools, significant increase in the number of teachers and other incentives, such as free school books and midday meals. These programs are implemented through collaborative efforts by state and central governments based on district level decentralised management structures involving local people.

It needs to be pointed out that the SSA is structurally defined to allow a natural convergence of the schemes implemented by different ministries for the benefit of the community. These include health (Ministry of Health), nutrition through the Mid-day Meal Scheme (Ministry of Human Resources) and numerous others as illustrated in Figure 2.2. The Mid-day Meal Scheme was launched in 2002 to provide nutritional support for children in primary schools. Being the largest of its kind in the world, the program aims to provide free hot nutritional meals for students under the SSA umbrella (Years I to VIII). The dual objective was to combat malnutrition and possibly act as an incentive for children to attend. There is also a multiplicity of initiatives tied to the SSA program, as depicted in Figure 2.2.



Figure 2.2. SSA constructs are aimed at allowing convergence of the multiple initiatives by various ministries for the benefit of the people. Adapted from *Sarva Shiksha Abhiyan, Manual for District Level Functionaries*, Ministry of Human Resource Development, 2017, p. 2. Copyright 2017 by Government of India.

The SSA program is well-defined and provides granular guidelines on each of its components, including the tasks to be done and the sources of funding. This includes the mapping processes to be undertaken by the state Public Works Departments (PWDs) for new schools and upgrades to learning enhancement programs (LEPs) for teacher training through District Institutes of Education and Training (DIET). It details ten days for annual teacher training and financial incentives for teachers to gain additional qualifications. As illustrated in Table 2.3, at a District level, under the overall responsibility of the District Magistrate (DM), the Basic Shiksha Adhikari (BSA) has Block Educational Officers (BEOs) to monitor performance and provide input for future planning.

In addition, each District is to set up a central data repository to monitor the progress of the program. These District Information Systems for Education (DISE) are supposed to be populated with relevant data on student statistics, school infrastructure, teachers and other sundry information which can be used to gauge progress.

Table 2.3

SSA organisational structures are aimed at being inclusive of the community at a village level

Organisational Hierarchy at a District Level	Comments
District Project Coordinator – DPC	Reports to the DM and to the State SSA coordinator
Block Educational Functionaries	Supervise the villages within their Block and provide input for future planning to the DPC.
Local Authority	Local Government (elected) – Panchayats within the village representing the broader community needs
Village Educational Committee (or School Management Committee)	Parents, teachers and other respected village people to provide local guidance and address concerns.

Note: Adapted from Sarva Shiksha Abhiyan, Manual for District Level Functionaries, Ministry of Human Resource Development, 2017, p. 14. Copyright 2017 by Government of India.

There is no doubt that enrolments have increased and now over 96.9% of the children between the ages of 6 and 14 are enrolled in a school (ASER, 2016). Notwithstanding, this metric provides only a partial picture in terms of learning outcomes. Through central programs like the SSA, the Government is looking to provide equal opportunities for all but there are substantial differences between the different states within the country. Attendance and learning vary across the nation and states like Uttar Pradesh are struggling with attendance levels of 50-60% compared to other smaller states where the numbers are around 80% (ASER, 2016).

2.4 Primary Education within a Global Policy Perspective

The UN conference on the Human Environment in 1972 was the first conference with a broad agenda covering a wide range of ecological imperatives and led to the formation of the United Nations Environment Program (UNEP) in 1974. Together with the World Wildlife Fund (WWF) and the International Union for the Conservation of Nature and Natural Resources (ICUN), a World Conservation Strategy (WCS) document was released in 1980. Its strategic principles linked

conservation and development in a cross-sectoral and interdisciplinary manner for the first time (Aplin, 2002, p. 138) that is the foundation of sustainability today. In 1983 the UN established the World Commission on the Environment and Development (WCED) as an independent body and its 1987 publication “The Brundtland Report” defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 43). This brought in the notion of preservation for future generations and sparked the debate on intergenerational equity. The Brundtland Report also recognized the role of developing countries and their imperatives of bringing their citizens out of poverty and educating the masses while expressing the view that industrialised nations should continue their own economic growth of 3 to 4 % in a sustainable way with technology-improving efficiencies in the use of materials and energy (Goldie, Douglas & Furnass, 2005, p. 3).

Focused on education, the 1990 UNESCO/UNDP World Conference in Jomtein, Thailand, expressed international support for universal primary education (WCEFA Final Report, 1990). The target was education for all, and it was to be achieved in a decade. A framework for action to meet basic learning needs was also produced with enablers, such as financial aid through the World Bank and technical assistance packages through donor country programs. Support for national action was to be country appropriate and innovative channels for delivery were stressed. There was a broad consensus and a recognition that “new pedagogical, epistemological, psychological and technical insights will make it possible to break the old moulds” to achieve the targeted objectives (WCEFA Final Report, 1990, p. 37). India was a participant and a signatory to the declarations from this conference (WCEFA Final Report, 1990).

2.4.1 *Millennium Development Program: 2000-2015*

The UN summit in 2000 saw 147 countries adopting the Millennium Development Goals (MDGs) to address abject poverty around the world. Many facets of poverty were considered, and eight goals were created aiming at reducing such poverty by 50% in fifteen years, using 1990 as a base. The role of education was considered pivotal to this effort. Industrialisation has created wealth for the western economies over the decades, mainly through science and technology

developments, which have taken significant investments in education. This has unfortunately largely occurred in the domain of wealthy western countries. Poor countries or developing economies have, at best, been users, not having the institutions or the necessary capacity to foster such development. In addition, basic levels of literacy were low in the developing countries and the issue needed to be tackled from a primary school level.

With general education as a focus, the MDG Goal 2 was aimed towards achieving universal primary education in all countries by 2015. Specific targets and indicators were also set to measure progress (UN Millennium Declaration, 2000).

Target 2.A under Goal 2 was to “ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary education”. Three indicators were to serve as metrics (UN Millennium Declaration, 2000). They were numbered sequentially for all MDG goals and for Goal 2 they were:

- Indicator 6: Net enrolment ratio (NER) in primary education;
- Indicator 7: Proportion of pupils starting grade I who reach grade or primary school i.e. grade V;
- Indicator 8: Literacy rates of youth (15 to 24-year olds).

The aim was thus not only to ensure enrolment but also to track the success of the policy over time as the children progressed into young adults. The UN website presents the results for the world as summarised below (UN MD Goal 2, 2015):

- Enrolment in primary education in developing regions reached 91% in 2015, up from 83% in 2000;
- In 2015, 57 million children of primary school age were out of school;
- Among youth aged 15 to 24, the literacy rate has improved globally from 83% to 91% between 1990 and 2015, and the gap between women and men has narrowed;
- In countries affected by conflict, the proportion of out-of-school children increased from 30% in 1999 to 36% in 2012.

As indicated in Figure 2.3, progress has been substantial, but challenges remain as a very large number of children are still not being reached. This is felt particularly strongly in India and its poorer rural communities.

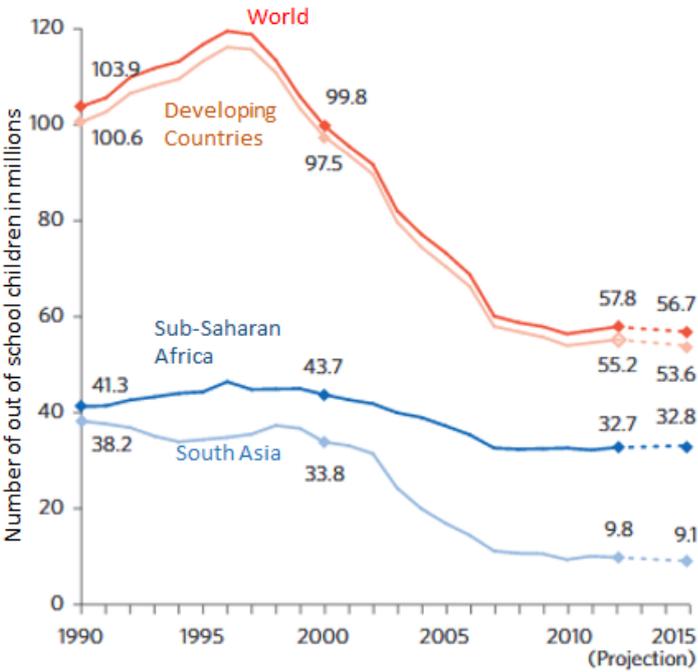


Figure 2.3. Number of children out of school
Adapted from *The Millennium Development Goal Report*, by the United Nations, 2015, p. 25. Copyright 2015 by United Nations.

The success of the MDGs has been considered to be one of the most powerful global undertakings in history against poverty in all its forms. While all the goals may not have been met, despite hurdles of civil unrest, the global financial crisis and shortfall in funding commitments from the donor countries (Sachs, 2013) there was very encouraging progress. The 2015 United Nations Millennium Development Goals Report recognised several areas where progress had been unsatisfactory and there were significant variations across regions and countries. Millions were still disadvantaged for a multiplicity of reasons (geography, gender, and age) and extra effort would be needed to address these inequalities. Specifically, for primary education: “children in the poorest households are four times as likely to be out of school as those in the richest households” (UN MDP Report, 2015, p. 26). This was clearly manifested in India.

The report also recognised that large information gaps existed in several areas due to inaccuracies and the lack of granularity in the data. Decisions are thus likely to be based on poor quality data thereby impacting their overall efficacy.

2.4.2 *Evolution to the Sustainable Development Program*

Motivated by the progress of the MDGs, the UN member countries attending the Rio+20 Environmental Summit committed to continue the effort beyond 2015. The new program would adopt global goals based on a sustainable development framework. There was a recognition that environmental degradation enhanced poverty and social inequalities and that an integration of economic, environmental and social objectives was necessary. These goals were to be universal, but it was acknowledged that the disadvantaged regions would be tackled first (Sachs, 2012).

In September 2015, 17 goals were adopted by the UN countries as part of a Sustainable Development Agenda. These Sustainable Development Goals (SDGs) have specific targets to be achieved over the following 15 years. The goals linked to education are listed below:

- Goal 4: Ensure inclusive and equitable quality education for all and promote lifelong learning opportunities (<https://sdgs.un.org/goals/goal4>, 2019).

In the case of India, two other goals are relevant as they cover gender issues and partially, the social construct based on castes which is peculiar to this country (<https://sdgs.un.org/goals>, 2019). These are:

- Goal 5: Ensure gender equality and empower all women and girls.
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels.

The agreement on SDGs is centred on global partnerships based on joint responsibility and obligations and thus steers away from the earlier construct of donors and recipients. Progress remains to be seen. It is hoped that millions of young people can perceive the importance of a sustainable universe and harness technology

in all forms to solve problems related to food production, energy, water and social inequality (Sachs, 2013).

From a policy perspective, India is a signatory to the MDG and SDG declarations. Activities are driven by the country's internal policies and initiatives, and these are consistent with the MDG/SDG objectives in trying to deliver universal education for all. That said, the current state of education is reflective of the delivery issues faced and despite the efforts, the desired results for children are not emerging. This is felt particularly strongly in the area of primary education.

2.5 Current Status of Primary Education

Reports discussing the current status of primary education in India come from either government-run surveys or through those carried out by interested private parties. Most contemporary research is based on these results. Since the launch of SSA and implementation of DISE, government websites and other platforms visible to the public are populated with DISE reports (sshagun.in, schoolreportcards.in). Details on these surveys are provided in the literature review chapter of this thesis (Chapter 3, Section 3.3). These results and reports are questioned by researchers and other organisations monitoring the progress of education. Serious lacunas have been identified and the government is being asked to account for these differences.

2.5.1 Government Reports on Education

Formal reports were issued by the Government of India to determine progress against the MDGs. In these, the data used is based on official statistics produced by the concerned ministries/departments of the central government. The sources of these are mainly from the periodic reports, such as the Census of India, the National Sample Survey, the National Family Health Survey, District level Household and Facility Surveys. In addition, these various surveys have varying periodicity thereby adding to the complexity of analysis.

For education-related data, the most relevant source appears to be the National Sample Survey which dovetails with the National Census. The national census in India is conducted every ten years with the last one being in 2011. The National Sample Survey of 2014 was conducted across all 640 districts of the

country and collected data from one hundred thousand households in over five thousand rural and urban wards across all states. Of these five thousand wards, thirty-two hundred were rural. This is the latest report to estimate the children in school and retention rates as they transitioned from primary to grade 6 and beyond (GOI, NSS-SRI, 2014). The survey acknowledged that it had built its list of sampling units from the 2011 census and sample sizes were dependent on the populations as determined in the census. Thus, the accuracy would be linked to the census ability to estimate the numbers of 6 to 13-year-olds.

The survey objectives were to provide state-wise the number and percentage of children in and out of school broken down by grades, gender, religion, social class and special needs in both rural and urban settings. A child was considered to be in school if he/she was enrolled in any recognised school and was not absent for more than 45 school days at a stretch. An “out of school” child was one who had either never enrolled or was absent for more than 45 school days continuously. A drop-out was an enrolled child who was absent for more than 45 school days at a stretch. The survey estimated that out of a total of 204.1 million children in the age group 6 to 13 years, around 6.064 million were out of school (2.97%). The breakdown can be seen in Table 2.4 (GOI, NSS- SRI, 2014).

The data indicates that a greater number of rural children are out of school compared to those living in urban areas. Similarly, female children and those belonging to SC, ST and OBC categories have a higher percentage of being out of school than the national average. While not presented in the extracted table above, an estimated third of children with special needs of any sort were out of school (GOI, NSS-SRI, 2014). The systems were clearly not supporting special needs adequately. Further details and breakdowns including gender, caste, disability were also given. The survey concluded that the numbers of children out of school were continuously declining from 6.94% in 2005 and 4.28% in 2009 to 2.97% in 2014 (GOI, NSS-SRI, 2014).

For the state of Uttar Pradesh, the comparable figures were 3.64% out of school in rural areas and 4.67% in urban towns. In Table 2.5 below, the metrics for students in UP are compared with the national average. It can be seen that while UP has approximately 20% of the nation’s children between the ages of 6 and 13 years, a

higher percentage are out of school, never having enrolled or having dropped out. The numbers for the State of Uttar Pradesh are likely to be the most representative of the case study village of Lakhnu as there is no granularity below the state level in this data.

The Government's own reports acknowledge that there are over six million children out of school and that the SSA did not deliver to expectations by the end of 2010. This same data forms the basis for the MDG/SDG reports issued by the Government and thus is subject to the same constraints.

Table 2.4

Number of children out of school

Sr. No.	Details	Estimated No. of Children (6-13 years)			Estimated No. of out of School Children (6-13 years)			% of Out of School Children (6-13 years)		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1	All Children 6 – 13 years	15,01,10,948	5,39,76,326	20,40,87,274	46,95,518	13,68,711	60,64,229	3.13	2.54	2.97
2	Male	8,32,66,078	3,11,50,340	11,44,16,418	24,50,953	7,15,456	31,66,409	2.94	2.30	2.77
3	Female	6,68,44,870	2,28,25,986	8,96,70,856	22,44,564	6,53,256	28,97,820	3.36	2.86	3.23
4	6 – 10 years	9,01,23,249	3,26,47,814	12,27,71,166	26,23,399	7,74,939	33,98,338	2.91	2.37	2.77
5	11 – 13 years	5,99,87,699	2,13,28,410	8,13,16,108	20,72,119	5,93,772	26,65,891	3.45	2.78	3.28
6	SC	4,63,96,983	1,43,75,716	6,07,72,699	15,91,869	3,74,158	19,66,027	3.43	2.60	3.24
7	ST	1,92,90,908	47,00,374	2,39,91,282	9,25,193	82,369	10,07,562	4.80	1.75	4.20
8	OBC	5,11,38,467	2,07,60,803	7,18,99,270	15,50,918	6,55,084	22,06,001	3.03	3.16	3.07
9	Other	3,32,84,589	1,41,39,433	4,74,24,023	6,27,538	2,57,101	8,84,639	1.89	1.82	1.87

Note: Adapted from *National Sample Survey on Estimation of Out of School Children*, Contracted research conducted by the Social and Rural Research Institute, 2014, p. 9. Copyright 2014 by Social and Rural Research Institute.

Table 2.5

Comparisons between student enrolments, attendance and dropout rates between the State of UP and the Union of India

	State of UP	India	Comments
Total Number of Children Ages 6-13 years	41.32 M	204.08M	20% of all children are from UP
Children out of School	1.61M	6.06M	26% of all out of school are from UP
Children never Enrolled	0.865M	2.698M	32% of those never enrolled are from UP
Never enrolled as a % of those out of school	53.7%	44.5%	
Children dropping out	0.466M	2.242M	21% of all children who drop out are from UP
Drop-outs as a % of out of school children	28.96%	36.97%	
Children enrolled but never attended	0.279M	1.124M	25% of those who don't attend are from UP
Not attending children as a % of those out of school	17.37%	18.53%	
Disabled children out of school	0.096M	0.600M	16% of disabled children not attending school are from UP
Disabled children as a % of out of school	30.49%	28.47%	

All numbers expressed in millions.

Note: Adapted from *National Sample Survey on Estimation of Out of School Children*, Contracted research conducted by the Social and Rural Research Institute, 2014, p. 12. Copyright 2014 by Social and Rural Research Institute.

2.5.2 Official MDG India Report 2015: Reported Data and Questions Raised

The India Country Report 2015 addressing the Millennium Development Goals was issued by the Government of India, Ministry of Statistics and Program Implementation, Central Statistics Office (mospi.gov.in, 2019). For it, the principal responsibility of collating the numbers rested with India's Central Statistical Organisation (CSO).

In it, the Minister claimed that the country was “marching in the right direction and the measures being taken are resulting in real and positive changes in the lives of the people in India” (GOI, MDG India, 2015, p. 4). The report covered the eight goals, twelve targets and thirty-five indicators and recognised that partly due to the global financial crisis (2008) progress in some economic and social areas has been less than desirable. While significant progress has been made, not all goals have been achieved; however, as the Minister concluded, the country is progressing in the right direction.

The report acknowledged that there was no independent statistical system for monitoring the MDGs and the information presented was based on national level data collected through official agencies. As such, there is no data available at below state level. To achieve that level of granularity, the data sets would be very large and this was not undertaken due to cost and organisational constraints (GOI, MDG India, 2015). The report also admitted that some of the administrative records are incomplete and as data periodicity of the surveys varies, many extrapolations have to be made.

The Government also considered data from an independent survey they had commissioned through the Social and Rural Research Institute on the number of school children out of school in the age groups 6 to 13 years (GOI, NSS-SRI, 2014). This survey was conducted across the country and estimated that in 2014 around 3% of all children between 6 and 13 years were out of school (Table 2.4), i.e. there is an improvement as a result of the SSA program.

The MDG Goal 2 of achieving universal education was reported as being moderately on track (GOI, MDG India 2015, p. 23). The 259-page report detailed the numbers and painted a progressive picture, the salient aspects of which are summarised below.

There has been a substantial increase in enrolment from 2000–2001 to 2013–14 wherein an additional 18.6 million children have been enrolled (4.6 million boys and 14 million girls). The Net Enrolment Ratio (NER) in 2013–14 was higher for girls (89.26%) versus boys (87.2%). Within this, the NER for the State of Uttar

Pradesh was reported as 87.03% in aggregate and slightly lower than the national number of 88.08%.

Student survival rate information is presented from an earlier period as no other data is available. The report acknowledged that strengthening the District Information System for Education is a high priority item for the Government. These trends are positive and point to increase in retention levels.

In India, anyone who can read and write with understanding short simple statements on everyday life is considered as literate. Youth literacy is on an increasing trend and expected to reach 93.38% by 2015. At a national level, the literacy rate for males and females is expected to be around 94.81% and 92.47% respectively. The gender gap is declining and female literacy rates are rapidly increasing to be in line with male literacy rates. Rural rates while lower than those in urban areas are also increasing consistently. The youth literacy rate for the State of Uttar Pradesh was reported as 81.57% in aggregate slightly lower than the national figure of 86.10%. Table 2.6 summarises the specific metrics tied to Goal 2.

The metrics focus on enrolment as opposed to attendance and learning. While enrolment is important, so is the understanding of how many children are actually coming to school and of those how many are achieving basic literacy and numeracy skills.

The Government progress report was rebutted by citizen groups and non-governmental observers. They pointed to areas where the data was lacking and challenged some of the claims maintaining that the results were not as progressive as published by the Government.

Table 2.6

India's Official report on MDG Goal 2 performance metrics in 2015

Goal 2: Achieve Universal Primary Education Target 5: Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary education	Reported Progress	Level of Accomplishment
Indicator 6: Net enrolment ratio (NER) in primary education	NER (6-10 years) = 88.08% (2013-14) up from 84.5% (2005-2006)	Moderate
Indicator 7: Proportion of pupils starting grade I who reach grade or primary school i.e. grade V	Ratio of enrolment of Grade V to Grade I = 86.05% (2011-12) up from 78.08% (2009-2010)	Moderate
Indicator 8: Literacy rates of youth (15 to 24-year-olds)	Youth literacy at 86.14% from 61.9% in the period 1991-2011. Trend line shows 93.38% by 2015.	Moderate

Note: Adapted from *Millennium Development Goals, India Country Report*, by Ministry of Statistics and Program Implementation, 2015, p. 10. Copyright 2015 by Government of India.

2.5.3 *Rebuttal of MDG India Report by Public Interest Groups*

Government-based reports on the implementation of the MDG program have been challenged by NGOs. Wada Na Todo Abhiyan, literally meaning “don't break your promise”, is a national campaign of 3500 civil society organisations (CSOs) which hold the Government answerable for various election and other promises to lift sections of society out of poverty and eliminate social discrimination (WNTA, 2010).

The WNTA 2010 report states that the official India Country Reports use data that is not referenced and from multiple sources which makes external validation difficult.

Several considerations are raised in this response and are relevant to understanding the overall veracity of the achievement (WNTA, 2010).

For example, the definition of “out of school” children leads to misleading results. Children could be retained on school rolls despite not attending for months. There is no link to learning outcomes as the figures do not relate to child participation and progress in learning. Some schools are alleged to inflate enrolment numbers to ensure continued participation in the midday meal program. There are considerable variations in marginalised groups and more targeted strategies are needed as the system is failing to meet the requirements of special needs children (WNTA, 2010).

Migrant children are not accounted for. The UNICEF (2014) report shows 20% of India’s population as migrant of which 77% are women and children (UNICEF, 2014). No reliable data from areas of natural or human-made disasters as well as local insurgencies are incorporated as these have direct impact on school participation. Education in such difficult circumstances needs more deliberate action.

Child labour and children working in the fields and/or picking crops and fruits are not considered. In 2005, approximately 9.07 million children between the ages of five to fourteen years were deemed to be economically active (GOI, NSS, 2007). The impact of child labour needs to be considered.

An independent assessment by WNTA of the DISE data showed that school survival rates in rural areas from Year I to Year V are 68 % for girls and 69 % for boys. The urban rates are 87 and 88 % respectively (GOI, MDG India, 2009). This is a wide gap and the data shows significant regional differences as well. This survival rate has seen a 5 % increase from 2004–5 to 2008–9. This is in contradiction to the government figures.

There is a very significant shortage of trained teachers. The term “teacher” has a wide definition with varying education levels, service conditions and salaries. Of late the government has tried to hire temporary teachers on contract basis and in some states the number of “para-teachers” is between 20–40 %. On the average,

there are only three classrooms per primary school. There are only three teachers per school and some have only one teacher and one classroom (14 %). Student-teacher ratios are significantly higher than the stipulated 30:1 (WNTA, 2010).

The official India 2015 report has updated statistics of progress compared to the 2009 report, but the WNTA points made in 2010 remain relevant as they impact the achievement of the overall Goal 2 (GOI, MDG India, 2015). The India 2015 report does not address these. In summary, the WNTA civil society organisations make a case that the government data is not complete and the analysis of progress is misleading. They conclude that reality is starker and that a lot more needs to be done were the MDG Goal 2 to be achieved (WNTA, 2010).

In a 2015 supplement, WNTA set out a number of priorities for the government to consider. Of particular relevance to education was the requirement for community insights and expectations to be central to any policy settings including the direct involvement of communities as this would allow for better engagement at a ground level and more ownership in the policy adoption (WNTA, 2015). This is consistent with the observations of Mangla (2013) that policy makers take a holistic view and are not fully cognizant of the difficulties and silos that exist within the community (Mangla, 2013).

Most rebuttals considered government and other survey data to identify gaps. Pratham, a leading NGO in the education field, actually measures what the children are learning and offer the best insights through a wide coverage in rural India. Their reports are appropriately titled ASER which in Hindi means “results”.

2.5.4 *Annual Status of Education Reports (ASER)*

Pratham is one of the largest NGOs in the country. The organisation had its origins in 1975 to provide education to the children in the slums of Bombay, now Mumbai, the commercial capital of India. The organisation is now pan-India with initiatives in primary education, vocational training and services for vulnerable children (<http://www.pratham.org>, 2019). Pratham is now working directly with the central and state governments and also aims to bridge the gaps in the educational system through targeted interventions which are replicable.

The journey has been eventful. With the Government reporting very high enrolment levels in schools as a metric, the quality of the education was uncertain. Pratham started conducting annual state of education surveys in 2005 across a representative sample of rural districts of India. The resulting Annual Status of Education Reports (ASER) are the most comprehensive in assessing the state of education across the country. “ASER measures quality of education at the very basic level of being able to read simple text and being able to solve simple math tasks” (Chavan, 2016, p. 9). Chavan (2016) emphasises that there is a gap between the government’s perception of what is required and the parents’ perspectives.

Conducted across the country, ASER is a household-based survey. It considers government schools, private schools and religious schools in each sampled village. In each rural district, thirty villages are sampled and in each village, twenty randomly selected households are surveyed. This process generates a total of 600-700 households per district, or about 300,000 to 350,000 households for the country. Approximately 600,000 children in the age group three to sixteen years living in these households are surveyed. This household design enables all children to be included, irrespective of caste or socio-economic status. The survey considers those enrolled, those who have never been to school or have dropped out. Information on household size, earnings and education levels are collected as well. Importantly, ASER considers learning outcomes by using standardised tests through its survey and is probably the most significant survey data source in that domain (ASER, 2016).

Children older than five years are tested for numeracy and literacy through a standardised process that involves giving the same test to all participants. The test corresponds to an expected level of knowledge in reading for Year II children and in mathematics for Year IV children. Local languages are used across the regions. The survey techniques for this mammoth effort have been studied by various researchers and considered robust (Goodnight, 2017).

The first ASER survey results surprised many. Despite reporting that only around 51% of the Year V students in government schools could read Year II text, “it did not cause an uproar or galvanise policy makers into action” (Chavan, ASER,

2016, p. 9). The 2008 survey noted that learning outcomes were declining with “only 41 percent across Grades I to VIII being able to read simple stories in 2008 as opposed to 43.6 percent in 2005” (Kaushik, ASER, 2008, p. 18). These data also indicated that the number of children across the country enrolled in private schools increased from 16.4% in 2005 to 22.5% in 2008 (Kaushik, ASER, 2008, p. 18). This significant change has not been explained as, while the government schools were free, the private schools assessed a range of charges from fees to ancillary charges for examinations and other educational material. The trend has not been reversed as noted in the ASER 2016 report. These results should have prompted urgent action from the Government, but “the Ministry of Human Resource Development, Government of India did not take ASER report seriously and instead claimed at that time that the learning levels had gone up” (Chavan, ASER, 2016, p. 9).

One participant describes the situation:

The meeting had been going on for almost an hour. One round of tea had come and gone and another round was starting. We were sitting around a long table—senior level officers from the governments’ education department and us. The focus was on student achievement data; some figures were from ASER and other findings were from recent research studies. As each Power-Point slide came on the screen, there were many viewpoints to be aired and interpretations to be shared. At one point the senior most officer said—yes we all understand that half the children in standard V cannot do what is expected of them in standard II. But tell me how many children in our schools are at grade level (Banerji, ASER, 2016, p. 12).

Key learnings from the initial years (2005–2008) were in two broad categories: i) that public and community engagement in the governmental programs was limited resulting in no end-use push for improvement in services and ii) it was very unclear as to how the empirical data was used (if at all) by the administration to formulate forward plans (<http://www.asercentre.org/p/159.html>). This resulted in the establishment of the ASER Centre in 2008 with an objective of collecting reliable empirical data to assess whether the taxpayer funded programs were leading to the stated outcomes.

The following high-level conclusions can be drawn from the recent reports (ASER 2016):

- Learning outcomes are declining as indicated by the percentage of Year V children who can read year II prescribed text, as indicated in Table 2.7.
- Attendance is poor - around 71.4% of the enrolled number in primary and 72.3% in junior schools.
- The proportion of small schools (with less than 60 pupils) and associated multi-grade classrooms is increasing.
- Numbers of children out of school are increasing in some states. For UP around 5.3% and alarmingly 9.9% of all girls in the age group remain out of school.
- There is some improvement in the basic facilities, such as functioning toilets for girls up to 61.9% from 55% in 2014. Computers were available in only 20% of the schools, mostly in those located in the progressive states of Kerala and Gujarat.

Table 2.7:

Reading trends for Class V and Class VIII children by school type

Year	% Children in Class V who can read Class II level text			% Children in Class VIII who can read Class II level text		
	Government Schools	Private Schools	Govt. and Pvt. Schools	Government Schools	Private Schools	Govt. and Pvt. Schools
2010	50.7	64.2	53.7	82.0	87.7	83.5
2012	41.7	61.2	46.9	73.4	84.2	76.5
2014	42.2	62.6	48.0	71.5	82.4	74.7
2016	41.6	62.9	47.8	70.0	80.9	73.1

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 52. Copyright 2016 by ASER Centre.

The ASER (2016) also considered the number of children who are learning at their grade level. These results were even more concerning on two grounds, first the low absolute percentage and secondly the large variation at a sub-national level as shown in Figure 2.4 (ASER, 2016).

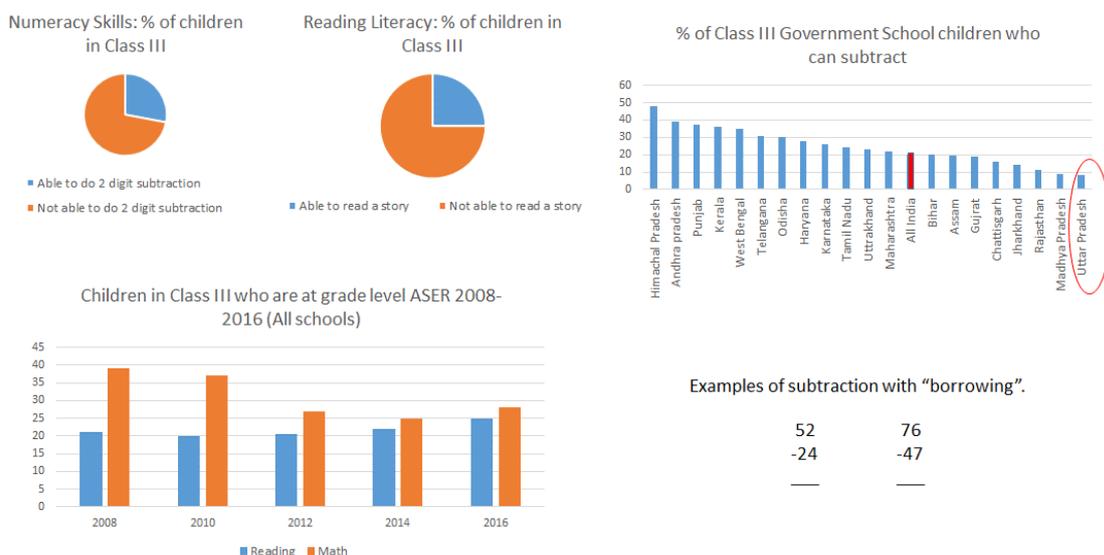


Figure 2.4. Number of children considered at “grade level” and the variations seen across the states within India. Uttar Pradesh is at the bottom. Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 12. Copyright 2016 by ASER Centre.

Such observations are consistent with the ones noted by the Wada Na Todo response to the India MDG 2009 report (WNTA, 2009). While under the SSA, more than 90% of the Indian population now has a primary school located within one kilometre of their home, the quality of education being imparted is low, particularly in government schools (Bajpai & Goyal, 2004). Infrastructural problems, such as lack of books, only one or two multi-grade classrooms, lack of benches, running water and toilets, do not support a conducive learning environment.

“Even in educationally advanced states, an unacceptably low proportion of children who complete all grades of primary school have functional literacy. There is a lot of ‘waste’ in the Indian school system as evidenced by the large percentage of children who drop-out before completing primary schooling. Such inefficiency is compounded by teacher apathy, teacher absenteeism, very high pupil-teacher ratios and inadequate teacher training” (Bajpai & Sachs, 2011, p. 7). In addition, extraneous non-teaching tasks are imposed on the teachers by the bureaucracy. These can range from “election related work to government survey works and from health-related work to supervising civil construction work” (Bajpai & Sachs, 2011, p. 8).

Public primary school teachers in rural areas are involved in so many non-teaching activities that this has major implications for the amount of time they spend away from school. This happens largely because teachers are the most qualified individuals available in villages to do such government activities.

The results are always the same—educational outcomes for the most vulnerable children are compromised. Statistics only tell part of the picture and it would appear that a significant number of young children (with a high percentage of girls in some states) were being left behind. These statistics can also be misleading if the input data is inconsistent as can be seen in the next section.

2.6 Questionable Veracity of Measurements

Actual achievements of the SSA program have fallen short of targets set especially in rural India. The number of Government schools and private schools has increased; however, the success of these programs is varied and the gross enrolment rate at secondary level (GER) is around 40%, considerably lower than other developing economies in East Asia (World Bank, 2009). The problems of attrition and limited transition beyond primary school are intensified in rural areas. For a variety of reasons, less than four in every ten students entering the system transition into high school. Even from those who remain, a sizeable proportion does not necessarily attain the required level of knowledge (Juneja, 2010). Access to education and achievement are different and metrics like gross enrolment rates currently used by officials to gauge success do not convey the full picture.

The Government through its various programs is investing around 3–4% of GDP in education (Venkatanarayanan, 2015). Evidence shows that the results are not congruent with the investment, especially in rural India. Questions have been raised about the accuracy of the data and how the information is used to modulate future actions. Many aspects need to be considered if improvements are to be made, but first and foremost there must be a recognition of the problems and that the current mechanisms need to be tightened.

Under the SSA, systems have been set up to capture school level data and agglomerate them at District levels (DISE program). However, the DISE data sets

are not accurate and it is not clear as to the auditing process. As an example, the Lakhnu village data was downloaded from the DISE reports (<http://schoolreportcards.in/SRC-New/LocateSchool/LocateSchool.aspx>, 2018) and is depicted in Figure 2.5. There are several inconsistencies—for instance, four schools are listed whereas there are only three in reality, and Deeksha Private School has been allocated two different codes.

The geospatial report incorrectly locates the Lakhnu Junior School as shown in Figure 2.6. The correct location of the school is also marked.

School Report Cards

Total Students registered till 14th December, 2018 on Student Portal : 21,25,22,246.

State Name : School Name School Code

Home **Locate School** Basic Search Advance Search School & Teacher Directory Missing Schools Raw Data Mobile Apps Report Module Gender Atlas School GIS

Academic Year: 2017-18 State: Uttar Pradesh District: Hathras
 Block: Hathras Cluster: Select Cluster Village: Lakhnu
 RTE Grading: Select Grade SortBy: Sort By

Search School(s) By School Name

Your Search is a combination of: AcademicYear = 2017-18, StateName = Uttar Pradesh, DistrictName = Hathras, BlockName = Hathras, VillageName = Lakhnu, SortBy = SCHNAME.

Search Result Contains : 4 School(s) School Report Card Page Size: 20

School Code	School Name	Cluster Name	Rural Urban	School Management	School Category	School Type	Head Master Name
09130100403	DIKSHA PUBLIC SCHOOL PS	JALALPUR	Rural	Private Unaided	Primary Only	Co-educational	
09130100405	DIKSHA PUBLIC SCHOOL UPS	JALALPUR	Rural	Private Unaided	Upper Primary only	Co-educational	
09130100401	JHS LAKHANU	JALALPUR	Rural	Dept. of Education	Upper Primary only	Co-educational	
09130100402	PS LAKHANU	JALALPUR	Rural	Dept. of Education	Primary Only	Co-educational	ARCHANA RATNAKER

Figure 2.5. The school locator report based on DISE data. There are many inconsistencies, for example 4 schools are listed whereas there are only three in the village. Adapted from *National University of Education website*, 2018. <http://schoolreportcards.in/SRC-New/LocateSchool/LocateSchool.aspx>



Figure 2.6. The geospatial report has the Lakhnu Junior School location incorrectly marked. 2019. Adapted from *Ministry of Education website* <https://schoolgis.nic.in/index.html>

The school detailed statistics report as it appears on the official website for school id 09130100401 (<http://schoolreportcards.in/SRC-New/ReportCard/ViewReport.aspx>, 2018), Lakhnu Junior School is shown in Figure 2.7. It is for the school year 2016–17, and most of the data is inconsistent with what has been experienced during IREAD visits. The number of teachers is incorrect and they are involved in non-teaching duties. There is a boundary wall (even though a small section remains to be completed), toilets exist but are kept locked as there is no provision to maintain them and keep them clean. Lakhnu village has no functional medical facility, so health checks for the children are not done. There is no library to speak of.

There are many such inconsistencies in the data and it is inconceivable how such a school can be rated 8/10. Similarly, Lakhnu Primary School is provided with a score of 8/10 as are the scores allocated to the two codes assigned to Deeksha Private School. Mangla (2013) also noted such irregularities during his research in UP

wherein junior officials acknowledged “we don’t have time to produce real data” (Mangla, 2013, p. 177).

Unfortunately, to any senior government official and those in policy making positions, the dashboard information rolled up from the Lakhnu Village will appear satisfactory. The substantial deficiencies in the data are not visible and there is no reason for any urgent action. Interestingly, not once, in all these years has the DM or any senior government official investigated the DISE data when talking to IREAD to reconcile the issues being raised. All have computers on their desks which generally are not in use.

As most of the research analysis is based on agglomerated government and other data, it is relevant to keep in mind the inconsistencies that may exist due to the way the information is collected. This represents an opportunity for a grassroots approach through IREAD working directly with a school in a particular village to appreciate the realities as they exist and improve outcomes. Other models initiated by expatriates which involve direct engagement with the rural community are briefly examined next to consider how their learnings can be useful to IREAD.

SCHOOL REPORT CARD: 2016-17*										8/10**									
School Code	09130100401			School	JHS LAKHANU														
State	Uttar Pradesh			District	HATHRAS														
Block	HATHRAS			Cluster	0913010003 - JALALPUR														
Village	LAKHANU			HM/Principal															
General Information																			
Location	Rural			Shift School	No														
Pincode	204101			Residential School	No														
School Category	Upper Primary only			Type of Residential School	NA														
Lowest Class				6 Pre-Primary Section	No														
Highest Class				8 Total Students (Pre-Primary)	0														
Type of School	Co-educational			Total Teachers (Pre-Primary)	0														
Management	Department of Education			Academic Inspections	3														
Approachable by All Weather Road	Yes			No. of Visits by CRC Coordinator	3														
Year of Establishment	1949			No. of Visits by Block Level Officer	1														
Year of Recognition	1949			School Funds (In Rs.)	Receipt	Expenditure													
Year of Upgradation from P. to U.P.	0			School Development Grant	7,000		7,000												
Special School for CWSN	No			School Maintenance Grant	9,500		9,500												
Staff Category																			
Regular Teachers	4	Graduate & above		4	Part Time Instructor (U.P. only) as per RTE		0												
Contract Teachers	0	Teachers Aged above 55		1	Teachers Involved in Non-		0												
Part Time Teachers	0	Head Master / Head Teacher		Yes	Teachers Aged above 55		0												
Teacher(s): Male	4	Trained for teaching CWSN		0	Teachers with Professional Qualification		4												
Teacher(s): Female	0	Trained in use of Computer		0	Teachers Received Inservice Training		0												
Medium of Instructions	Medium 1 Hindi			Medium 2	Medium 3														
School Building, Equipment & Facilities																			
Status of School Building	Govt.			Boundary wall	No boundary Wall		Computer Aided Learning Lab		No										
# of Classrooms for Teaching	3			Toilet Seats	Boys	Girls		Playground Facility		Yes									
Furniture for Students	All			Total	1		1		Land available for Playground		NA								
Number of Other Rooms	0			Functional	1		1		# of Computers Available		0								
Classrooms in Good Condition	3			CWSN Friendly Toilet	No		# of Computers Functional		0										
Classrooms Require Minor Repair	0			Drinking Water Facility	Hand Pumps		Medical Check-		Yes										
Classrooms Require Major Repair	0			Drinking Water Functional	Yes		Ramp for Students Disabled Needed		No										
Separate Room for HM	Yes			Library Facility	Yes		Ramp Available		Yes										
Electricity Connection	Not Functional			Total Books in School Library	246		Hand Rails for Ramp		Yes										
Enrolment & Repeaters																			
Grade	All	All	Total		SC		ST		OBC		Muslim#		Other Minorities#		CWSN	Repeaters			
			Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls		Boys	Girls		
I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
II	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
III	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
IV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
V	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
VI	61	30	18	12	12	10	0	0	6	2	6	0	0	0	0	0	0		
VII	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
VIII	21	3	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0		
Total	100	33	20	13	14	10	0	0	6	2	6	0	0	0	0	0	0		
Incentives (Previous Academic Year)												Examination Results (Last Academic Year)							
Primary Only	Caste	Text Books		Uniforms		Upper Primary	Text Books		Uniforms		Class IV/V		Class VII/VII						
		Boys	Girls	Boys	Girls		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls					
	General	0	0	0	0		2	4	2	3	Students Enrolled	0	0	7	10				
	SC	0	0	0	0		27	22	26	24	Students Appeared	0	0	7	10				
	ST	0	0	0	0		0	0	0	0	Students Passed	0	0	7	10				
	OBC	0	0	0	0		11	8	11	8	Passed with ≥ 60%	0	0	3	5				
Muslim	0	0	0	0	6	6	6	6											
Key Indicators																			
% Classroom Required Major Repair				0.00				Pupil-Teacher Ratio				8							
% Teachers with Prof. Qualification				100.00				Student-Teacher Ratio				11							
% Muslim Girls to Muslim Enrolment				0.00				% SC Enrolment				39.39							
% Repeaters to Total Enrolment				0.00				% Muslim Students				18.18							
% Change in Enrolment. over Previous Year				67.00				% SC Students				72.73							
% SC Girls to SC Enrolment				41.67				% ST Students				0.00							
% ST Girls to ST Enrolment				0.00				% OBC Enrolment				24.24							
** Grade Based on availability of 10 selected RTE Indicators (Ramp, Playground, Boundary Wall, Drinking Water, Boys Toilet, Girls Toilet, Library, PTR≥30 at Primary Schools, PTR ≥35 at Upper Primary Level, SCR≥30 at Primary Schools, SCR ≥35 at Upper Primary Level and Teacher-Classroom Ratio≥1) read more...																			
© 2016 . NUERA, New Delhi, India												Downloaded from: http://www.schoolreportcards.in				*As on 30th September 2016			

Figure 2.7. Lakhnu Junior School official report card. Most of the data is incorrect. Adapted from National University of Education website, 2018. <http://schoolreportcards.in/SRC-New/ReportCard/ViewReport.aspx>

2.7 Consideration of a Different Approach

Most of the existing studies about rural education in India are statistical and only a few reports examine the human side: the parents and the communities they live in. The ASER report (2016) does mention the disappointment expressed by parents on the lack of knowledge exhibited by their wards (ASER, 2016). Clearly the parents care, but how is this expressed either directly or through the community? Understanding these issues needs a different approach and this is what this case study research is aiming to illuminate through the IREAD activities in Lakhnu Junior School and the village.

The current context and the events on the ground form an important foundation of a bottom-up research study. With an appreciation of the historical and contemporary education policy framework and prevailing constraints, the existing scholarship in the area of primary education in rural India is examined in detail in the following chapter.

Chapter 3: Literature Review – The Current Knowledge Base

3.1 Introduction

Scholarship in the domain of primary education in rural India is extensive. Understanding the current level of knowledge in any field requires establishing a present state of the research topic through a review of a range of publications (including books, scholarly articles, and reports) on the subject. Research tells a story and the existing literature helps us identify where we are in the story currently, before being able to add new perspectives (Greenfield, 2002). New research continues this story and attempts to bridge the gaps in information and knowledge.

The approach in this chapter is to scrutinize the contemporary knowledge base as it relates to the research question and the sources of data governing the various inferences and interpretations. As a precursor to developing a detailed understanding of evidence in the literature, the methodology of sifting through the morass of reports and papers using a narrative review is rationalised first. Subsequently, the foundation of this case study and its niche within the current body of knowledge is examined and established. Existing research data sources are then reviewed and possible limitations considered. This allows a distillation of some key indicators to highlight the challenges of educating India's many children. Various research concepts developed in the literature are carefully considered leading to a set of key determinants impacting education, from which the ones relevant to Lakhnu can be shortlisted. The structure as considered is illustrated in Figure 3.1.

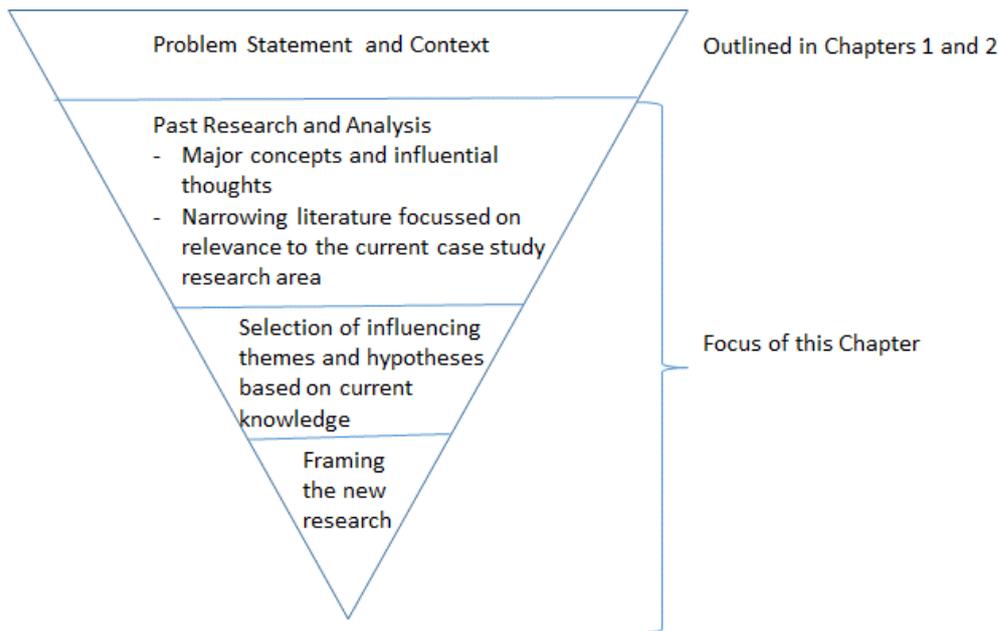


Figure 3.1. Narrowing the field of research. Adapted from *Study and Learning Centre, RMIT*. 2013
<https://emedia.rmit.edu.au/learninglab/content/literature-review-overview>

This creates the foundation for considering a suitable strategy for data collection and analysis in the subsequent chapters. The objective is to be able to frame the key questions and identify a list of causal factors within the context of the Lakhnu village given the present understating of issues impeding rural education based on prevailing knowledge.

3.2 Approach to the Literature Review

The repository of information for a literature review is varied, ranging from academic journal papers, books, articles, dissertations and other published material which expounds a particular topic. Such literature presents a diversity of opinions, each of which elucidates an agenda. Authors of the papers and journal articles analysed for this research may bias their arguments to align with the core theories they support. This is not surprising or unusual as such interpretations are not value-neutral and reflect a researcher's subjective view and a combination of judgements and intuitive biases. Personal attributes, ethnicity, past history are just some of many factors that can apply a cognitive bias to how a particular stakeholder statement is interpreted or expression construed (Yin, 2009). This form of subjectivity is intrinsic to the process, however research conducted using explicit methodology and

following prescribed ethics guidelines should not be unduly prejudiced by individual interests (Thiollent, 2011). In this case study, the researcher is connected to and accepted in the ethnic environment in which the research is undertaken, so should in theory be able to view the data in its intended context. It is acknowledged that while the researcher is privileged in terms of caste and education compared to the average village resident, the acceptance is supported by the historical family ties.

To carry out the literature review on the uptake of primary education in rural North India, the material was looked at through relevant value-systems. The diversity of key descriptors or search words expanded considerably as a result. In addition to identifiers such “education” and “rural India”, causal descriptors such as poverty, backwardness, inequality, hunger, sustenance, casteism, and governance were identified. There is an abundance of literature on education in India, mostly based on statistical survey results populating various metrics. Complementing these is a more limited number of studies based on other research methods such as interviews and focus group discussions in targeted areas.

The current research indicates that while enrolments are up, learning outcomes are falling short of expectations (ASER, 2016). From a policy perspective, the Government of India remains committed to universal primary education through the SSA initiative. Similar to poverty eradication the apparent lack of urgency from the Government of India in addressing these educational shortfalls to achieve equality and the dignity for all is indicative of the inherent complexities (Gupta, 2012).

The principal purpose of a narrative or standard literature review is to give the author and reader a comprehensive overview of the topic. In doing so, the methodology should allow for a plurality and a multiplicity of voices to be considered, to critique and summarise a body of literature about the thesis topic (Schostak, 2013). Literature is sourced from a range of databases and it is left to the researcher to consider the criteria that are most pertinent to the research agenda. This technique appears to be appropriate for examining the systemic and individual biases and decisions stakeholders take that ultimately impact a child either learning or not learning at a school. The ensuing themes can be tested as to their relevance in

addressing the research question through the case study investigation to debate and explain causality.

The principal data input sources, the large scale annual and episodic surveys that contribute to the analysis must also be understood. In the subsequent sections, scholarly writings are examined to develop an understanding of the key determinants impacting rural education in India and specifically in the state of Uttar Pradesh. In assessing the current state of knowledge, over 40 papers and reports from a variety of databases have been considered. In addition, a few relevant books have been accessed to develop a deeper understanding of the factors that affect primary education in rural parts of the country and UP. This allows selection of relevant themes and factors impacting education in rural Lakhnu, as discussed in the following sections.

3.3 Information Sources for Most Recent Research

India is a big country with a large population. The most recent estimate is around 1.35 - 1.375 billion people based on an elaboration of UN population data⁵. The last detailed Government of India survey (2011) estimated that the population was 1.2 billion in 2001 (GOI, Census, 2013). This will be updated in 2021 through the next census. While the exact numbers are not critical, they are very significant. Given the sheer numbers and the diversity and size of India, assessing the infrastructure requirements for primary education and associated metrics to gauge success has been a challenge (Ramachandran, 2005).

Data is collected through official government as well as public interest-driven, privately-funded channels. Collecting pertinent data for framing policies is a mammoth task in such a large and complex country. Therefore, different ministries are charged with the responsibility to collect and analyse population and development data. The process engages federal agencies, state government

⁵ See <http://uis.unesco.org/en/country/in#slideoutsearch> and <https://www.worldometers.info/world-population/> for more information.

departments and local government officials. The principal government-run and sponsored surveys relevant to research in education are described below.

- The National Sample Survey on Education: this survey is conducted under the auspices of the Ministry of Statistics and Program Implementation. Primarily data are collected through nation-wide household surveys on various socio-economic subjects, crop statistics and education indicators, literacy rates and expenditure incurred for the purposes of education. A survey of Education Consumption – a term used to describe educational and literacy indicators, was run from January to June 2014 and reported on in March 2016 by the National Sample Survey Office (NSSO). This is the latest information gathering with the previous such survey carried out in 2007. The principal objective was to assess the participation of people in the age bracket of 5 to 29 years old in formal education. In total, 4577 villages were surveyed nationwide including 616 villages (and 4919 households) in UP.
- The National Family Health Survey (NFHS): this is a large-scale, multi-round survey conducted by the Ministry of Health and Family Welfare (MOHFW), based on a representative sample of households throughout India. Three rounds of the survey have been conducted since the first survey of this kind in 1992-93. The survey provides state and national information for India on fertility, infant and child mortality, the practice of family planning, maternal and child health, reproductive health, nutrition, anaemia, utilization and quality of health and family planning services. In 2005-6, NFHS 3 was conducted followed by NFHS 4 in 2015-16, the results from which were released in late 2018. This survey gathered information from 601,509 households across the country including 76,233 in UP (GOI, NFHS, 2018).
- The National Census is conducted every ten years by the Ministry of Home Affairs and focuses mainly on the population size and associated demographic characteristics. The last survey was carried out in 2011 and another is scheduled for 2021.

- The Government also commissions episodic surveys for specific targets. A survey for estimating the children not attending school was conducted in 2009 by the Social & Rural Research Institute (New Delhi, India) under the auspices of the Ministry of Human Resource Development. This survey leveraged the NSS 2006 data focused on children in the age group of 6–13 years categorising them by gender and social classes both in rural and urban areas. A similar survey ran in 2005 which provided a basis for comparison for improvements under the SSA initiative.

In addition to the above general statistical data collection surveys, education-based reports are also being produced on a regular or sporadic basis. Some of the main ones which are relevant to this study are described below.

- The Public Report on Basic Education (PROBE, 1999) was a comprehensive report on the status of basic elementary school education in five of the North Indian states of Rajasthan, Uttar Pradesh, Madhya Pradesh, Bihar and Himachal Pradesh. This report was seminal as it considered aspects such as children’s participation, teacher availability, regularity in attendance, state of infrastructure and actual educational learning. The field work for this study was conducted in rural areas and considered education as seen by the children, parents and teachers. In that sense, it was a “people’s report for the people” and not sponsored by the Government (PROBE, 1999, Foreword, p. 2). Conducted over three months in 1996, the survey covered 1376 households in 234 villages selected randomly in the five states in North India in a “quest for a diagnosis and a cure” of the educational status (PROBE, 1999, Foreword, p. 2). Four of these states, including UP and excluding Himachal Pradesh, represent around 40% of India’s population and have been the worst performing in terms of primary education (PROBE, 1999). The data for these four states has been presented together and no classification at a state by state level is provided in the report. Other state specific reports like the Pratiche Education Report (2002) considered similar issues in Eastern India. As the PROBE sample area was rural North India, it is likely to be representative of conditions in Lakhnu which is located in Uttar Pradesh, one of the five states in the survey. A second survey was done in 2006, a decade

after the initial survey and covered the same sample set. This report recognised that while the school facilities and enrolments had improved, the core issue of poor levels of learning remained (De et al., 2006).

- The Annual Status of Education Reports (ASER) are collated through surveys which started in 2005 and have continued on an annual basis. The proponents of ASER, the NGO Pratham founders wanted to inform the people by providing an accurate snapshot of the current state of learning of Indian children (<http://www.pratham.org>). These visionaries wanted evidence-based data collected using scientific methods for surveying and simple and standardised testing techniques, wherein the results could be easily understood by ordinary people. They saw this as not a survey but a movement sharing the state of education with the local rural community by engaging them in the process (Chavan, ASER, 2005). This is the largest household survey of children conducted in India by citizens' groups, carried out by more than 25,000 volunteers and covering over 700,000 children in 15,000 villages each year. It is also the only annual source of information regarding learning levels of children available in India today (<http://www.aser.org>). These data sets have provided multiple researchers and social commentators an opportunity to consider a range of factors impacting rural education at a primary school level and transition beyond. The ASER designers and architects consider their efforts as complimentary to those being done by the government, promoting citizens' rights to independently evaluate learning outcomes for their children. As stated in the first 2005 Report: "We the people of India, from different states and regions, speaking different languages, sat with our children and looked within our homes, within our villages, into our schools and prepared this report for ourselves, to build a better India" (ASER, 2005, title page).

A further important group of education-related data collection are reports produced by international organisations and consortia, such as the World Bank or the United Nations (UN). They are managed through a range of their respective bodies and are typically associated with their funded projects. Government and non-

government organisations that operate or have an interest in India have also produced information relevant to this topic. In many cases, they collaborate with India-based organisations or institutions. Below are some examples.

- The Consortium for Educational Access, Transitions and Equity (CREATE) supported by the UK Department for International Development (DFID) was established to specifically consider the issues of access and equity in developing countries. With the University of Sussex being the lead organisation, the National University of Educational Planning and Development (NUEPA) is its Indian partner. The CREATE considerations are multifaceted and their website states: “sustained access to meaningful learning is critical to long term improvements in productivity, the reduction in inter-generational cycles of poverty, demographic transitions, preventative healthcare, the empowerment of women and the reduction in inequality” (<http://www.create-rps.org>)⁶. Similarly, The Earth Institute at Columbia University (USA), through its Centre of Globalisation and Sustainable Development, has also published on education quality and coverage issues in rural North India.
- The India Human Development Survey (IHDS) is a national survey jointly managed by researchers from the University of Maryland and the National Council of Applied Economic Research (NCAER) in New Delhi. The first survey was carried out in 2005 and 41,554 households in 1503 villages and 971 urban neighbourhoods across India were interviewed. A second survey was conducted in 2011–12. This effort was funded through international bodies, such as the Ford Foundation. The UNDP together with the State of UP looked at the human development index in UP in 2008 (UNDP, 2008). More recently in 2014, UNICEF published a report on children left out of school (UNICEF, 2014). Both of these were based on existing data.

⁶ CREATE also conducts research in Bangladesh, South Africa and Ghana.

These various consortium reports aim to generate research findings to support governments and international development agencies, NGOs and other stakeholders in critical issues related to the provision of basic education for all children. They provide a different perspective to the official Indian sources and often focus on particular issues that the formal government reports would not cover. It is interesting to note that while the Government of India's reports represent the country's official position, the additional details provided by ASER and other such reports are more specific in terms of what the children are actually learning.

While there may be differences in the percentages of children out of school and in literacy levels, the common thematic across all studies and research is that basic education is a critical building block for national development and more needs to be done to improve the situation in India. This applies to the country as a whole and particularly to UP which is its most populous state. These discrepancies in reported data could be due to a number of reasons, including the design of the individual surveys and accuracy of data inputs. On an ongoing basis, data is collected from each school and used to populate the District Information System for Education (DISE) database which was developed by the central Ministry of Human Resource Development (MHRD) for all the districts in the country. Mangla (2013) argues that the data collected from DISE is often tenuous and not always reliable. As an illustration, he explains that field-level officials have to produce data for the SSA (Sarva Shiksha Abhiyaan or Education for All) evaluation and the official reporting by their superiors. According to Mangla (2013, p. 178):

To meet "targets", the headmaster often makes up numbers, without going to each house to identify out of school children in his catchment area... The Block Resource Coordinator (BRC) compiles these numbers from various schools and tries to ensure that enrolments are not dropping...and so on all the way to the State capital..... It is understandable as they have to answer to Delhi to show that they are keeping a watch on things and conducting the policy transparently.

These studies have highlighted the variations in learning levels across the country and how in some states the situation is dismal. Following the ASER 2005

report, the Government of India agreed to make efforts to improve the DISE statistics and commission additional surveys to estimate the number of out-of-school children (Ramachandran, 2005). Having considered the principal data sources and some of the lacunas, the extent of the educational challenge and associated causalities as attributed by current research is examined in the next sections.

3.4 Framing the Challenge

Shortly after the country's independence, the founding leaders of modern India visualised universal primary education (UPE) for all children. This vision was enshrined in Article 45, Directive Principles of State Policy, Constitution of India, wherein it was written: "The State shall endeavour to provide, within a period of ten years from the commencement of this constitution, for free and compulsory education for all children until they complete the age of fourteen years". However, this objective to be met by the early 1960s still remains elusive. The lack of achievement has been recognised, including by the education minister himself in 1964. In an address to the Central Advisory Board for Education he stated that: "Our constitution fathers did not intend when they enacted Article 45 that we just set up hovels, put students there, give them untrained teachers, bad textbooks, no playgrounds and say we have complied with Article 45 and primary education is expanding. They meant that real education to be given to our children between the ages of 6 and 14" (Chagla, 1964).

The National Family Health Survey (NFHS) is focused on household characteristics and the data is considered for designing programs for health and family welfare issues. Education levels are also surveyed with particular focus on those who are considered vulnerable or disadvantaged. The 1992 survey data indicated that 57% of the women were illiterate and only 9% had ever gone beyond high school. In the 6 to 14-year-old age bracket, only 59% of the girls attended school. This report also noted that significant disparities exist across the nation and in general the southern and western states had higher literacy rates than northern and eastern states. Females and scheduled class and tribes (SC/ST) are disproportionately disadvantaged (GOI, NFHS, 1992).

The 1999 PROBE report also supported these points. This seminal report identified ten reasons for children not being enrolled in schools. The most prominent causes were income generation, costs of schooling and lack of interest on the part of the children and parents. Other contributory factors included distance to the school, poor teaching standards, some children's disabilities and a hostile school environment for poor children (PROBE, 1999). The research recognised that cost and distance from school are significant determinants as even free education costs INR 318 (AUD 6.3) per year per child and while 93% of the children have access to a school within one kilometre of their home, challenges are posed by the terrain and lonely pathways. In addition, there is the notion of "social distance" which may prevent a child from a lower community attending a school in an upper-class hamlet. The PROBE report picked UPE as both a constitutional directive and a popular demand of the people. It observed that without education, the electorate could not make informed choices, a critical feature of a functional democracy. The authors and researchers also recognised that in the caste-based social fabric of India, educational disparities enhance social inequities. The better-educated have more opportunities than those without education, who are condemned to manual work. Basic education is thus critical for social justice (PROBE, 1999).

Furthermore, the PROBE report challenged some existing beliefs such as "illiterate parents see no reason to send their children to school" (PROBE, 1999, p. 7) and "child labour is the main obstacle" (PROBE, 1999, p. 8). The study identified that 98% of those surveyed thought it was important to educate boys as it improves employment opportunities, increases self-confidence and the social status of the family. For girls the figure was lower with 89% favouring education as it helps them to keep accounts, write letters, creates income opportunities and improves marriage prospects (PROBE, 1999, p. 19). The report also identified an important social dimension, wherein parental views on education were dependent on the opinions within their family and the community. Hence, the prevalent norms directed their own decisions to a significant extent. This was consistent with the finding that collective action by the community was an important factor in village development. Such collective action was less evident in villages with significant class divisions.

The ASER reports have been tracking the developments in education in rural areas since 2005. As these reports are annual, they can provide a comparative assessment and are a good guide to the progress being made. In 2016, the survey covered 589 rural districts across India reaching 562,305 children between the ages of 3 and 16 years in 350,232 households in 17,473 villages (ASER, 2016). The ASER process is participatory and involves everyday citizens. In her study, Melissa Goodnight (2017) considers the ASER methodology, its design choices and how these influence the outcomes from the surveys (Goodnight, 2017). The ASER datasets are large and systematically collected. While they claim to be apolitical, this is hard to achieve as they have to function within the system. They also do not consider some class and religion-related issues which tend to be more sensitive. Notwithstanding this criticism, which may be particularly relevant to India due to its caste and class structure, the design and applications can be applied anywhere in the world to assess the effectiveness of various national educational initiatives on learning and universalisation of primary education (Goodnight, 2017).

According to the 2016 ASER report, the current state of affairs has changed compared to 2006. While enrolments have improved, learning outcomes are poor and inconsistent. In addition, the pre-school numbers indicate that many children are falling through the cracks by either not being enrolled or not being in a supportive learning environment. Considering trends at a pan-India level, enrolment is increasing and over 95% of the children are now enrolled as indicated in Figure 3.2. More female children are being enrolled and the gap between boys and girls being registered is decreasing.

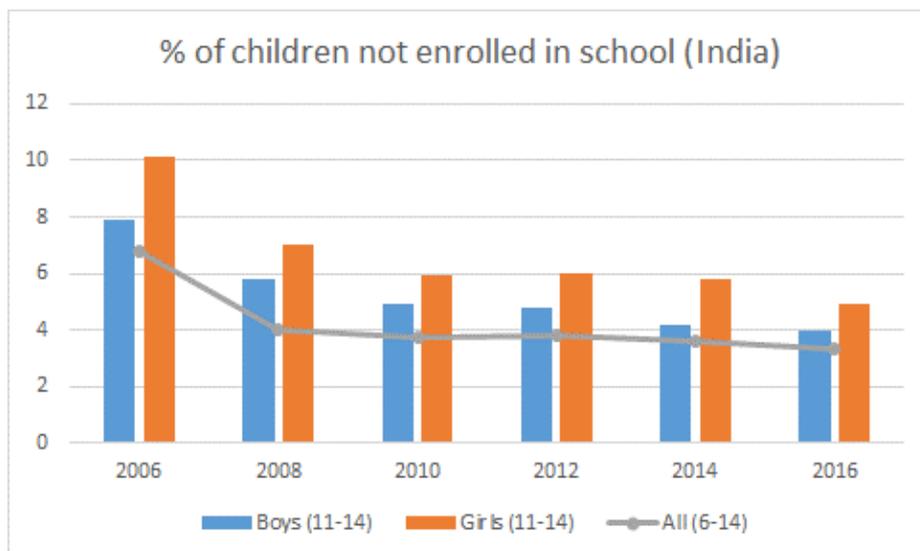


Figure 3.2. Percentage of children not enrolled in school at a national level. Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p.51. Copyright 2016 by ASER Centre.

The majority of children still attend a government school. Table 3.1 indicates that 95% of the children over the age of six are enrolled with half of the total attending a government institution such as a Balwadi or Anganwadi (crèche) or a school (ASER, 2016).

Table 3.1

Percentage of children enrolled in different types of schools (years III-VI)

Age of children	Percentage in Balwadi or Anganwadi (crèche)	Percentage in Kindergarten	Percentage in School			Percentage Out of school or pre-school	Total
			Govt.	Pvt.	Other		
3 years	53.6	8.2				38.3	100
4 years	52.3	22.5				25.3	100
5 years	22.5	17.7	30.7	17.5	.9	10.6	100
6 years	5.6	10.3	53.3	25.1	.1	4.9	100

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 51. Copyright 2016 by ASER Centre.

The ASER evaluations are based on standardised literacy tests wherein a reference level in reading assessments is from Year II text. Using Year VIII children as an illustration, the report finds that 2% cannot recognise letters, 5.4% can recognise letters but not words, 6.5% can read words but not Year I text, 13% can read Year I text but not Year II text and 73% can read Year II text (ASER, 2016, Table 3.2).

Table 3.2

Percentage of children by grade and reading level

Year	Not even a letter	Letter	Word	Year I text	Year II text	Total
I	46.1	31.7	12.4	5.0	4.8	100
II	23.5	31.5	19.8	11.8	13.4	100
III	13.6	24.1	19.9	17.3	25.1	100
IV	8.5	17.2	17.7	19.2	37.4	100
V	6.0	13.3	14.2	18.6	47.8	100
VI	4.0	9.6	11.6	18.0	56.9	100
VII	2.8	7.2	8.9	15.1	66.1	100
VIII	2.0	5.4	6.5	13.0	73.0	100

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 52. Copyright 2016 by ASER Centre.

Considering trends over the years it can be seen in Table 3.3 that the results are alarming. Reading levels are declining on a percentage basis. In 2016, only 41.6% of government school Year V students could read Year II text compared to 50.7% in 2010. The performance of children in private schools was also static, with around 63% showing little improvement over time.

Table 3.3

Reading trends for Year V and Year VIII children by school type

Calendar Year	% of children in Year V who can read Year II level text			% of children in Year VIII who can read Year II level text		
	Types of Schools			Types of Schools		
	Govt.	Pvt.	Govt. & Pvt.	Govt.	Pvt.	Govt. & Pvt.
2010	50.7	64.2	53.7	82.0	87.5	83.5
2012	41.7	61.2	46.9	73.4	84.2	76.5
2014	42.2	62.6	48.0	71.5	82.4	74.7
2016	41.6	62.9	47.8	70.0	80.9	73.1

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 52. Copyright 2016 by ASER Centre.

The situation is similar in UP (Table 3.4). The state performs poorly with a significant number of children unable to read even a letter. Even worse, the state is ranked in the lower quartile of all human development metrics, such as education and nutrition, used in the National Family Health Survey (GOI, NFHS, 2018). Being the most populous Indian state and having significant political clout because of the large number of parliamentary constituencies, UP has been a laggard in improving the state of its people. The health and education metrics and income levels generally put UP below the average in India (GOI, NFHS, 2018).

Using consistent metrics to assess literacy amongst children, the results in Table 3.5 indicate that UP is performing below the national averages. Again, using Year VIII children as an illustration, the report finds that 3.3 % cannot recognise letters (2% nationally), 5.9% can read words but not Year I text (6.5% nationally) and 67.9% can read Year II text (73% nationally) (ASER, 2016).

Table 3.4

Percentage of children in rural UP by grade and reading level. The results lag behind the national average

Year	Not even a letter	Letter	Word	Year I text	Year II text	Total
I	49.7	32.8	8.3	4.8	4.4	100
II	27.3	36.4	14.4	10.1	11.9	100
III	16.8	29.9	15.7	15.1	22.5	100
IV	11.7	23.6	14.1	16.3	34.4	100
V	8.3	19.0	12.3	17.2	43.2	100
VI	5.2	14.7	11.0	16.5	52.7	100
VII	4.0	10.5	8.5	14.9	62.1	100
VIII	3.3	9.0	5.9	14.0	67.9	100

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 214. Copyright 2016 by ASER Centre.

The 2016 ASER report noted that despite the investment in UPE, learning levels were low and alarmingly static or declining from year to year. Secondly, despite the investment in school infrastructure, government school enrolments were

dropping and those in privately run schools increasing. The Government's message and its motivations were not being reciprocated by the users and the community seemed to be rejecting the initiatives (ASER, 2016). This raises the issue about the challenges associated with the success (or lack thereof) of universal primary education (UPE) in India as a whole and in the rural sector in particular.

Several journal publications have considered the challenges faced in implementing UPE (Dreze & Kingdom, 2001; PROBE, 1999). Progress has been made since independence but a combination of economic, social and geographic factors contributes to children not regularly attending school and not completing primary education with an acceptable level of outcomes (Govinda & Bandyopadhyay, 2010).

The majority of rural children across India are enrolled in government schools. As these schools are free, most of these children are from disadvantaged backgrounds, often the first generation to attend an educational institution (PROBE, 1999). Poverty and education form a complex nexus (Banerjee & Duflo, 2012). The State is not unaware of these issues. National policies do place the issue of poverty front and centre but the government “despite the dedication to development appears to be incapable of doing more to combat chronic poverty” (Gupta, 2012, p. 279). There is no ideological opposition to redistributive policies or commitment to equality for the marginalised by the State in India and that makes the lack of urgency in eradicating poverty harder to rationalise and paradoxical (Gupta, 2012). There is optimism though, “India can and will continue to grow at high rates of economic growth which can be far more inclusive than what it has been over the last two decades” (Bajpai & Sachs, 2011, p. 19).

However, the success dependencies of UPE are not unidimensional and besides poverty, other factors—social, cultural, geographical or religious—can also impact when any individual or group is excluded (Govinda & Bandyopadhyay, 2010). Exclusion from schooling denies children a right to education. While enrolments may indicate almost universal participation, poor transition to the next educational level with high dropout rates and dubious learning and cognitive outcomes requires analysis of the multiple factors and determinants. The National

Sample Survey (GOI, NSS, 2006b) considered the statistical data and outlined five causal factors for children not attending school: proximity to school, income generation requirements, domestic work taking precedence, not considered important and others, such as marriage. These are categorised by gender and age group in Table 3.5 (GOI, NSS, 2006b).

Table 3.5

Reasons for not going to school per 1000 dropouts, India, 2006

Reason	Rural Males (years)			Rural Females (years)		
	5-9	6-11	10-14	5-9	6-11	10-14
School too far	1	1	3	0	2	16
Has to support household income	4	16	171	2	10	70
Education not considered necessary	5	21	73	16	35	21
Has to do domestic chores	0	1	12	1	14	109
Others (marriage, health etc.)	34	65	170	37	62	142

Note: Adapted from *Status of Educational and Vocational Training in India*, National Sample Survey 61st Round, by Ministry of Statistics and Program Implementation, p. A-37 and p. A-38. Copyright 2006 by Government of India.

The above data supports the theory that in rural households, boys are expected to augment household income whereas girls are engaged in domestic work from the relatively young age of six years. While that can be explained by poverty and household economics, the aspect of education not being deemed necessary is illustrative of the mindset of the guardians and parents. Many of them may not have had any education themselves. Even those enrolled are at risk of dropping out or of completing the schooling process without cognitive benefits because under the current policies students are not withheld but promoted to the next level. This leads to age homogeneity but education heterogeneity within classrooms, an aspect even diligent teachers struggle to deal with, particularly when the student–teacher ratios are high.

According to the PROBE (1999) Report, “the child’s lack of interest in studies” is a factor for dropping out. However, factors related to infrastructure (e.g. school and accessibility), teaching materials (e.g. books and technology), teachers

(e.g. poor training and availability), home situation (e.g. requirement to support the family), represent a myriad of parameters that can contribute to such a sentiment. In Himachal Pradesh (HP), the best performing state amongst those surveyed, several differences were apparent from both the demand and supply sides of education. Parental motivation for education was high, gender bias low and parents together with the broader community engaged with the school and teachers. The school infrastructure was better maintained and the teachers' work culture (arrival on time, low absenteeism, interest in students) was significantly better. The policy framework was adaptive as well, staffing levels were maintained and the school calendar adjusted in line with the agricultural cycle, particularly during harvest times, when children help with the crops (PROBE, 1999).

Other research has also suggested that school enrolment is positively impacted by family wealth and literacy levels as well as school quality (Dostie, 2006). In addition to household characteristics and school infrastructure, the effects of the community influences are considered as being important (Dostie, 2006). Social capital accumulated with community support can be a powerful tool and there is often a disconnection between such force and education in rural India (Iyengar, 2011). Deprivation in parts of the community and embedded caste structures impair village development and limit collective action (Dostie, 2006). From a policy guidance perspective, the same study also suggests a correlation of higher enrolments with better infrastructure such as road access and piped drinking water. Landownership also has positive influence and a case for land reform or redistributive policies would likely have an affirmative effect on education (Dostie, 2006).

Veronique Gille (2012) considered spillover effects which imply that human capital of a worker grows with the human capital of other workers (Gille, 2012). Her research is based on empirical evidence from the data collected through the India Human Development Survey (2005). She postulates that educated people have a positive effect on their neighbours as well, with increases in their farm productivity of 3% (Gille, 2012). Education not only has benefits for the individual but also can be a positive externality to the surrounding community.

It is hard to reconcile the numbers of children leaving primary school (Year V) and entering upper-primary (Year VI). The responsibility has been delegated to the states and this is managed at a District level through the District Information System for Education (DISE) based on examination results at the primary level. In the state of UP, these statistics indicate a low rate of 67.8% lagging behind the national average of around 83.3% (Govinda & Bandyopdhayay, 2010; NUEPA, 2007).

Gaurav Siddhu (2011) noted that there is limited research and only a few papers focused on the determinants of transition from primary to secondary education (Siddhu, 2011). The matter probably goes beyond demand and supply for the schooling system under the governmental policies (Dreze & Kingdon, 2001). Issues noted include the disparities emerging for girls and children of backward castes and tribes, all consistent with other studies but no specific reasons for the results emerge. Similarly, there appears to be a lack of longitudinal studies, following children over a number of years to understand the pathways selected and why.

Exclusion of children from the primary education system is a process modulated by externalities in the child's life. A child's progress from enrolment in a school to progress through successive grades depends on many factors, each of which plays a role and determines whether the child ends up being literate or not. These externalities include family, the community, the school itself amongst others. Any effort to understand the effects must consider as many of these as possible.

The various policy metrics considered by the Government are focused on enrolment of as many children as possible. This has resulted in substantial improvements and now over 95% of the children are enrolled in primary schools (ASER, 2016). However, learning outcomes, the real purpose of education, tell a different story. The PROBE 1999 survey was an eye-opener in terms of the condition of education at a primary level, wherein they survey found that one-third of the children were out of school and the majority between the ages of 10 to 14 years were illiterate (PROBE, 1999, p. 2). The ASER surveys validated those findings and as

shown in Table 3.4, literacy levels are still low. The UP metrics as shown in Table 3.5 are in general worse than the national average (ASER, 2016).

In his provocative book *Red Tape*, Gupta (2012) states that “life-denying consequences of chronic poverty... have largely disappeared from public discussion” in India and suggests that this is a form of structural violence against a section of the society perpetuated through the inequities of policy administration and social arrangements (Gupta, 2012, p. 4). He argues that the bureaucratic procedures create a barrier to obtaining meaningful outcomes from the numerous government programs. There are so many schemes that an arbitrariness emerges in how these are implemented and often the same policy can have different outcomes for similar affected cohorts (Gupta, 2012).

Mangla, in his PhD research (2013), conducted over 500 interviews in three Indian states, including UP. He differentiates between deliberative norms, wherein the bureaucrats are working with informal and largely unwritten rules to collectively solve problems and obtain results and those who follow the letter and not necessarily the intent of the law. Anyone who has travelled in rural India can testify to the fact that government officials are treated with enormous respect and the District Magistrate (DM) is often referred to as “Main baap” (or like a father) and given a demi-god—not quite the attitude one would expect of a service organisation. Mangla (2013) contends that in the state of UP, the bureaucrats and officials are “legalistic” and procedural driven. This rigidity in approach and lack of flexibility creates conditions that even if enrolled at school, the children are not achieving the best possible results (Mangla, 2013).

There is also a political facet, wherein government schools in rural areas are typically the only public buildings within walking distance and serve as voting booths and are used for other official meetings. The location is often decided by the more influential upper-class residents of the village and frequently, to the detriment of those who need them the most (Kingdon & Muzammil, 2003).

The studies and research considered highlight the extant of the challenge of achieving UPE in India particularly in the rural areas where majority of the citizens

live. Poverty, widely prevalent in villages, exacerbates the issue and makes attaining good education for the children harder. The scale is enormous as indicated in Table 3.6 and in spite of the various policy initiatives the eventual goal of high levels of literacy in children remains distant. The children in the age group of 6–13 years old are estimated at being 200 million and of these around 6 million are out of school for a variety of reasons including those who drop out. In UP alone over 1.6 million children are out of school (GOI, NSS-SRI, 2014)

Table 3.6

Number of children in primary school and drop-out rates

	Children aged 6-13 years	Number of children out of school	% Out of school	Number of children who dropped out	% of drop outs of those not in school
All India	204,087,274	6,064,229	2.97%	2,242,171	36.9%
UP State	41,328,812	1,612,285	3.9%	466,849	28.9%

Note: Adapted from National Sample Survey on Estimation of Out of School Children, Contracted research conducted by the Social and Rural Research Institute, 2014, p.9. Copyright 2014 by Social and Rural Research Institute.

These existing studies contextualise the research question of this thesis which aims to consider a mechanism of improving the uptake of primary education with better learning outcomes in Lakhnu. From a research perspective, the IREAD approach breaks new ground in terms of considering the same stakeholder set over a long period of time. These activities are being performed within the existing policy framework and with community support and require engagement with the principal stakeholders impacting education, from the policy makers to the parents and the school teachers. Considering the data from the IREAD activities as a diagnostic to the research question requires a focus on areas which determine whether a child is excluded from education or not. The existing research covers a multiplicity of concepts, some of which may be applicable in Lakhnu.

In the following section, these concepts are explored and prevalent theories examined. The process aims to illuminate the principal factors that need additional scrutiny and are likely to be causal in impacting educational outcomes in Lakhnu.

3.5 Concepts Developed in the Literature

The literature recognises that the learning outcomes for the poor children in rural areas are far from satisfactory. Several studies focus on the copious amounts of data collected initially through the PROBE and subsequently through the ASER surveys. The PROBE study was pioneering while the ASER surveys nowadays are the most comprehensive and portray the current situation. Their objectives are simply to assess whether the children of India are learning. The design and methodology consider the connection between evaluation, democratic governance and citizen participation in the process of seeking an improvement in India's primary education system in the country's rural areas (ASER, 2005). An underlying philosophy is that if ordinary people learn to measure what affects their life they can be motivated and communicate more effectively with those charged with the service delivery. This is consistent with the approach that once people can identify their self-interest, they will be more involved in ensuring the performance of such projects or activities. Engaging parents in their children's learning is a key part of this procedure, one which can ensure sustainable support for the pupils throughout their school years.

The themes emerging from a broad reading of the literature related to education in India are examined next by identifying and reviewing specific publications and considering the views of the respective researchers. The gaps are then identified and linked to the research questions posed for the case study of Lakhnu.

Dreze and Kingdon (2001) considered the PROBE dataset and are of the opinion that single explanations do not offer a satisfactory reason for poor participation. Children going to school (or not going) is a household decision which is influenced by a range of parameters: economic status, parental education and beliefs, and school quality. For this they considered several indicators: pupil-teacher ratios (PTR), number of female teachers, teacher attendance, frequency of

inspections, midday meal facilities, teacher training and quality, physical punishment in class, school infrastructure and teacher-parent cooperation. Of the total set, they used six indicators (PTR, lunch facility, classroom facilities, classrooms weather proofing, number of days the school was open, non-teaching duties of teachers and parent-teacher cooperation) to assess school quality in their regression analysis (Dreze & Kingdon, 2001).

Their conclusions indicate that a multiplicity of factors from household economics to school quality influence school attendance and learning. Strong intergenerational effects persist, i.e. educated parents send their children to school. Maternal education impacts attendance of girls quite significantly. Perceived school quality and whether their children were learning also had a significant impact as did midday meals, especially in the poorer sections of the community. While being a child from a historically deprived scheduled class or tribe (SC/ST) did increase disadvantages, being Muslim did not. Household wealth status was important, however landownership (an indicator of wealth) by itself was not conclusive and resulted in some parents diverting their children towards fieldwork. They attributed the differences and better performance of Himachal Pradesh (one of the five PROBE states) to a combination of household and community effects. School functionality and quality assessment were difficult to analyse as they integrated multiple aspects from infrastructure to teachers' motivation. Finding "reliable evidence" in this area on student participation and school quality remains as area of further research (Dreze & Kingdon, 2001).

Analysing the PROBE data for Himachal Pradesh (HP), a parallel with Kerala is drawn wherein both states are better performers and the common link posited is the higher status of women and a more homogenous society with lower caste-based barriers in these states (Bajpai & Goyal, 2004). In terms of education metrics, Kerala and UP are almost polar opposites. The poor performance of UP has been linked to strong caste distinctions, a history of feudalism, inequality and poverty (Bajpai & Goyal, 2004). Despite all these, some progress has been made in improving the school infrastructure and enrolments. Under the Sarva Shikshya Abhiyan (SSA) initiative over 19000 primary schools have opened between 2002 and 2011 (NUEPA, 2012). On average, the infrastructure in UP is better than even in

educationally advanced states like HP (Mangla, 2013). While there has been a growth in enrolments in UP, attendance and retention are problematic. The percentage of girls out of school in the rural parts of the state has declined from 11.1% in 2006 to 9.7% in 2011 (ASER, 2011).

Provision of educational services based on central government policies remains a chronic problem in the state of UP. There are multiple examples of poor service delivery by the state towards its people, such as 30% of the schools not supplying mandated midday meals (ASER, 2011) and 26% teacher absenteeism (Kremer, 2005). Poor results are directly linked to the lack of teaching in the schools due to a myriad of reasons including teacher absenteeism and assignment to other duties, such as census work or civil tasks needing educated people by the administration. As a result, half of the rural Year V students were unable to read a Year II textbook or do simple arithmetic (ASER, 2016).

In the face of these poor results, the community has been silent and not demanded redress from the Government. A popular hypothesis is that decades of discrimination and inequality have led to public apathy and collective neglect at a community level (World Bank, 2003). These divisions are entrenched and impede collective action. People can accept schools being closed and teachers not teaching without protest (Dreze & Sen, 2002). In contrast, politics in UP has seen dramatic changes. Lower-caste leaders have created their own parties and been voted in to govern by a disenchanted populace. This advent of lower-caste politics and their ascent to power has seen a majority single-party rule in UP becoming more difficult. Although infrastructure in erstwhile neglected areas has improved with roads and electrification, education continues to languish. This selective development is potentially enhancing particularism at the expense of universal public services like education (Keefer & Kehemani, 2004).

Alcott and Rose (2015) leveraged UNESCO's 2013/14 Education for All Global Monitoring Report which proclaimed that of the 250 million children included in the study, over half are not learning basics (UNESCO, 2014). Their investigations identified that in rural India poverty and gender influence a child's likelihood of going to school and the type of school attended impacts the overall

learning outcomes. In addition, poor children who can get private tuition show better learning outcomes as compared to those who do not (Alcott & Rose, 2015).

Enrolment in low-cost private schools that have proliferated around the country, including rural areas, is substantial but the poorest are less likely to attend such schools. Government schools are free while private schools charge fees. Despite that, enrolment in government schools is on the decline as seen in Fig 3.3 (Jha & Parvati, 2014). When coupled with increased enrolment, this indicates that parents do care and are often willing to spend sums of money to educate their children in private schools.

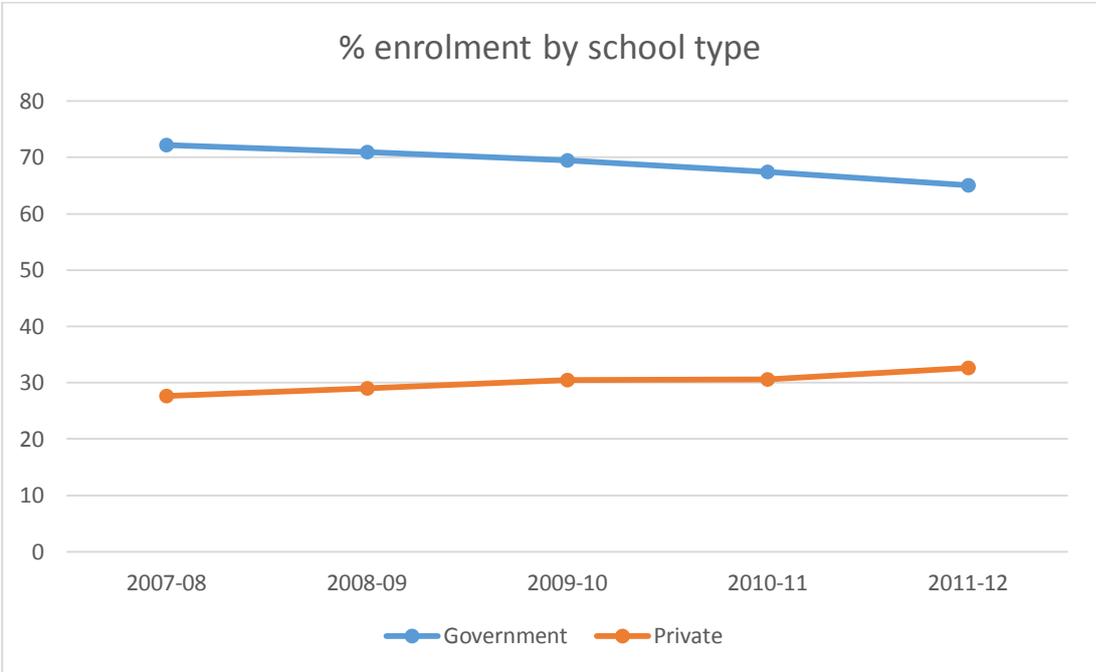


Figure 3.3. Enrolment of children by school type. Adapted from *Assessing Progress on Universal Primary Education in India – A Note on Some Key Constraints*, by P. Jha and P. Parvati, 2014, *Economic and Political Weekly*, Vol XLIX No.16, p. 45. Copyright 2014 by P. Jha and P. Parvati.

Bajpai and Goyal (2004) analysed quality and coverage issues in primary education (Bajpai & Goyal, 2004). They noted that despite constitutional provisions, the quality of education provided by the public sector was low and varied substantially from state to state. Furthermore, Bajpai and Goyal (2004) highlighted both lack of schools and the quality of teaching. Their research revealed weak links between the school and the community and the teachers with little incentive to teach despite good

salaries. Schools had poor quality classrooms and teaching materials and lacked basic infrastructure, such as water and toilets. These become disincentives for girls in particular. Apart from teacher training and qualifications, outcomes also depend on how many hours of teaching actually occur. This is a metric that is under-explored in the literature and is possibly bundled with other metrics such as teacher absenteeism despite the 1999 PROBE report finding that in 50% of the schools visited no teaching was taking place. In rural districts, teachers are reluctant to take an appointment in a remote school and often apply for transfers, further exacerbating teacher availability problems and pupil-teacher ratios (PTRs) (Bajpai and Goyal, 2004). In addition, multi-grade classrooms and single teacher schools impact what can be taught as curriculums become hard to follow (Grover & Singh, 2002). Other factors impacting quality are caste and social systems which can serve as a disincentive for students of a lower class in a school with an upper-class teacher. Systemic corruption is not uncommon with misuse of school funds and nepotism in recruitment. Governance is poor and low accountability also cause disruptions in the learning environment (Bajpai & Goyal, 2004).

Existing research has also considered the factors that influence the kind of school a child attends and the effect of learning for those in formal education. Studies indicate private schools improve learning outcomes better than their government counterparts (Desai et al., 2009; French & Kingdon, 2010). Others however found evidence that the improvements in outcomes were not significant (Chugdar & Quin, 2012). The choice between enrolling children in private or government schools is economically governed. While private schools are less prevalent in rural areas, they are often preferred by the relatively well-off parents. For UP, it was found that 90 % of the bottom quintile (income) of families sent their children to government institutions versus a comparative figure of 30 % for those in the highest quintile (Harma & Rose, 2012).

Using the ASER 2012 data for 10 to 12 year olds, Alcott and Rose applied a range of analytic methods to consider various factors that impact learning for children attending primary school in India. For learning outcomes they used the ASER methodology shown below in Table 3.7 (Alcott & Rose, 2015). At the lowest level 5% of the sample children could not read at all whereas at the highest level 51%

could read a story. The rest of the children could read a few words or sentences but not contiguous texts.

Table 3.7

Learning measures used for 10-12 year old children. Information from ASER 2012 data.

	Level	Reading ability	% of the sample
Learning Measures from the 2012 ASER Surveys	Lowest	Nothing	5%
		Letter	12%
		Word	13%
		Sentences	19%
	Highest	Story	51%

Note: Adapted from *Schools and Learning in Rural India and Pakistan: Who goes where and how much are they learning?* by B. Alcott and P. Rose, 2015, *Prospects*, 45(3), 345-363, p. 10. Copyright 2014 by University of Cambridge.

In this research Alcott and Rose (2015) also extracted information from the ASER 2012 data sets to evaluate the relative participation drivers between children attending government and private schools. For gauging family wealth they considered aspects such as whether they lived in a brick or mud house and owned goods such as mobile phones and televisions. They also considered aspects of the family like the number of siblings and whether or not they were the first generation to attend a formal school. Characteristics of the 10 to 12-year-old age group according to school provider type are shown in Table 3.8 below (Alcott & Rose, 2015).

Table 3.8

Children (10–12 years) enrolment by provider type and other characteristics based on ASER 2012 data

Children attending various schools	Government School	Private School	Religious School	Left School	Never Attended
Sample Size	99973	42009	1094	2612	1963
Gender (%)					
Male	49	42	49	52	54
Female	51	58	51	48	46
Social					
Siblings (Mean)	1.7	1.6	2.5	2.1	2.3
1st generation student (%)	28	14	43	54	65
Family Wealth Quartile (%)					
1=poorest	33	15	39	55	62
2	24	17	30	25	22
3	27	31	22	16	12
4 = wealthiest	15	37	9	4	4
Private Tuition (%)	19	22	11	1	3

Note: Adapted from *Schools and Learning in Rural India and Pakistan: Who goes where and how much are they learning?* by B. Alcott and P. Rose, 2015, Prospects, 45(3), 345-363, p. 12. Copyright 2014 by University of Cambridge.

In their analysis, Alcott and Rose (2015) applied multinomial logistic regression, which allowed them to assess the impacts of certain variables while keeping the others constant. They identified gender and wealth to be the key variables in determining the type of school attended and poor girls were 43% less likely to attend private school than poor boys. This gap decreased as family wealth increased. Furthermore, they analysed four categories of children—poor girls, poor boys, rich girls and rich boys. They determined wealth to be the key parameter impacting the choice of school with poorer children more likely to be out of school than rich children. Learning was better in private schools with 80% of the students being able to read letters and words whereas in government schools the number was lower at 67%. However, the quality was consistently poor across all types of schools as approximately 20% of the children were unable to read a continuous paragraph (Alcott & Rose, 2015).

The sample size in this study was large and covered an area similar to Hathras. This research indicates that private schooling is not leading to improved outcomes and suggests that the policy makers focus on government schools to understand and address the issues of primary education for the village poor. They postulate that poverty is the main determinant of failure to achieve positive outcomes and that a greater proportion of children from wealthy families do well.

While the RTE Act provides prescriptions, there is a significant shortfall in education inputs as documented in the 2012 ASER report which indicated minimal progress over three years. Lack of such basic facilities also creates a discontinuity and adds to the difficulty of regular and continued school attendance. Table 3.9 documents the continuing shortfall in school infrastructure (ASER, 2016). While some infrastructural improvements can be seen (toilets for example), the changes over six years appear minimal.

Table 3.9

Shortfall in infrastructure for schools as per RTE norms

% of schools with		2010	2012	2014	2016
Midday meal	Kitchen shed for cooking midday meal.	82.1	84.3	88.1	89.7
	Midday meal served in school on day of visit.	84.6	87.0	85.1	87.1
Drinking water	No facility for drinking water.	17.0	16.7	13.9	14.8
	Facility but no drinking water available.	10.3	10.3	10.5	11.2
	Drinking water available.	72.7	73.0	75.6	74.1
Toilet	No toilet facility.	11.0	8.5	6.3	3.5
	Facility but toilet not useable.	41.8	35.2	28.5	27.8
	Toilet useable.	47.2	56.4	65.2	68.7
Girls' toilet	No separate provision for girls' toilet.	31.2	21.4	18.8	12.5
	Separate provision but locked.	18.7	14.2	12.9	11.5
	Separate provision, unlocked but not useable.	17.2	16.4	12.6	14.1
	Separate provision, unlocked and useable.	32.9	48.1	55.7	61.9
Library	No library.	37.3	24.1	21.9	24.5
	Library but no books being used by children on day of visit.	24.7	32.2	37.2	32.9
	Library books being used by children on day of visit.	37.9	43.8	40.7	42.6
Electricity	Schools with electricity connection				67.9
	Of schools with electricity, % of schools with power on day of visit.				75.0
Computers	No computer available for children to use.	84.2	79.9	80.4	80.0
	Available but not being used on day of visit.	7.2	10.7	12.6	11.9
	Computer being used by children on day of visit.	8.6	9.3	7.0	8.1

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 56. Copyright 2016 by ASER Centre.

A detailed country analytical review (CAR) on access to elementary education in India was completed in 2008 by CREATE which added a new perspective to the national efforts around UPE (Govinda & Bandyopdhayay, 2008). The research considered the multiple causes for exclusion: poverty, gender biases, social factors, geographical location among other considerations. The review also considered the impacts on the large migrant families who move for work from the village to urban areas and may fall outside normal educational administrative systems. Variables, such as health and nutrition were relevant for the poorer families and the government policies, including the Mid-day Meal Scheme were implemented to alleviate such pressure. The Government allocated funds and encouraged participation from the private profit- and not-for-profit sectors but the barriers to improvement have proved substantial (Govinda & Bandyopadhyay, 2008).

Distilling the key findings from the CAR, Govinda and Bandyopadhyay (2010) focused on aspects of exclusion from primary education that was occurring despite the rapid expansion in educational resources from the SSA and related programs. Equitable access to primary education remained challenging with significant numbers of children being excluded from the school system and the quality of educational achievements at a primary school level remaining unsatisfactory (Govinda & Bandyopadhyay, 2010).

As a result of the various programs, GER's have increased especially for girls although the gender differences are higher in the upper primary sections where the pupils are older. However, by 2014, pupil-teacher ratios (PTR) of 30:1 as mandated by the RTE Act were still not maintained and several single-teacher schools continued to exist. This is largely due to a shortage and as many as 37% teacher positions remained unfilled (Jha & Parvati, 2014). Children from scheduled castes and tribes fared worse as did Muslims who were identified as having a large proportion of "out of school" children (Govinda & Bandyopadhyay, 2010). The use of para-teachers (or Shiksha Mitras) was supposed to bridge this gap but may even have exacerbated the issues. These para-teachers are low-paid contract teachers who often lack motivation and are largely placed in schools in remote areas with deprived children (Probe, 1999). Importantly, they recognise that the issue is multidimensional

with disadvantages being propagated by diverse drivers from poverty to cultural, social and religious biases.

Govinda and Bandyopadhyay (2008) contend that education must be viewed as a process wherein past and present events impact and influence the individual child. They considered seven parameters that impact the exclusion of children: health/nutrition; poverty/child labour; literacy of parents; scheduled class and tribe (SC/ST) status; gender disadvantages /girls; difficult circumstances and disabilities (Govinda & Bandyopadhyay, 2008).

International organisations such as the UNDP (2008) have linked the early life of a child to future participation in primary education. Malnutrition is also linked to social factors such as caste and status. Over half of the children under three years of age in the state of UP are malnourished, with higher percentages belonging to SC/ST backgrounds (UNDP, 2008). Such children miss early education and are never able to catch up, thereby ending up as labourers with little prospects of improvement.

This had been recognised by the Government, which in 1995 launched a Mid-day Meal Scheme (MDMS) to provide food in primary schools, improve the nutritional levels and potentially act as an incentive for parents to send their children to school. There were implementation issues and inconsistencies between states as some were providing dry rations whereas others cooked meals. The scheme was standardised across the country in 2004 following a Supreme Court of India order in 2001 that cooked meals need to be provided. The broad aim was to guarantee around 500-700 calories per day and 12 to 15 grams of protein per child in primary schools. Chauhan documented the evolution and issues faced by the scheme and identified problems, such as fake enrolments in schools to increase the food allocation funds (Chauhan, 2004). Other unintended consequences, such as involvement of children in the cutting of vegetables and reduction in the teaching time of teachers as they became responsible for procurement of grains and cooking, also occurred. This forced partnerships between governments and interested parties including NGOs which took the responsibility on a contract basis. Chauhan reviewed over 30 other

studies and concluded that overall the MDMS was functional and achieving its objectives partially through improving school attendance and supporting the nutrition needs of the children (Chauhan, 2004).

Poverty and education go hand in hand. The National Sample Survey established that the proportion of non-literates was highest in the bottom quintile (by income) of the population. (GOI, NSS, 2006b). Price elasticity of demand for education is considered low (Glewye & Kremer, 2005) but direct costs of schooling can have detrimental effects (Chandrashekar & Mukhopadhyay, 2006). Child labour is widely prevalent in poor families and this precludes the child going to school (Table 3.6, Section 3.5 of this thesis). The existing child labour legislation was inadequate and did not cover children engaged in domestic activities (Bajpai & Goyal, 2004). More recent research on linkages between poverty and education indicates indirect as opposed to direct causality, as despite economic prosperity some states lag behind others in educational achievement (Bajpai & Sachs, 2011). Often the work children are engaged in is seasonal and does not prevent them from attending school but may impact attendance at certain times. This issue is complex and probably a range of factors other than family income, including parents' level of education and mindset, determine the participation of children in regular and seasonal work.

Patriarchal family norms and conservative social practices, such as early marriage to prevent "love affairs" and to minimise individual choices by keeping tight control on girl children's movements especially post puberty, also impact school enrolments. India's caste system, and the SC/ST status also have impacts on a child's exclusion. Such children often face different forms of exclusion even though the notion of "untouchability" has been banned by legislation (Sedwal & Kamat, 2008). This leads to a double disadvantage for girls from marginalised communities. Such female children face discrimination and have few alternatives other than government schools as private fees are often beyond reach (Duraiswamy, 2004).

The impacts of seasonal migration away from the native village to either nearby cities or to other states is an active area of research. Some studies have estimated that as much as 20% of the country's population could fall in this category

with women and children being in the largest proportions (UNICEF, 2014). This group of children may not be covered by ASER and other studies and thus be invisible. Exacerbated by lack of rural labour opportunities, the number of migrant families may be in the hundreds of thousands resulting in children missing school and closing opportunities for learning (Smita, 2008). Again, government policies such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) aim to provide a minimum of 100 days of work per rural family as the basic wage (GOI, MGNREGA, 2005). This is part of a larger social scheme whose success and impacts are still being assessed.

Legislating the right to education is not enough, there needs to be the ability to identify gaps, including in implementation, and modify the Act as appropriate based on the deficiencies learnt during its application. There are no parameters to gauge the quality of the education. Teachers' eligibility is ambiguous and while a broad 75%:25% split in funding between the Federal and state government is defined, lack of detail in some area creates confusion (Jha & Parvati, 2014). Implementation delays have resulted in insufficient or non-existent infrastructure, both social and physical. Child labour and social practices detrimental to education continue to flourish, both being intractable problems needing strong political will. Jha and Parvati (2014) contend that only 4.17% of GDP was allocated towards education, less than the 6% provision in the Act. Funds available are underutilised and the quality of implementation suffers because of inadequate monitoring. Staff limitations, poor training and frequent transfers make it difficult for teachers to establish a connection with the school and its community (Jha & Parvati, 2014).

A trifecta of design flaws which were not rectified in the updates to the RTE Act, implementation bottlenecks and some systemic weaknesses mean that the money allocated for education is not having the desired effects and what the Education Minister said in 1964 remains relevant even today. As a starting point, funding allocation should be increased, the resources for teaching infrastructure and adequate monitoring should be boosted to allow improved outcomes.

A case study from western UP considered the determinants of failure in children transitioning beyond primary school to high school. In an agrarian district, a

701 sample from 17 schools was used in a setting similar to Hathras (Siddhu, 2011). In this area, most families rely on agriculture. Around 40% do not own land and of those who do, the average holding is 1.7 acres. Demographically and culturally the area is similar to the Lakhnu village wherein around 26% of the population is SC/ST and around 25% Muslim. The enrolment trend is reflective of what has been widely reported, i.e. total numbers enrolled have increased, but 50% of those who start Year 1 do not make it to Year 8. The statistics are glaring as can be seen in Figure 3.4.

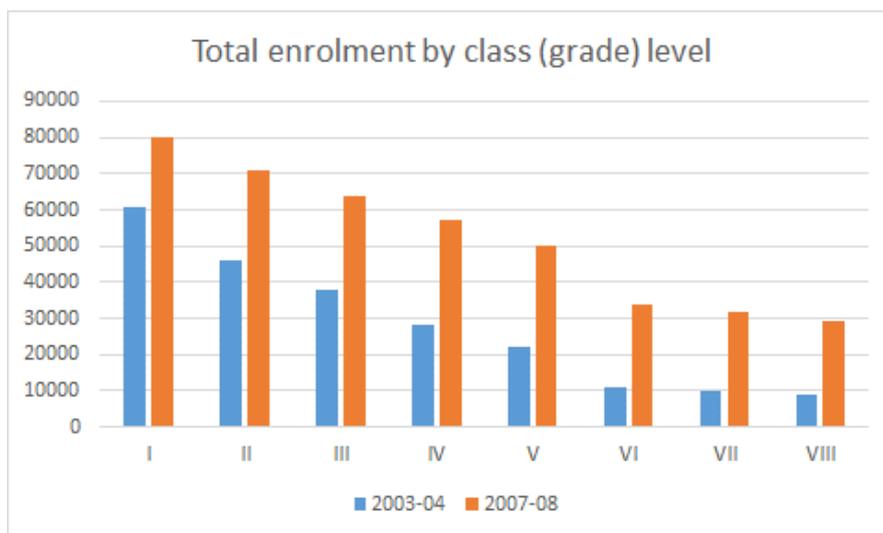


Figure 3.4. District JP Nager enrolment based on DISE data. Adapted from *Who makes it to Secondary School? Determinants of Transition to Secondary Schools in Rural India*, by G. Siddhu, 2011, *International Journal of Education Development*, 31 (2011) 394-401, p. 395. Copyright 2011 by Science Direct.

Gaurav Siddhu (2011) researched the existing literature to build a list of casual factors that can influence participation in schooling. The identified issues include cost of schooling, gender of the child, age, distance from school, parents' educational levels, caste and social economic status of the family. The study was performed using verbal interviews with parents, children and teachers supported by some specific data as required by the CREATE modelling approach. This included health indicators, including body mass index (BMI) and intelligence quotient (IQ) tests administered to the children. School infrastructure data, number of teachers and staff were also recorded and unannounced visits were made on three occasions to check attendance levels.

Siddhu (2011) identified eight influencing factors and conducted multivariate analysis across the data collected over two years. The key findings were that for girls, distance to the school and cost are the most pertinent. For boys, being “not interested in studying” was the most quoted reason. The analysis did point out some interesting nuances: the health parameters did not seem to be a key determinant and being overage for a class was often a reason for dropping out, more for females than males. In addition, where cost was a consideration, boys often were prioritised over girls with sentiments like “she is going to be married soon”. The same parameters impacted the more vulnerable sections (SC/ST and religious minorities like Muslims) more strongly. Another nuance was that more intelligent girls seemed to receive more investment from their parents and that if both parents were educated (or believed in education) the girl-child was more likely to be supported. While these are all considerations for future research, the key determinants of cost and access should be targeted first by policies (Siddhu, 2011).

The Government has started to realise that several years after the RTE Act, learning outcomes have deteriorated (ASER, 2016). As per the 2011 census (GOI, Census, 2013), 41% of the population was under 19, and literacy levels as gauged by the Program for International Student Assessment (PISA) tests in 2009 ranked India towards the bottom of the 80 countries which participate in this program. This is not a good preparation for becoming a knowledge superpower – a vision espoused by the country’s leadership (India Today, 2015). Public schools were largely constructed in the mid-90’s when enrolment percentages were also high, but these are not functioning effectively enough to provide education. Ironically, hundreds of low-fee schools have been closed as they do not meet the RTE Act’s minimum requirements. Consequently, displaced students, estimated at four million, have been obligated to attend government schools where the facilities are often even worse. The latest ASER reports indicate that reading proficiency has declined since 2008 and the policy positions needed to be altered (Kingdon, 2015). Rules of the SSA framework such as the automatic promotion of children and maintaining the age appropriateness in classrooms were aimed at improving the self-respect and not humiliate the child. However, unintended consequences occur as determined through the ASER reports leading to very poor literacy and numeracy skills in senior years. The plummeting

literacy numbers however are not raising a high level of concern from either the parents of such children or the Government (Chavan, 2016).

Local school management, including stakeholder parents and senior community members are meant to monitor teacher performance and student outcomes. The Village Education Committee (VEC) concept is meant to function like a parent teacher association (PTA) with a border engagement from the village panchayat or local government. The PROBE (1999) report found that these bodies were largely ineffectual, meeting occasionally and having little engagement with the school activities (PROBE, 1999). One reason for their ineffectiveness was they were viewed as a top-down government directive rather than being based on a community need (PROBE, 1999, p. 6). Under the RTE these are now constituted as school management committees or SMCs. Their effectiveness however remained limited with little evidence of the community engagement seen in Northern India as far back as the late 1990s (PROBE, 1999). This task should not be left to the district education authorities. Information about the comparative performance of schools should be available to allow parents more choice when it comes to decisions where to enrol their children.

The Government of India has taken several initiatives to ensure universal primary education in the country as mandated by the RTE Act. Amendments to the RTE Act have been considered and passed by the Government based on the various studies and inputs they have received. These include firmer rules for teacher qualifications (2015) and a focus on subject wise learning outcomes (2017). With the focus on quality education, the Central RTE Rules were amended in 2017 to include reference on class-wise, subject-wise Learning Outcomes. The Learning Outcomes for each class in Languages (Hindi, English and Urdu), Mathematics, Environmental Studies, Science and Social Science up to the elementary stage have, accordingly, been finalized and shared with all States and Union Territories (UTs) of India. These would serve as a guideline to ensure that all children acquire appropriate learning level (GOI Press Release on RTE, 2018). A recent 2019 amendment has softened the no-detection policy, i.e. no child could be failed or held back under any circumstances and left that decision to the individual states (GOI, MLJ, 2019).

The reasons behind the poor uptake of primary education in rural India are complex with many variables identified. Research discussed in this chapter has allowed the construction of a mud map illustrated in Figure 3.5 that highlights the key factors which impact the uptake of primary education. Various researchers have considered a number of these variables in examining the exclusion of children from the opportunity of being able to gain an effective education. This mud map evolved through analysing the literature and identifying categories reflecting the research directions taken up to explain the factors which impact the exclusion of children from schools and the learning process in rural India.

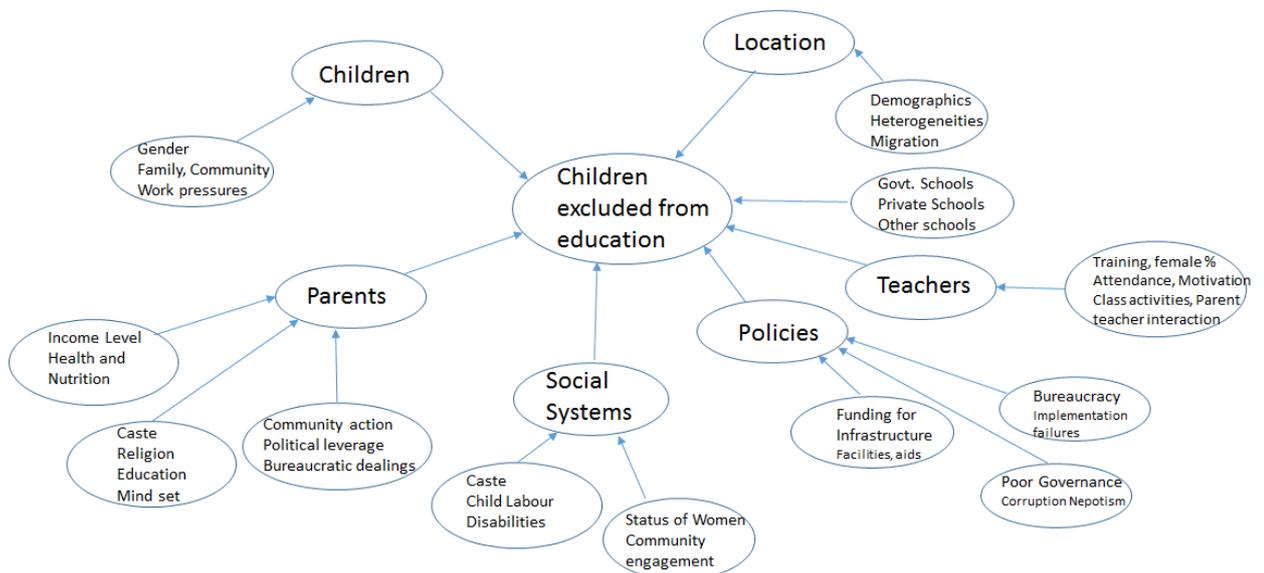


Figure 3.5. Mud map of the various factors impacting exclusion of children and impacting their educational outcomes. Compiled by researcher.

In this mud map, the various categories reflect the demand and supply aspects of the provision of education to children. The demand drivers are the parents and the children themselves who are seeking to avail the service. Policies like compulsory education also push the demand, as do incentives such as the Mid-day Meal Scheme. Social systems can either spur demand by encouraging the community children to attend or act as a deterrent imposing restrictions due to religious or other reasons. Cultural issues are diverse across India and the geographical location of the village or school has an impact on the demand as well. Regions having migratory labour see a reduction demand compared to the more static communities. Good infrastructure and

motivated teachers can also spur demand as can flexibility in policies which can adapt to the village agricultural cycle.

Policy driven provision of schools and infrastructure is an important supply parameter. The bureaucracy of the state administration controls the staffing by teachers and the provision of essentials like books and stationery. Proximal schools providing safe and easy access to children is a supply side enabler.

These will form the base set of determinants from which a subset germane to Lakhnu can be extracted. As a precursor, it is relevant to consider how the IREAD approach is complementary to the existing modalities and where it is located within the research data acquisition space. This is discussed in the following section.

3.6 Expanding the Body of Knowledge: Context for this Research

There is a significant body of knowledge and research done in trying to attribute causality to the poor outcomes of universal primary education (UPE) in India, particularly in its rural sectors. Wide-ranging factors, such as policies, demand modulators like social systems and gender biases, supply side constraints and poor implementation processes have been assessed and hypotheses for attribution of the results formulated.

These approaches were analysed in the mud map (Figure 3.5) and used to consider various linkages and highlight the primary and secondary factors which are impacting both the exclusion of children from primary education and poor learning outcomes for those who attend. Exclusion is a broad term covering children who have not enrolled, have dropped out or not transitioned beyond primary school. Such exclusion and sporadic attendance are impacted by a multiplicity of factors, such as poverty, lack of facilities and social and cultural biases faced by the children and their families particularly in rural areas. This must be considered as a process with contributing events coming from the community, the family, the playgroups and the school. Understanding the impacts of these events necessitates observing and capturing as many as possible in a child's day-to-day life (Govinda & Bandyopadhyay, 2008, p. 72).

While extensive, current research on primary education in rural India is principally based on large-scale survey data collected over a defined period of time, typically a few months. While the sample data aims to cover a percentage of the previously sampled datasets, it is rarely, if at all, possible to isolate the same location and demographic set of people in these data. A major reason for this is that most statistical analyses and information are deliberately anonymised to protect the privacy of the respondents. A smaller number of studies conducted through individual researchers, universities and research consortia have used other techniques such as individual and focus group interviews with various stakeholders. However, such work is generally not followed-up and no temporal aspects can be considered. Classifying the major research data gathering techniques can help visualising the domains they cover (Table 3.10).

Table 3.10

Dominant research mechanisms in literature

Mechanism	Stakeholders	Duration	Comments
Large scale surveys and data base building leading to subsequent analysis.	Largely rural households, parents and children.	Short; Targeted over a few months.	Annual Status of Education Report (ASER); Government census and other sponsored surveys done every 5 to 10 years; private surveys (Public Report on Basic Education in India, UNICEF and World Bank supported) episodically conducted.
Interviews and Focus groups.	Cover rural residents and the bureaucracies.	Short.	Generally done as part of a thesis or other paper requirements; not usually repeated except through centres in universities, such as the University of Sussex and the Columbia Earth School where some continuity exists.

Note: Adapted from *Transitioning to Better Primary Education: The Role of an Expatriate Organisation in India*, by S. Sharma, D. Marinova and D. Bogueva, *Sustainability* 2020, 12(16), 6849, p. 5. Copyright 2020 by S. Sharma, D. Marinova and D. Bogueva.

The IREAD linked strategy in this longitudinal study can add another dimension to the body of evidence that exists to understand exclusion of children from primary school and the poor levels of learning. Such an approach, transcending multiple years while interacting with all stakeholders, allows a level of communication with the local community that is unlikely to be achieved with other methods. This research is directed towards one school, Lakhnu Junior School, which is the unique case unit of analysis in the PhD study. Such a methodology has not been considered or yet used in the literature related to education in India.

The various complementary approaches in the existing research universe can also be pictorially represented in Figure 3.6. It should be noted that the partitioning between the large-scale survey-based studies and those produced through other research techniques is qualitative and only intended to indicate that the large survey data has contributed to majority of the scholarship in the area.

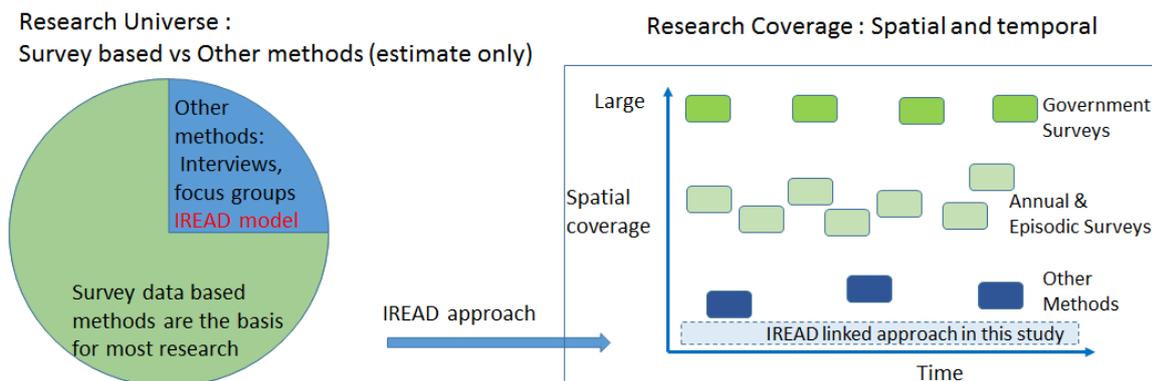


Figure 3.6. The IREAD based research approach considered in this case study is complementary and accretive to other methods used in current literature.

Having located the IREAD approach within the continuum of the existing knowledge base, the critical aspects relevant to the research question can now be drawn out from the current research. In the following section, key themes with relevance to Lakhnu Junior School are extracted and will be used to drive the subsequent data collection and analyses phases of the case study.

3.7 Discussion: Determinants and Factors Impacting Education

The plethora of reports from government surveys, international organisations like the UN and a host of researchers have validated the fact that the challenge posed in the Minister of Education's statement of 1964 is yet to be addressed in totality. Schools around the nation have poor infrastructure (hovel-like), teachers are in short supply and poorly trained, textbooks often do not arrive on time and proper playgrounds and functional libraries are few (GOI, MHRD-CABE, 2010).

It is not surprising that a significant number of children fail to attend school regularly and eventually drop out. Logically if the benefits from education are perceived, this would or should not happen. In simple demand–supply terms, school availability and demand, i.e. children, should be the prime determinants of universal primary education. In reality, the factors and determinants are multi-fold as shown on the mud-map on Figure 3.6. While some of those factors have received a lot of attention, others have been scarcely considered in the existing research. The main points repeatedly made in the literature are listed below:

- poverty, household resources, parental motivation;
- intergenerational education effects;
- household conditions/Community characteristics;
- school quality: multi grades in one class, single-teacher classes;
- school infrastructure and distance from community;
- gender, caste and class based (SC/ST) disadvantages;
- parental and community involvement in school affairs;
- incentives–midday meals;
- not enough teachers, poorly trained and disinterested teachers;
- not enough focus on teaching; teachers assigned to other duties;
- lack of flexibility on part of the administration in tailoring the school needs based on the village farming cycle;
- policy design and implementation flaws.

These are all valid, but there is evidence that despite such limitations, some states do better than others. There are numerous demographic studies which show

that gender disparities are the highest in North India where women face greater discrimination (Husain, 2011). In his analysis, Hussain was not able to conclusively link discrimination to education completion evidence. The study however has a limited perspective and does not examine effects at primary and transitional levels (Husain, 2011). Discrimination against girls in relation to education remains an area of active research with some key observations linking the better outcomes for children to the status of women in those societies and a higher degree of community engagement in education (Bajpai & Goyal 2004; Husain 2011; GOI, MHRD, NEP 2020).

The SSA allows for the school management committee (SMC) to be inclusive of the local community and encourages parent-teacher interactions. However, there is scant research into this and while parents may state that “nothing is taught in schools”, they rarely communicate with the teachers or hold them accountable. Cultural aspects, including government school teachers belonging to higher castes and thus considering themselves “above” the parents of the largely marginalised children attending the schools, have been occasionally mentioned but little evidence has been collected. It is possible that in the feudalistic North India, these parents prefer to withdraw their children as opposed to incurring a fight with the system.

In Indian mythology, the concept of “guru bade pameshwar” (the teacher is superior to God) is central and stories about pupil-teacher respect and devotion abound. The teacher has always been a respected member of the community and a “local”. Now teachers are government employees and transferred all over the state. Not much is discussed about the impacts of teachers being from outside the local area and what links this has to their attendance and effective teaching hours. Nepotism and corruption with some teachers managing to avoid remote schools further compound this issue. The choice for parents is often to consider the low-fee paying private schools. These, however, are frequently transitory and open and close regularly. So, frustrated parents may not bother to enrol their children in a school as they perceive that the child is learning little if anything (Harma, 2011; Alcott & Rose, 2015).

The official reports, as evidenced in the country report on the Millennium Development Goal 2 (MDG 2), show achieving UPE as being “moderately on track”, while accepting that the results were compiled based on existing data collected for other purposes and not specifically targeted at the MDG objectives (GOI, MDG India, 2015). This has been challenged by NGO reports which claim that the SSA has not been successful and NER is not a suitable metric. Children remain on school rolls but do not attend, child labour persists, schools have poor infrastructure, teachers are inadequately trained/qualified, marginalised communities and women do not receive the required attention—all of these ensure that educational learning outcomes are very poor.

Poverty, limited household wealth and income are often cited as reasons for children not attending school. It is indeed befuddling why national governments with bipartisan support for development policies are not able to reduce chronic poverty further. The notion of bureaucracy de-politicising the poor is posited by Akhil Gupta (Gupta, 2012). Well before India adopted open market policies in 1991, it was purported that three powerful blocks were largely benefiting from the country’s resources and programs. These were the industrialists, the wealthy farmers and landowners and the bureaucrats who were also the policy makers. While the first two were influential in the success of political candidates, the bureaucrats ensured that only favourable policies could succeed (Bardhan, 1984). There was an alliance between the business interests and public officials who promote pro-business policies while extracting rents for themselves instead of providing quality services (Kohli, 2006), which is likely to continue today.

In the research related to educational outcomes, poverty is considered an “end game” of other forces and does not appear to be specifically researched in this context. It is recognised that India’s growth in the last two decades has been largely through its service industry. In 2012, the service sector made up 55% of India’s GDP and employed 28% of its workforce; whereas industry employed only 12% of the workforce and made up 29% of the GDP (Gupta, 2012). Agriculture in comparison represented 16% of GDP but employed 52% of the workforce (Gupta, 2012). With almost 67% of India living in villages (World Bank, 2018), unemployment and

underemployment are rife as the educational system is weak and not preparing the children for the service industry.

Information technology (IT) professionals the world over are largely of Indian backgrounds and some of the largest companies in this space originate in India. This revolution has resulted in bypassing the normal transition of growth through industrialisation and manufacturing. The manufacturing sector, which generally employs a large number of people in trades languishes in India and as a result unemployment is largely not addressed (Gupta, 2012).

Malnutrition effects have been studied through BMI assessments in ASER and other surveys. This has spurred midday meals type schemes and improved school participation rates (Dreze & Kingdon, 2001). Food spoilage (as much as 18%) and lack of rural infrastructure add to the issues and it has been colloquially stated that India does not have a food problem, but it has a food distribution problem (Balaji & Arshinder, 2016).

Globalisation has had its impact and positively reinforced the services sector with investment as it is tied to the lucrative export markets. Agriculture on the other hand has been bogged down with limited access to global markets due to poor infrastructure and protectionist policies in this space. A simple Google search of “the plight of India farmers” brings up over three million results in half of one second. Farmer suicides are on the rise and even in rich states like Punjab, they have been tied to burdens caused by a combination of natural effects (e.g. drought and crop failures) and rapidly declining profitability (Kaur et al., 2016). Subsistence farming, very common in Indian villages, is purported not to be a pathway to adequate nutrition and protein in diets. Farm income increases allow better purchasing power and improve BMI measures (Rao, 2017). While the Government has mandated a minimum sales price (MSP) as a form of subsidy, farmers rarely receive that price and often sell at lower prices (personal discussion with Professor Trilochan Sastry in 2017).

Employment opportunities in the service sector are excluded for those without the educational capital needed in this globalised marketplace. A child going

to an English medium elite school in a city has almost unbridgeable advantages over a rural child studying in the local vernacular. A good quality of education is just not accessible to the rural majority. The only direct employment possibilities for these children in this booming service sector are in ancillary positions such as peons and drivers. Indirect opportunities have been afforded by the construction booms in cities due to the service sector's expansion which requires manual labour. Migrant workers from rural areas live in shanty towns and slums often near the construction sites.

With around 67% of India's population living in rural areas and having poor employment opportunities, the government has resorted to Acts such as MGNREGA thereby increasing dependency on the state. These also become populist tools as voter participation is higher in rural communities as opposed to the wealthier urban areas (Yadav, 2002). Such schemes end up as hand-outs and do not provide a long-term solution to the disparity between the have and have-nots in India which is on the rise. A middle-class urban child cannot imagine the life of a rural child and has no solidarity with its country cousin. The wealthier people are aspiring to achieve western type lifestyles, cleaner cities and demanding demolition of the shantytowns. There is a serious risk of the wealthy being pitted against the poor in the use of limited resources (Gupta, 2012). Such differences can be observed between the children in Lakhnu and those who have grown up in cities and have had private school education. There is a world of difference between the opportunities available to them and the rural divide is not likely to be bridged in this generation unless there is a change and transition to better ways of delivering education.

In India, there seem to be a set of policies that are aimed at social emancipation but are not effective. Education in rural India is but one example and numerous research proponents have identified areas of improvement, from design to implementation. In his 1962 book, *The Politics of Scarcity: Public Pressure and Political Response in India*, Weiner recognised the issues related to implementation of policies stating "a great hiatus between law and reality, between what is willed by the national leadership and what is done at a local level" (Weiner, 1962, p. 239). Very early on, he recognised that what is conceptualised at a central framing level needs to be implemented at a local level and herein lies the gap.

A possible perspective is that economic growth allowed allocation of funds for schemes such as the SSA. India is a country with a high proportion of young people and an educated workforce could be a demographic dividend for future years. Hence, it is conceivable that in the eyes of policymakers, education became a pathway to economic growth as opposed to a matter of social justice. Top-down policies on education have had beneficial results (Banerjee & Duflo, 2012), but one can assert that the process can be slowed down when a vast section of the society is grappling with poverty and barely surviving. The benefits of education are longer-term and not easily understood by people who are struggling on a day to day basis (Banerjee & Duflo, 2012). So potentially the larger goals of education as set by the policy makers are not keeping pace with the expectations of parents.

Some of these parameters are difficult to research and information provided by bureaucrats, teachers, parents and children themselves potentially changes with their circumstances. Possibly understanding what they really mean needs more time than a typical survey can provide. It has been acknowledged that sometimes government school teachers and headmasters do not participate in ASER surveys for the fear that their school may be deemed as not being in compliance with the SSA guidelines (Goodnight, 2017). The central players from an implementation and governance perspective are the BSA (Basic Shiksha Adhikari) and the DM (District Magistrate). There is little published work on interviews delving into root causes of poor participation with these people. It is quite possible that they would only pass the official line, such as that funds are awaited, teacher recruitment has not been sanctioned or priorities are set by the bureaucrats in the State Capital and the Ministers.

Potentially, any of the stakeholders in the delivery of education in rural India, needs to feel secure, develop a sense of trust and/or not be threatened in any way by the information they provide. They generally do not feel comfortable in being recorded and are reluctant to make off-the record comments.

In this sense, IREAD can be a unique vehicle which through its continued low-profile presence over many years and on-the-ground work, can allow additional insights. For the community members, trust is built over time with continued

participation by the organisation in social and educational activities. The bureaucrats may also be more willing to talk to overseas people or non-resident Indians as they may perceive them as having short-term project-based interactions and not being a continued long-term presence like other NGOs.

Table 3.11 below lists the key parameters, the levers that control them and a qualitative assessment of the research that exists in the area. It is important to note that not all of these parameters are mutually exclusive and there is some interdependence. Although the parameters are all applicable to Lakhnu in a general sense, the relative impacts of each are likely to be different.

Table 3.11

Parameters impacting exclusion of children

Parameters impacting exclusion of children from schools and education in general	Well researched	Relevant to Lakhnu	
Schools	Number and availability.	Yes	No
	Quality of infrastructure/Functionality.	Ongoing	Yes
Location	Remoteness.	Yes	Yes
	Heterogeneity of class.	No	Yes
	Migration into or out of area.	Ongoing	No
Child Specific	Gender: Female child.	Yes	Yes
	Respect for women and their empowerment.	No	Yes
	Disabilities/Special needs.	No	Yes
	SC/ST status.	Yes	Yes
	Work pressures: Child labour, housework.	Yes	Yes
Parents	Family income, housing.	Yes	Yes
	Landownership.	Ongoing	Yes
	Religion.	Yes	Yes
	Caste SC/ST status.	Yes	Yes
	Education – father, mother.	Yes	Yes
	Community action for political leverage and dealing with bureaucracy.	Ongoing	Yes
	Mind Set.	Ongoing	Yes
	Caste demographics of community.	Yes	Yes
Social Systems and Engagement	Child labour.	Yes	Yes
	Parent teacher interaction.	Ongoing	Yes
	Teacher – interests, motivation, local links.	Ongoing	Yes
	Community safety net and security.	Ongoing	Yes
	Community engagement with education/educators (social capital).	Ongoing	Yes
Policy Driven for service delivery	Number of schools.	Yes	Yes
	Funding for infrastructure, teachers etc. at a Federal and State level.	Yes	Yes
	Teachers – Number, qualification, training, motivation, non-teaching tasks, monitoring of performance.	Ongoing	Yes
	Incentives – Midday meals, scholarships	Ongoing	Yes
Bureaucracy	Governance including indifference.	Ongoing	Yes
	Corruption, Nepotism.	Ongoing	Yes

In this research, no pre-determined theory is being hypothesised, but a bottom-up exploratory approach is considered to investigate the root causes of the poor uptake of education in rural areas and unsatisfactory outcomes in terms of developing literate children. While the detailed methodology set in grounded theory

is covered in Chapter 4, a set of themes has been extracted based on the existing research as being most likely applicable to Lakhnu.

The village of Lakhnu is difficult to access but is not remote as it is a few kilometres from the town of Hathras. Its primary school is inside the village and the junior school is within a kilometre of the main habitats. The ratio of boys to girls in the school is roughly equal and the vast majority of them are from the lower socio-economic communities. Midday meals are prepared on site and all children seem to eat together. There are no obvious signs of segregation on the basis of caste or class in the school. No disabled children were enrolled in the school, and none showed obvious signs of malnutrition. On the surface things look good, but there are deeper factors that need to be investigated to understand the true situation in the school and the village. Table 3.12 thus lists the key themes extracted from the larger Table 3.11, as being relevant to Lakhnu. These are considered further in the research conducted as part of this thesis.

The narrative literature review presented a range of opinions and some unanswered or partially answered questions. Stories, unlike numbers, are subjective and can often be altered as told even by the same storyteller. Part of the researcher's task is to understand the underlying perspective from amongst the diversionary and sometime superfluous material. Each system has its strengths and weaknesses. An evaluation based on incorrect input data can be easily wrong, particularly as such information once released is used by others to make their assessments. Likewise, a story can present a limited perspective, however it has a place in understanding one more piece of the research question. The aim of this study is to present the story of Lakhnu through the perspective of IREAD.

Table 3.12

Themes considered as relevant for the exclusion of children in Lakhnu

Parameters impacting exclusion of children from schools and education in general		Comments
School	Quality of infrastructure/Functionality.	Is the school an attractive place to go?
Child	Gender.	Gender issues matter more
Specific	Work pressures: Child labour, housework.	when the girls grow up. At this level both genders are relevant.
Parents	Family Income, housing.	For young children, decisions
	Landownership.	are taken by parents and they
	Caste SC/ST status.	have the ability to monitor and
	Education – father, mother.	influence the child.
	Mind Set (of parents).	
Social	Parent teacher interaction.	The School Management
Systems and	Teacher – interests, motivation, local links.	Committees are meant to both
Engagement	Community safety net and security.	monitor and support the
	Community engagement with	school.
	education/educators (social capital).	
	Community action for political leverage and	
	dealing with bureaucracy.	
Policy	Funding for infrastructure, teachers etc. at a	The SSA is meant to ensure
driven for	Federal and State level.	scheme implementation is
service	Teachers – Number, qualification, training, non-	through the local bureaucracy.
delivery	teaching tasks, monitoring of performance.	
	Incentives – Midday meals, scholarships etc.	
Bureaucracy	Governance including indifference.	What is happening on the
	Corruption, Nepotism.	ground as opposed to what
		should happen?

The IREAD activities have been continuing for over a decade with community support. This can be considered as evidence of the confidence displayed by the community insofar that there are no personal vested interests behind the

activities and the proponents are sincere in working for the public good in Lakhnu. The high level of trust should facilitate the stakeholders, particularly the parents and guardians of the children to share their thoughts frankly.

In the subsequent chapters the methodology of data collection and field work are discussed keeping in mind the parameters shortlisted through the research. The approach provides a new and different mechanism of data collection to consider and validate the research question. The data are then analysed through a framework and a premise drawn in an attempt to provide an understanding of the research question. As the approach is novel, it is hoped that the insights will be complementary to the existing knowledge base and can provide some practical pathways to impacting the education in villages positively.

Chapter 4: Methodology—A Participatory Approach using Grounded Theory

4.1 Introduction

The current government initiatives in India are focused on providing free primary education for all. Initial access to education however, is of limited value unless it leads to regular attendance, progression through to upper primary and secondary grades and attainment of meaningful learning with utility. In addition, there need to be enabling opportunities for the economically disadvantaged and girls in particular (Lewin, 2011). Bajpai and Sachs (2011) mapped India's progress in the decade during which the country opened its economy and embraced market reforms over the period 1990-2000. In looking forward to the decade to 2020, they highlighted eight target areas such as poverty reduction, better literacy, job creation with equity and ecological preservation (Bajpai & Sachs, 2011). They stressed the need to improve educational achievement and reduce dropout rates in public schools to no more than 3%. To achieve this, they made some generic recommendations, such as improved teacher training and useful curriculum development that facilitates education leading to jobs. Recognising the issues with program implementation, they pointed out the complexities of centralization of power at a State and Federal level through the bureaucracies with "extremely inadequate channels of transmission of local knowledge and needs" (Bajpai & Sachs, 2011, p. 14). They recommended that more power and decision making be devolved down to the local government of the Panchayats in rural areas (Bajpai & Sachs, 2011).

This research aims to understand how a community-based collaborative relationship with non-residents (including expatriate Indians) through an association like IREAD can be used to facilitate the uptake of primary education by the rural poor in India. Hence, the methodology for data gathering has to be consistent with the aim of the research (Kvale, 1989). The proposed methodology is based on using participatory research with the community and acquiring an understanding of the causal factors to direct strategies for improving uptake of education. This is achieved through case study research, one of many available qualitative research techniques.

The chapter considers various qualitative research techniques and develops a rationale for the suitability of a case study methodology using participative research and grounded theory, under which a theory is constructed through a through systematic gathering and analysis of data (Glaser & Strauss, 1967). The unit of analysis is selected with a data collection methodology and protocols developed to be able to accumulate and curate targeted information over the period 2011–19 through visits to the case study site. Given the remoteness of the village and the difficult logistics, the data collection is integrated with IREAD activities. A flow chart for gathering all forms of data is developed ensuring that field notes and other evidence remain secure and appropriate governance processes are in place for any stakeholders. This includes compliance with local regulations in Hathras District where the case study site is located and also those mandated in Australia through the IREAD Association’s licensing authority and the research protocols at Curtin University.

A case study approach through IREAD and its activities provides an opportunity to focus on one village government school over many years and use a methodology based on grounded theory with a people-focussed approach applied to the same target research base. Consistent with a grounded theory approach, the data collected and ensuing analysis are iterated to develop a theory. Provision for the endorsement of this theory and the key inferences based on the initial years of data gathering through targeted interviews in a focused field trip in 2020 allowed a modicum of validation and potential extrapolation of the analyses. Such an approach has not been considered, to the best of my knowledge, in the literature related to education in India and provides a new and different mechanism to explore and validate the answer to the research question.

4.2 Background Considerations: Rationale for a Grounded Theory

The IREAD activities are actively managed by the members of the association, including the researcher, and the purpose behind all initiatives is to improve the educational outcomes for the village children and have a positive impact on the lives of their parents and the broader community. Any ideas behind these activities originate from all involved stakeholders, including the IREAD participants

and community. Thus, the objectives are sought to be met through significant participation of all concerned.

This approach aligns with the purpose of participatory action research which is defined as “to change social practices, including research itself, to make them more rational and reasonable, most productive and sustainable and more just and inclusive” (Kemmis et al., 2013, p. 2-3). Qualitative research through a community-based participatory approach is increasingly recognised as having the potential to align community and researchers’ objectives (Greib et al., 2014). In the case of Lakhnu, the community and IREAD discussed the key issues and activities were directed towards solutions based on a shared understanding. In this context, the participatory approach involved the coupling of capability to action (Thiollent, 2011).

It would thus be reasonable to construe that addressing the research question through IREAD activities would be a direct form of participatory action research. The IREAD participants had a positive role and were simultaneously engaged and involved observers. This is consistent with the participatory action research requirements that the researchers be actively involved with the stakeholders in the research process (Kemmis et al., 2013). This is not a limitation in the objectivity of analysis and in effect provides the IREAD members an opportunity for reflection and alteration of any proposed activities based on the observed incremental results (Kemmis et al., 2013). The research question was considered in the context of a specific village school, the information was mainly qualitative and any inferences drawn had to consider suitable techniques.

Qualitative research involves the collection and use of a variety of empirical materials such as personal experience, case studies, interviews and other processes, which allow observations and help in understanding the views held by individuals on certain topics (Denzin & Lincoln, 2000). This methodology has been in use since the early 1900s and through several stages of evolution is currently oriented towards analysis of concrete cases in their particular contexts (Flick, 1998).

In contrast to most of the quantitative studies analysed in the literature review, qualitative researchers study people phenomena in places where things are

done and use a systematic approach to data acquisition and information assessment on matters that are not entirely quantifiable (Becker, 1986). Qualitative data can support developing an understanding of human behaviour (Guba, 1994) and thus case studies can be used to investigate the reasons for decision making and implementation. Yin (2009) postulates that this approach is useful when the research focuses on the “why” and “how” and there are more variables than particular data points. Case studies involve the review of all available data and complement it with direct observation of the events and interviews with people involved in the events (Yin, 2009). This form of empirical inquiry can investigate a real-life contemporary phenomenon in depth especially when multiple variables are involved over which the investigator has little control (Yin, 2009). In essence, a case study can explain the rationale for the decisions being taken: why they were taken, how they were implemented and with what result (Schramm, 1971). The case study methodology is thus suited to examining the research questions in the context of Lakhnu.

Mapping the research requirements against different research techniques also supports the use of the case study approach. Table 4.1 shows the applicability of the different techniques to the forms and emphasis of the research question. In our case, the quantitative databases from existing research in the literature illustrate the “what” and “how many”, i.e. poor participation and performance of children in rural schools. The unknowns centre on the “why” which suits scrutiny through a case study. In addition, as an IREAD activities based approach to find answers is broadly participative, no specific control on behavioural events is needed.

Table 4.1

Applicability of different research methods

Method	Form of Research Question	Requires Control of Behavioural Events?	Focuses on Contemporary Events?
Experiment	how? why?	yes	Yes
Survey	who, what, where, how- many, how much?	no	yes
Archival Analysis	who, what, where, how- many, how much?	no	yes/no
History	how? why?	no	no
Case Study	how? why?	no	yes

Note: Adapted from *Case Study Research–Design and Methods* by R.K. Yin, 2009, Volume 5, Sage Publications, p. 8. Copyright 2009 by Sage Publications Inc.

Current initiatives, such as the Government’s “Sarva Shiksha Abhiyaan” (SSA), are top-down policy driven programs that target universal education for all children in the age group of 6 to 14 years. The outcomes from the delivery of the various programs have fallen short of expectations, particularly in rural areas, as learning is not improving and less than 40% of the students transition to high school and even of those who do, knowledge levels remain dubious (Juneja, 2010).

Several apparent variables for children not attending school and learning can be considered. Is it just poverty and the need for the children to support their parents in the agricultural fields or is it deeper, wherein the economic benefits of education are not considered meaningful enough? These are the types of questions for which the case study approach is suitable. The literature review already provided some insights. They include parents being largely illiterate themselves, possibly not seeing the benefits of educating their children, especially girls. The immediate requirements of subsistence farming dominate the day-to-day life and there appears to be little alignment between the education provided and skills needed in a local context. Consequently, there seems to be little appreciation of self-worth and potential and

thus an opportunity for developing place consciousness (Waage, 2008). Such a place-conscious stewardship approach centres on making students active learners by giving them knowledge and appreciation of their local area (Waage, 2008). This may be relevant as anecdotally, education benefits in the Lakhnu community are perceived to be principally about getting a job, particularly in the government sector. Education however has wide applicability and can engender better choices from citizens in all domains of life (Spohr, 2003; Duflo, 2001). A case study can explore how barriers restricting education can be broken down and what would make families change their attitudes.

The case study methodology also allowed multiple input data sources to be investigated and applied as evidence. These were used to explore existing phenomena through active participation and observations in the target setting. Characteristics ranging from culture, religion, social constructs and community beliefs together with economic conditions were likely to be amongst those that impact the parents or guardians in their desire to support (or not) their ward going to school. The subjectivity and interpretation of these circumstances complicated the research domain. In such conditions a case study can be a useful research tool (Denzin & Lincoln, 2000).

There is thus a rationale for considering a bottom-up, participatory action research-based methodology framed as a qualitative study. A case study approach is thus proposed as the basis of an empirical inquiry and data are gathered through participatory research performed in conjunction with the activities of IREAD. As the Association is active in the government schools, there is access to the full range of stakeholders and opportunity to collect information about the causal factors impeding the uptake of primary education through qualitative research.

To put the research objectives in perspective, a unit of analysis needs to be defined so as to focus the acquisition of the required data and provide a reference for any analyses. This is done in the following section.

4.3 The Unit of Analysis in the Case Study

The unit of analysis in this case study research was Lakhnu Junior School. This is a government school which enrolls around one hundred students, roughly equally divided by gender, from Year VI to Year VIII. This unit of analysis was a real-life phenomenon and not simply a concept. Hence, the investigation of the research question was based on a real physical case in this study.

It is clear that the unit of analysis influences the starting theoretical propositions and what we hope to learn from the study. In this context, the developed understanding was expected to be related to groups (family situations), organisations (school organisation and the bureaucracy that governs them) and the broader society within the village. Care needs to be taken to distinguish between the substance of the study and the process of implementation of any findings or recommendations generated through the analysis, i.e. how a community-based collaborative model with IREAD was used to facilitate the uptake of primary education as opposed to the effectiveness of such a model (Bickman & Roj, 2000).

The analysis was based on a diverse evidence base of different data types with the focus being not on statistical analysis but a deep understanding of the drivers that in this case result in a child attending school and learning. Statistical methods offer explicit numerical interpretation criteria which will not be applied in this study. As a guide and criteria for interpreting the data, Yin (2009) suggests to identify and address rival explanations in producing the research findings (Yin, 2009, p. 34).

It is expected that the analysis of the data collected will result in the ability to formulate a new theory that describes and explains the barriers to universal primary education and also provides insights about transitioning to a better way of involving children in all levels of primary education. This involved revisiting the data collection phase in specific areas where gaps or additional questions emerged.

Although the researcher's subjectivity will not be eliminated from the process, research conducted with an explicit methodology and following robust ethics procedures should not produce results unduly biased by individual interests

(Thoillent, 2011). As an example, in this case study, the design of the data collection included open-ended interview questions with attention given for them not to be perceived as leading or exhibiting any bias. The researcher was akin to an analyst who observed stakeholder reactions and noted their responses, to arrive at a common understanding of the problems and possible mitigations (Thoillent, 2011).

The rationale of the research design considering a single case and unit of analysis, as compared to several units of analysis, was based on it representing a typical setting for such investigations. Annual Status of Education Reports in India (ASER) are agglomerated by States and Districts within States (ASER, 2005). These reports acknowledge similarities at a District (local) level. It would be reasonable to assume that Lakhnu Junior School would be typical of similar schools in the Hathras District of the State of Uttar Pradesh. As such, the case study findings would have broad applicability across, at a minimum, 450 schools in the same District and most likely across the several thousand schools in the entire State. Potentially this school can also act as a surrogate for other similar government educational institutions throughout the Hindi speaking belt of Northern India where cultural similarities exist.

Within the case study construct it was also recognised that the complexities are multidimensional (culture, religion, social constructs and community beliefs together with economic conditions) which makes having a research hypothesis difficult. In the next section a grounded theory approach is put forward, thereby allowing an evidence-based theory to be developed.

4.4 Developing a Grounded Theory

In social sciences, research is often about theory building or theory testing (Hall, 2004). Epistemologically, theory building methodologies can follow inductive and deductive reasoning. Under the former, a collective is developed through sensible singulars whereas in the latter case the mind is able to move from what one knows to consider complex problems (Spangler, 1986). Qualitative researchers use both theory building approaches (Denzin & Lincoln, 2000). Information derived from observations leads to theories and through a process of deduction we can reject, accept or adapt the hypothesis (Ghauri, 1995). Theory testing is associated more

with quantitative methods such as questionnaires while theory building tends to use less structured techniques such as interviews and observations (Hall, 2004).

The bottom-up approach being proposed here was based on locally relevant data collected during IREAD activities over the studied period from 2011 to 2019. It was assumed that as this multifaceted data was collected and analysed, a central theme or a set of common or repetitive insights may be conceptualised. This was consistent with using a grounded theory approach, wherein the paradigm results from the methodical gathering and analysis of data. The fundamental methodology was thus focused on understanding the common themes emerging from the data (Glaser & Strauss, 1967). This approach was implemented in the Lakhnu case study.

A grounded theory approach relies on an ongoing comparison of the data gathered and the theory starting from data collection (Glaser & Strauss, 1967). Based on the information gleaned and evidence gathered additional cases are selected and new data sources identified. The issue of scientific generalisation from a single case or limited number of cases is considered as arbitrary (Kennedy, 1976). Notwithstanding, the scientific process can be applied and case studies similar to experiments should be generalizable to theoretical proposals (Yin, 2009). The notion of replication logic across cases in such research is considered as a means of validating the data (Yin, 2009). Complementarity of these methodologies has to be considered in this form of study.

Data sources were varied and were collected during the IREAD projects. All interactions with the school, the parents of the children, the broader community and the policy-implementing officials of the state administration, in the pursuit of such projects represented data sources. Some were active, involving interactions with stakeholders while others were passive wherein the research data was based on observations. Evidence was also collected through a recording of field notes, photographs, videos and relevant items linked to the education of the village children. The area of interest was to be directly linked to the village and the educational institutions located there. As far as the IREAD activities were concerned, they fell in two broad categories: one where the organisation was the project proponent and a second wherein it acted as a facilitator and encouraged projects from

other proponents. Further detail is provided in section 4.5 in the context of developing the methodology.

Glaser and Strauss (1967) argued that a theory grounded within an empirical reality can be relevant and be capable of being validated. Eisenhardt (1989) further supported this approach and described building theories through case study work (Eisenhardt, 1989). According to Yin (2009), however, an initial theoretical understanding as part of the case study design phase is necessary in order to look for appropriate evidence (Yin, 2009). This has been developed through an assessment of the current research, identification of gaps and the high grading of key themes and associated parameters impacting on the exclusion of children from schools and education in Lakhnu (Chapter 3, Table 3.12).

In this case, given the research gaps, investigating the root causes of the lack of uptake of education, it would seem appropriate to focus on understanding the common concepts emerging from the field data (Glaser & Strauss, 1967). This bottom-up exploratory approach would aid in understanding the considerations of the investigated community as opposed to the more conventional way of developing it rationally from the top down (Glaser & Strauss, 1967). Inductive reasoning through real-life observations is a good starting point and can be combined with deduction to help forecast or predict. When using grounded theory, the transcription and therefore the interpretation would represent the researcher's individual view, which would include a mix of judgements and intuitive biases which are iterative with the data (Glaser & Strauss, 1967). In this thesis, the inductive assessments based on the case study data sources were expanded through deductive reasoning from analysing the research question to reaching a conclusion. The research methodology must also consider that even such exploratory approaches should have clarity around the purpose of the investigation and criteria to ascertain any findings and conclusions.

Uniquely, the approach through IREAD allowed greater access and collection of more valuable insights building on the existing trust and long-term relationships. This plurality of data sources led to a consistent epistemological position, starting with no predetermined ideas and allowing for a beneficial discourse between the various players with different viewpoints (Thiollent, 2011). The qualitatively

acquired data in this case study literally represented hundreds of hours of interactions, cumulative investigative time in discussing the research question with the various stakeholders and represented post-positivist ideologies which contrasted with more empirically acquired data (Merton, 1957). The approach, however, allowed an appreciation of the nuances of human response and behaviour and the development of an insight, akin to being “in their shoes” insofar that is possible for an external researcher. Any collected research data was inductive and descriptive relying on researcher observations and researcher-subject interactions. The data collected was analysed and used by the researcher to consider the next set of interactions to develop a common set of repetitive insights. Consequently, a conceptual model emerged from the data, distilling the dominant factors impacting the subject of study, through a comparative analysis of the temporal data (Charmaz, 1994). Logically, this should be more meaningful as it is emerged from the data as opposed to being a theoretically generated construct.

The IREAD activities allow capturing the phenomenon under study as all of them are focused around the unit of analysis (Babchuk, 1997), in this case, Lakhnu Junior School. The theory emerges from the data that is collected as opposed to data that the project did not collect (Glaser, 1978, p. 54). Research bias cannot be completely eliminated but should be minimised as the researcher starts with no preconceived hypotheses (Bradley, 1980).

Such a methodological design to collect the data has to consider the logic that links the research questions to the data to be collected. In the next section the case study design is developed centred on the unit of analysis and the investigation built around it.

4.5 The Methodological Approach—Case Study Framework

The case study research process adopted for this investigation involves the five standard phases as outlined by Yin (2009): planning, design, preparation, data collection, analysis and information dissemination. Figure 4.1 outlines the process which begins with a planning phase and the design is a result of an iterative sequence.

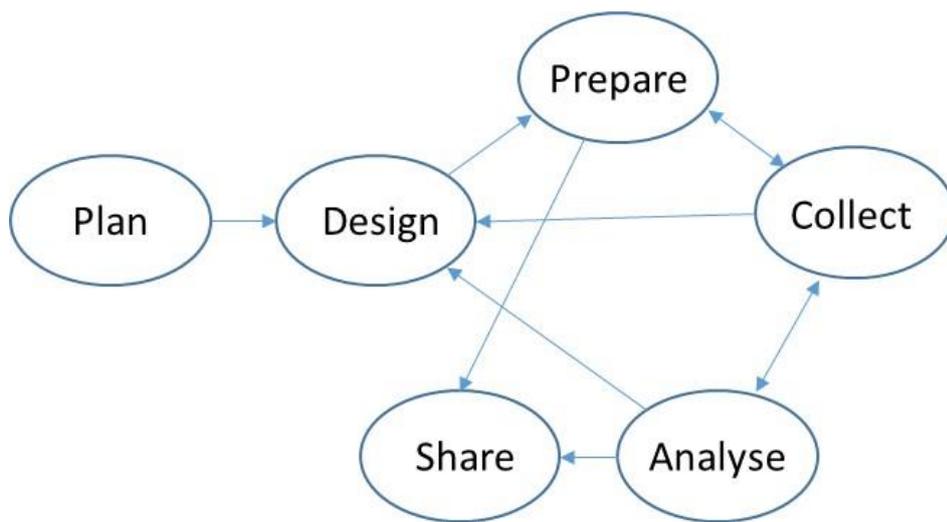


Figure 4.1. The workflow for the case study method. Adapted from *Case Study Research – Design and Methods* by R.K. Yin, 2009, Volume 5, Sage Publications, p. 2. Copyright 2009 by Sage Publications Inc.

The planning phase essentially covers the original literature review on primary education in India which highlighted the need for a qualitative investigation for a deeper understanding of the barriers and opportunities to improve rural disadvantage. An important part of the planning phase is deciding on how to address the research question through the case study approach.

There is no all-inclusive set of options, a cookbook or a codified approach to consider as part of designing a case study (Yin, 2009). The case study also needs to be distinguished from a one-shot quasi-experimental design needing particular research considerations and following a structured approach (Cook, 1979). At the design phase, multiple stakeholder groups need to be identified with appropriate research directions which can help find answers to the research question. This helps elicit the required information and data sources that need to be collected. Part of the design stage is also deciding on the suite of approaches that will be used to collect and analyse the required information. The case study design follows the procedures outlined by Yin (2009) and considers the five key areas: research questions; the propositions (if any); its unit(s) of analysis; the logic linking the data to the propositions; and the criteria for interpreting the findings (Yin, 2009).

In this case study, the data was collected through observations, discussions, interactions and field notes by the researcher while carrying out IREAD activities and facilitated projects over the years 2011–2019. Photographic evidence of infrastructure and other artefacts, such as school equipment, enrolment and attendance sheets, was recorded to facilitate discussions with administration officials. Observations considered school activities over a period of time in order to assess qualitatively a typical day and effort going towards learning. Furthermore, observations around the village during school time were indicative of children's attendance and prompted IREAD discussions with their guardians in that regard. In most cases, observations and notes were subsequently recorded in a diary.

The most significant IREAD facilitated project over the research timeframe was the Curtin University-led Lakhnu Community Sustainable Development Project (LCSDP) directed by Professors Reena Tiwari and John Stephens from the School of Architecture and Built Environment (now School of Design and the Built Environment). Over this period Curtin University staff and students visited the village on five occasions (2011–2016) and carried out a range of collaborative community projects centred on the families and broader community of the children of Lakhnu Junior School. In addition, episodic and targeted government or other group led workshops were organised in line with the overall IREAD objectives. The IREAD facilitated these visits as the local contact by informing and engaging the village community and state administration. The research data thus included relevant personal observations, photographic and information material collected by Curtin students and other participants as part of their project. Thus, the research data set was diverse, consisting of quantitative information, such as attendance and other records, and qualitative interpretation based on value judgements through notifications of personal researcher experiences.

Consistency in data collection and the approach to asking any direct questions, for example, have to be determined (Yin, 2009). Given the nature of the researched village community, conducting formal interviews was not an option. On the other hand, the established presence and relationships between IREAD and the Lakhnu community allow for easy access to stakeholders who are willing to share their thoughts and experience but would be reluctant to participate in a structured

investigation. They would find a strict protocol challenging in terms of their own literacy levels as well as understanding the purpose and benefits from being investigated. There were these and a number of other subtleties that needed to be considered when designing the case study. Figure 4.2 illustrates the process highlighting the iterative aspect that may necessitate additional data collection subject to the analysis and any identified gaps.

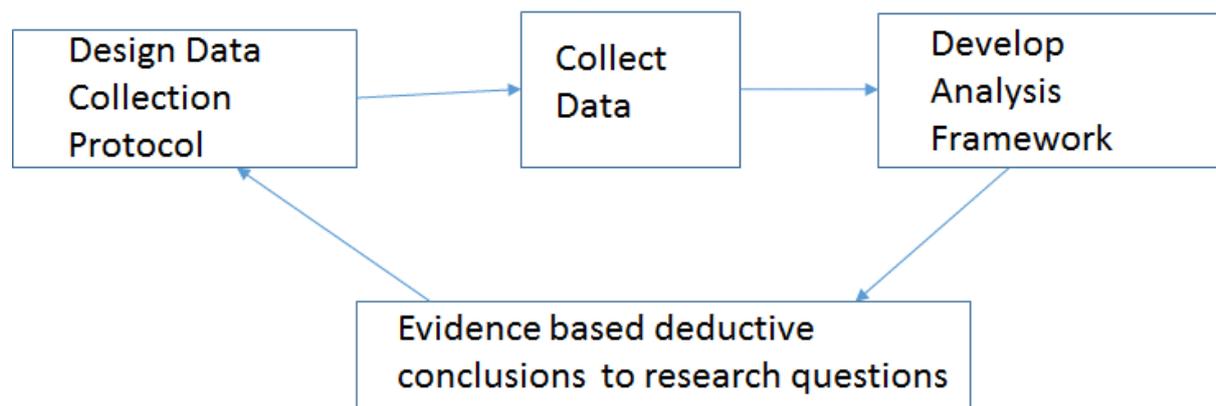


Figure 4.2. Case study method data collection workflow. Adapted from *Case Study Research – Design and Methods* by R.K. Yin, 2009, Volume 5, Sage Publications, p. 57. Copyright 2009 by Sage Publications Inc.

This iterative process was aimed at complementing and enhancing the research as the data was collected and analysed. It was envisaged in the study design options for other techniques, such as interviews, to be considered to validate or enrich the initial analysis. Also, it was expected that the questions to be asked of the stakeholders would evolve and become more specific as a result of the analysis.

The aim of the research was focused on using the activities of a non-resident organisation, such as IREAD to understand and assist in the uptake of primary education in remote Indian villages like Lakhnu. A comprehensive review of the current state of rural education in India was undertaken in Chapter 3. As an illustration, this prior research identified a range of causal factors, such as cost of schooling, proximity to schools and security needs particularly for girls (Siddhu, 2011). Other national level studies used statistical techniques to define enrolment percentages and also rate learning outcomes (ASER, 2016). This narrative review presented a range of opinions and tabled some unanswered or partially answered

questions. These were considered as initial propositions in designing the collection of evidence while retaining the exploratory nature of the study to allow other factors to surface.

The four tests outlined by Yin (2009) to assess the quality of social research are also applied to the design process. They are:

- The construct needs to be valid for the concepts being studied – this would include using multiple sources of evidence and establishing the chain of evidence where possible.
- Internal validity in such exploratory cases may be limited to explanation building (including rival explanations) – possible explanations are being analysed.
- External validity depends on the generalisation of the emergent theory to cover the broader domains of application of the findings – the opportunity to generalise the research findings is present as the phenomenon under investigation is not unique; in fact, there are many similar cases across India – a country where 70 % of the population is still rural, and UP – its most populous state (GOI, Census, 2013).
- Reliability of the data can be ascertained through a modicum of repeatability of the same message emerging, for example, through a temporal data gathering sequence – when there is repetition observed in the insights obtained from the different sources of evidence, the data collection can be considered completed.

The aim of this study was to present the story of primary education in Lakhnu through the perspective of IREAD and in doing so understand the key determinants that affect both the supply and demand for education. Hence, the methodology in this case study used the IREAD observations and other supporting information as the principal data collection mechanism. Interviews, with open-ended questions, were selectively used to refine the conclusions from the initial analysis. While pre-formulated questions provide a framework and structure, they can limit variability of responses (Yin, 2009). Care needs to be taken to avoid a rigid design and allow the

discussions to develop as they lead to an improved understanding of the individual attitudes and beliefs that guide behaviour. This should be accretive to the insights into the key issues as interviews are a form of human interaction where knowledge is developed (Kvale, 1989).

Having considered the types of information to be collected, a framework for the data collection process could be outlined. This process is understandably driven by IREAD activities centred on the unit of analysis.

4.6 Framing the Data Collection

The review of contemporary research in Chapter 3 identified the key stakeholders and their spheres of influence linked to the unit of analysis, Lakhnu Junior School. These ranged from the state administration that determines the funding, the curriculum and the teachers to the guardians of the children themselves. Figure 4.3 maps these key influencers and the areas they control. Given the economic variations, caste system and the social norms within the village construct, the variables impacting the approaches and beliefs of these stakeholders will be different and needed to be recognised. In this case study, all stakeholder interactions occurred through IREAD activities. This is illustrated in Figure 4.3 with the IREAD interactions depicted as the blue rim surrounding the Lakhnu School and the lens through which all interactions with various stakeholders are viewed.

All field work and other information was expected to be collected in a human context, and access considerably aided by the established history of IREAD in the area, not just with the school but also with the community and the administration. The researcher, as a member of IREAD, was personally involved with the data collection. Three principal streams of data were considered—one through IREAD activities directly, the second garnered through the IREAD facilitated projects like the Curtin University Lakhnu Development Projects and the final one through government or other group organised community activities at IREAD's request.

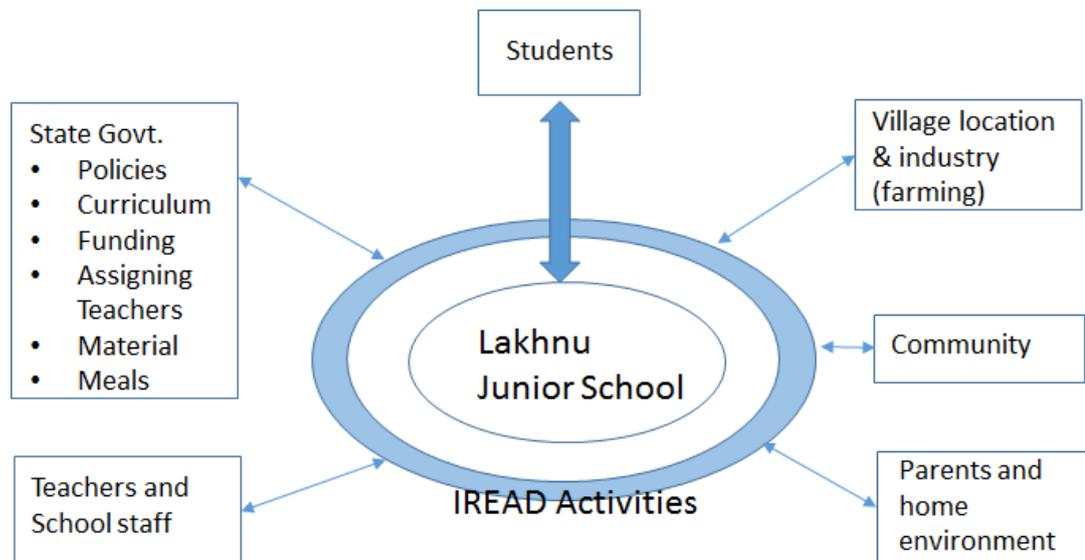


Figure 4.3. Data collection framework. All IREAD activities are depicted through the blue rim linked to Lakhnu Junior School and form the basis for stakeholder interactions and data collection.

The case study collected data on factors impacting education in Lakhnu Junior School over nine years (2011–2019). This data itself was multidimensional and drawn from all three streams outlined above. Care was taken to ensure compliance with all relevant ethics and regulatory requirements in all human interactions. These discussions and conversations were documented as field notes. Factual data about school performance was obtained through the school and other evidence captured is in photographs and videos.

Observations of the school activities over multiple visits were used to assess qualitatively a typical day and the effort going towards learning. This also included comparing quantitative data on enrolment numbers. School teachers were usually available during the IREAD visits and their interactions with the children were apparent. Normally, parents and those willing to participate in the discussions were informed via the school. Key officials were the District Magistrate (senior most officer in the District) and the Basic Shikskha Adhikari (Officer in-charge of Primary Education). Meetings with them could be held in their offices if available. Their schedules were difficult to ascertain ahead of time as they could be called away by other bureaucrats or politicians at a very short notice. The only approach was to physically visit their offices and check. When present, they typically had a long line

of people waiting to communicate with them and can only see each individual for just a few minutes. They were often distracted during the meeting by an attendant coming in with a memo or a phone call. These officials are transferred frequently, sometimes within a nine-month to a one-year period. Hathras is a small town and fairly remote, so officers are also keen to move on and leave for a better location. The research communications with the state administration comprised of diary notes and any formal letters written requesting specific actions by IREAD.

Furthermore, the research data also included relevant evidence collected through the Curtin LSCDP interactions with the local community. These were accretive to the IREAD exchanges in understanding the issues faced in regard to education. All conversations were conducted in Hindi and English except with the parents who are only able to communicate in Hindi. In North India, it is the norm for educated people to use both Hindi and English while conversing. Teachers and other officials are competent in reading and understanding English. While there are limitations of translation, the loss of critical information should be minimal as the researcher is fluent in both Hindi and English.

Figure 4.4 outlines the grounded theory development process using the participatory research mechanism (Glaser & Strauss, 1967). To complement the research findings and validate the theory, semi-structured interviews with key stakeholders were conducted towards the end of the data collection period, in early 2020, thereby constituting a fourth data stream (Sharma, Marinova & Bogueva, 2020). The selection of open-ended guiding questions is refined based on the analysis of the prior data collected through this study. These interviews were conducted with the principal players impacting children's education, namely teachers, parents and state government officials who implement the primary education policies. This methodology is implemented by the researcher as an adjunct to the IREAD activities and seeks a validation or clarification in relation to the proposed theory.

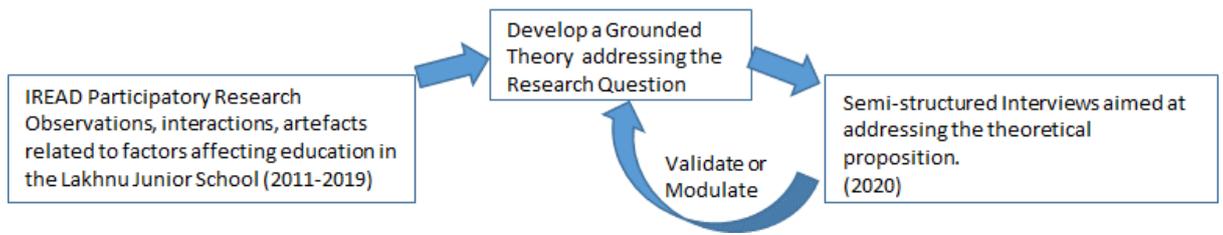


Figure 4.4. Grounded theory building through the participatory research mechanism.

From a process perspective, the approach to conducting the interviews was more formal and subject to ethics and other compliance criteria. Human Research Ethics Approval was received from Curtin University. Information sheets were used to engage with each of the categories of participants. Timing sensitivities were minimal, only school holidays needed to be avoided. The participants were informed about the research intent and the open-ended questions supporting the semi-structured interview. Hindi translations of information forms were available for the parents and community members. Consent was sought and obtained where possible using appropriate consent forms and translations for the parents.

There was some uncertainty on whether the participants would sign the consent forms. While teachers may sign the consent forms, illiterate parents were unlikely to put their thumb print on any document but may verbally authorise the teachers to sign on their behalf. In general, government officers are reluctant to sign anything. This has been the experience of the researcher in getting any form of endorsement on an application whether it be for the school electrification or a request to increase the teaching staff. Nonetheless, copies of the information statements and consent forms were made available to all participants. Children were not specifically queried, but they may have been present in conversations with their teachers or guardians. Information and consent forms provide for such acceptance and have been translated into the local language, Hindi. The information statements and consent forms for teachers, government officials and parents/community are included in Appendix A.

The described methodology can be systematically implemented with observations in given time intervals and interactions following a defined script (Palmer, 1973). However, it is more common to allow flexibility and have the

researcher define the steps (Yin 2011, p. 131). That generally allows for more natural coordination and flow of social interactions. This approach should also help gauge the level of comfort of the community members or parents and their reception of the research interactions. Such a flexible approach has been followed for most part in applying the data collection methodology while a more defined structure can be used for the interviews to validate the findings. Figure 4.5 presents a data collection and analysis flowchart in its totality.

The questions designed for the semi-structured interviews were tailored to each influencing group; however, the list was not exhaustive as the discussion could lead to exploring other relevant areas as well. A sample set covering all three principal stakeholder types is presented in Table 4.2.

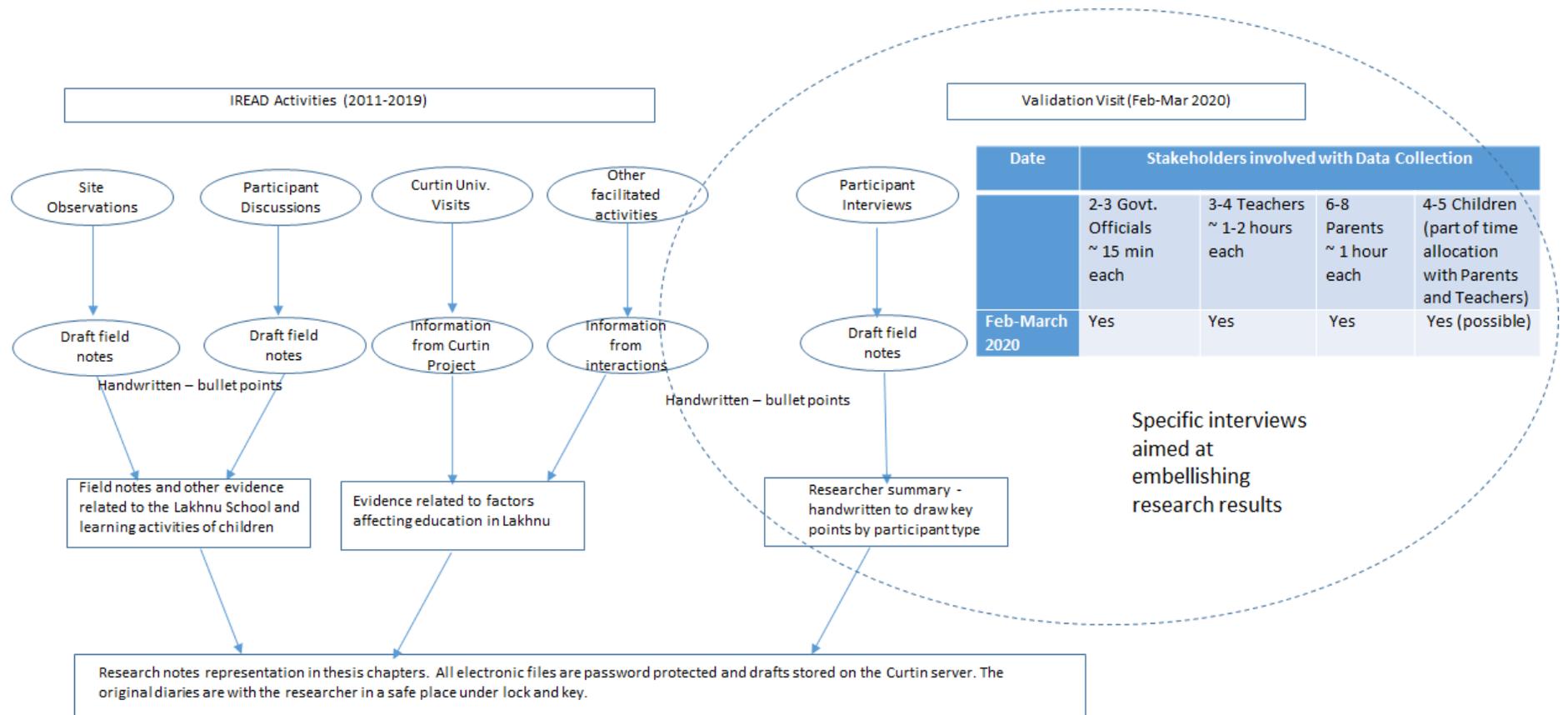


Figure 4.5. Data collection and analysis flowchart

Table 4.2

Sample questions for the three stakeholder types

State Government Administrators at a District level in Hathras.	Parents of Lakhnu Junior School children and other community members.	Teachers and School Staff of Lakhnu Junior school.
<ul style="list-style-type: none"> - What incentives are being given to children to study? - How can standards be improved? - Are all aware of the Govt. initiatives? Are they having an impact? - How do you see the success of Govt. initiatives such as the Sarva Siksha Abhiyaan (SSA)? - How to address shortage of teachers? - Teachers are often assigned to non-teaching tasks? Can this be minimised and if not possible at least rationalised with the harvesting seasons? - Can some flexibility in the curriculum be managed to allow for more time off during harvest times (which may not coincide with school holidays) - How can children have some practical classes on vocational training – cooking, carpentry, masonry, horticulture and farming in the field during the harvesting season? - Can electricity be connected to the Lanknu School? - Can an internet connection be provided? - How can IREAD help with training the teaching staff? With computers? - How can NGO's help? What would you like to see IREAD achieve? 	<ul style="list-style-type: none"> - What is the role of education? - Do you think it is beneficial? - Are all your children enrolled? If not why? Constraints - Why is attendance of children sporadic? - What impacts attendance? Is it linked to the farming work schedule? What are the children who have dropped out doing? - There are examples of village children who have become well educated and have good jobs. What influence do they have? - Do you think all children can have such opportunities? - What aspirations do you have for your children? - What concerns do you have? For boys? For girls? - Can these be met through education? - What can be done to improve retention in the school? - What incentives can be given to children to study? - Are you aware of the Govt. Initiatives? Are they having an impact? - What can be done to encourage children through IREAD? 	<ul style="list-style-type: none"> - Why is the attendance of children sporadic? - What impacts attendance? Is it linked to the farming work schedule? - There are examples of village children who have become well educated and have good jobs. What impacts do these icons have? - Do you think all children can have such opportunities? - What aspirations do you have for your children? - What concerns do you have? For boys? For girls? - Are books, teaching material available on time and in adequate quantity? - Will computers help in bringing new ideas and encourage children? - What are your thoughts regarding the Internet? Would it be useful to have an internet connection during school hours? - What aspirations do the children have? - Do parents want their wards to study? If not all – why not? - What can be done to encourage children? Through IREAD? - How can IREAD help with training of the teaching staff? - Opinions regarding IREAD activities such as visits from Curtin students and associated community projects. - What would you like to see being done and how would you like to participate or contribute to this effort? - Information on other NGOs that have been active in the past or are currently active.

The case study thus combined temporal data on causal factors as determined through IREAD activities with targeted open-ended semi-structured interviews with the key stakeholders to better understand the key parameters triggering the poor learning outcomes. Process controls applied to the storage of project data and its retention and dissemination. The physical field notes and electronic files of all evidence were safely secured. Data was de-identifiable for reports and papers and confidentiality of the stakeholders is maintained.

Fieldwork in this case study had a significant human context. This had to be approached with caution and respect for the stakeholders in each interaction, as outlined in the next section. Access for all fieldwork and other information was considerably aided by the established history of IREAD in the area, not just with the school but also with the community and the administration.

4.7 Approaching the Fieldwork

The case study methodology and the workflow allowed a construct which could be used to acquire and analyse the data associated with the IREAD activities keeping the research question and objectives in focus. Most of the prior research was based on large-scale statistical studies and there was limited in-depth analysis for the poor uptake of primary education and subsequent transition to secondary schooling in rural India (Siddhu, 2011). A single case study could be designed with the unit of analysis being Lakhnu Junior School based on inductive assessments through interviews with questions designed according to the guidance provided by Kvale (1989) and Yin (2009; 2011).

The complexity of undertaking a case study should not be underestimated. As opposed to laboratory experiments or surveys, the information collection procedures are not routine and data cannot be mechanically collected. This makes demands on the researcher's "ego, intellect and emotions" (Yin, 2009, p. 68) as he has to do this himself while trying to rationalise between the data collected and potential theoretical constructs (Yin, 2009). The flow chart is but a guide and the researcher needs to keep an open mind and evaluate the information being collected. With the IREAD history in the area, one can feel reasonably confident that the stakeholder responses will be genuine and reflect reality from their perspective. This is critical as

it would be naïve to assume that a solution can emerge without a true internal root-cause analysis. The researcher also needs to be prepared and be cognisant of the essential constituents for a good investigation. Yin (2009) outlines five points: (i) ask good questions, (ii) be a good listener; (iii) be adaptive and flexible to consider new directions if needed, (iv) have clarity on the research issues and (v) be bereft of preconceived notions (Yin, 2009, p. 69). As data is collected, the evidence must be extracted and reviewed for consistency with the research question and the need for additional evidence or change in nature of the inquiry considered, i.e. flexibility is paramount. The attribute of a good listener is to understand the message and the viewpoint of the source without bias. At all times, the research question must be clearly central to any inquiry (Yin, 2009). In considering these criteria, the IREAD members are well-positioned as informed researchers. They have been working for the betterment of the school and local education and intend to continue even beyond the duration of this case study. The research is being enthusiastically conducted as it may allow better insights and consequently improve chances of achieving enhanced educational outcomes from the finite resources available. Notwithstanding the above, it is important to keep personal biases and opinions in check and be “sensitive and responsive to any contradictory evidence” (Yin, 2009, p. 69)

In the following chapter, the field work settings are defined in detail and the case study described. A rich data set of field notes and supporting evidence is accumulated from the three different source streams and they illuminate the uncertainties related to the research question. In accordance with the grounded theory, clarity should emerge as the data is collected and analysed. This allows a refinement of the questions being considered for the semi-structured interviews and supports testing the theory. The research findings may be generalisable as there are many non-resident Indians who want to contribute towards improving education in India and this (IREAD) methodology may create an additional option for them to consider.

Chapter 5: Case Study Description

5.1 Introduction

The aim of the research was to understand and leverage community-based collaborative relationships that IREAD had developed over the years to evaluate the factors impacting primary education in rural India. Its methodology was to use a case study approach through IREAD using the government-run Lakhnu Junior School as the unit of analysis. This provided an opportunity to focus longitudinally on one village institution temporally and develop an exploratory approach with the same stakeholders. The unit of analysis was a functional school and not simply a concept. Hence, the investigation of the research question was based on a “real-case” in this study.

There was a plethora of reports and papers published which provided insights into a range of causal factors and while governmental efforts are ongoing, educational outcomes remain unsatisfactory in rural India. In this research, no pre-determined theory was hypothesised to investigate the root causes of the poor educational outcomes. Attention was towards influential contextual factors which are expected to be related to family, the village community and institutions like the school and the administrative structure it belongs to. As an illustration, the attributes linked to causation can range from individual, such as endemic poverty to inadequate service delivery from the government (infrastructure, poor quality and often incorrect data being agglomerated through the District Information System for Education or DISE) and extending to the lack of broader community engagement in rural sectors towards demanding better educational services. In shaping the case study, it was recognised that a framework needed to be developed considering the key themes impacting education as elicited from the literature and their applicability to the unit of analysis. These themes were extracted from existing research as being most likely applicable to Lakhnu and were listed in Chapter 3.

All fieldwork for this case study was performed in a social context and thus subject to a range of sensitivities and constraints, alleviated by the trust that IREAD has established. These shape the data collection process and methodology and impact on the information to be extracted from the collected materials (Yin, 2009). The

researcher, as a key member of IREAD, had been personally involved with the data collection and been cognisant of using a convivial approach, as opposed to a more formal one, in all interactions. As detailed in the research methodology (Chapter 4), three principal streams of data were considered: the first through IREAD activities directly; the second garnered through the IREAD-facilitated projects; and the third through government activities in the village conducted at IREAD's behest.

This chapter details the case study data collection which was multifaceted and carried across stakeholders and temporally. In the following sections, the fieldwork and resulting specifics across all data types are detailed. Key interactions with various stakeholders are documented and quantitative information such as school attendance records and demographics presented. The facilitated projects are explained and recorded accounts complement community behaviour data. This accumulated information can then be analysed in light of the research question in the subsequent chapter.

5.2 Fieldwork: Background Information

This field work took place in everyday settings with people in real-life roles (Yin, 2011, p. 109), within the village, at the school and in the offices of the state government officials. The Lakhnu Junior School parents and other community members, particularly those in the lower socio-economic strata have very low levels of formal education and a significant number of them are not able to read or write. Informal settings for discussions as opposed to more formal approaches are better suited to a frank discussion as they appear non-threatening. For genuine responses to be elicited, honest and trusting relationships needed to be created by the researcher. Here, the established presence and trusted relationships between IREAD and the Lakhnu community allowed for access to stakeholders who were willing to share their thoughts and experience.

The field settings in Lakhnu fell into two broad categories: the community comprising of people living in the defined geographical area of the village and an institutional setting of a typical day in the junior school (Anderson-Levitt, 2006). The people living in the village belong to the area and have been there for generations with limited migration from other parts of India or elsewhere. New residents are

largely added through marriage, women, generally from within the same community and from nearby villages. Thus, there is a commonality of community systems as it does not include a largely unrelated group of people despite caste and religious differences. These field settings can also present cultural and language barriers for researchers. Fortunately, these are less problematic as being ethnically Indian and from the same state, I can communicate fluently keeping in mind the various cultural sensitivities. The amount of time spent in the field can vary considerably from several days to a few years (Yin, 2011). This depends on the events or projects planned, the specific interests being pursued or simply determined by available resources. The visits have varied from a few days to two weeks at a time with the village and school being visited on the average twice a year.

In this case study, the data was collected primarily through observations and field notes using separate sources. These included regular IREAD activities over nine years (2011–2019), the Curtin University Lakhnu Sustainable Development Project led by Professors Reena Tiwari and John Stephens from the School of Design and the Built Environment with field interactions over five years (2011–2016) and episodic activities such as a targeted government led workshop facilitated through IREAD in 2016. In addition, semi-structured interviews were conducted in March 2020 to deepen and validate some of the research analysis and theory. The research data included factual information such as attendance and enrolment sheets, notes on what was seen around the village and the school classrooms and feedback from government officials on the representations made by IREAD in its attempt to improve the educational environment. Photographs allowed the piecing of the story and to an extent indicated progress, especially related to infrastructure. Observations around the village were indicative of children not in school and prompted IREAD discussions with their guardians in that regard. Normally observations and notes were recorded in a diary subsequently. These data sources and the associated information are summarised in Figure 5.1.

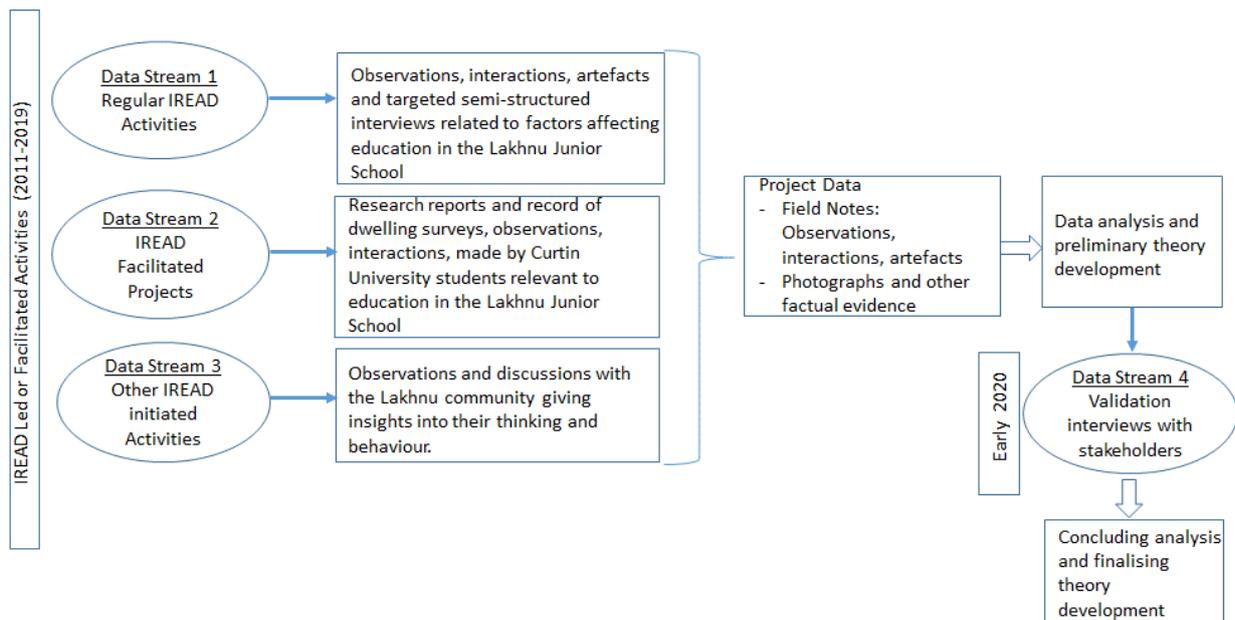


Figure 5.1. Case study data sources and information types.

The IREAD relationships, engendering trust with the local community had been developed over years. Care had been taken to remain focused on educational matters and improve the school facilities and not engaging in matters of local politics as they can be divisive. Listening to the local community issues and not rushing into solutions have been a valuable lessons learnt from the initial interactions. Often there was a deeper reason for a situation or problem to persist and adequate time was needed to appreciate the undying causes. This allowed targeted representation of the school and village educational concerns with the state administration and over the years tangible benefits have resulted; school classroom benches; electricity connection, boundary wall and gate construction, school science laboratory and adequate teacher staffing being some principal examples. The Association's image and that of its members is one of general well-wishers for the village who have over a period of time carried out activities that have benefited the community.

This trust was leveraged for the Curtin University projects with a large number of students and teaching staff. The results were gratifying, with the local people willingly providing access to their homes and sharing aspects of their daily life. Given the level of poverty in the area, requests for financial help and other material support have often been made. These have been handled consistently with a clear message that the aim is not to provide aid and hand-outs but to facilitate the

people helping themselves. All project materials and labour were sourced locally, an aspect which also allowed some funds to flow back into the community.

The ongoing activities of IREAD also provide the motivation to consider this case study as a model for desiring non-residents wanting to contribute back to their country of origin. A unique approach which may be replicable can result and provide a sustainable pathway for those who can devote a few days or weeks of their time annually but are not able to relocate and live in the area to which they are trying to contribute.

5.3 Fieldwork: Applying the Methodology

Participant observation has a long history in anthropology and sociology (Yin 2011, p. 121, Anderson-Levitt 2006). Four variants have been considered to distinguish between participating and observing: (i) being a participant only, (ii) being a participant who observes, (iii) being an observer who participates and (iv) being an observer only (Yin, 2011, p. 122; Schwartz and Schwartz, 1955). In this case study, as supported by the data framework in Figure 5.1, the essence is one of a participant-observer with varying granularity between the options (ii) and (iii) above.

The research data accumulation methodology was explained and rationalised in Chapter 4. Apart from the interviews, all data related to Lakhnu Junior School is collected through the streams linked to IREAD. It is recognised that the data flowchart, as illustrated in Figure 4.5, is a guide and the researcher needs to evaluate the documents to gauge the veracity of the information and seek additional input as necessary (Yin, 2009). It is likely that in an informal and convivial environment that has been created by IREAD through the years, various stakeholder responses may be open and not nuanced to the point of being ambiguous. Notwithstanding this, a flexible line of inquiry and a good understanding of the local vernacular is paramount. Personal biases and opinions needed to be kept in check and the researcher required to be “sensitive and responsive to any contradictory evidence” (Yin, 2009, p. 69).

Data collection instruments for participant-observers are typically without well-defined metrics of measurement. They are comprised largely of field notes (in

all forms) which acted as a record of what the researcher has himself measured. These typically did not provide a hard metric to distinguish between what was noteworthy and important or not, it was entirely in the judgement of the researcher (Yin, 2011, p. 122). Limitations and constraints can be any cognitive bias held by the researcher or their ability to recall the nuances of a conversation or expression of the individual. Personal attributes and social background can also matter in creating some filters which can bias the interpretations. In this case study, the researcher is more aligned with the observation sphere due to ethnic and local ties despite being an expatriate. While this should minimise the biases, it is unlikely to eliminate them. Some rules have been proposed generating a participant observer's creed (Yin, 2011, p. 125). These included focusing on listening, making good mental records, not having pre-suppositions and having confidence that eventually patterns addressing the research question will emerge.

The key stakeholder groups from the above analysis thus comprises of the educational policy making/implementing officials, the school teachers, the parents of the children, the children themselves and the broader village community. The influence of these stakeholders is critical to a child attending Lakhnu Junior School and learning.

- Parents: For primary school children, parents take the decisions to send a child to school. While the policy framework mandates that all children between the ages of 6 and 14 years be enrolled in a school, parents determine where and monitor/influence the child's attendance. They also enact the broader community influences (related to gender, religion and cultural factors) on the child which in certain cases can have significant effects;
- Teachers: They make the school an interesting and attractive place for children to attend. Their motivation, interest, skills and availability all directly impact the learning outcomes of the children;
- Policy makers and implementers: Compulsory enrolment, regular provision of wholesome midday meals are policy enablers for children to attend primary school. This group represents the state administration charged with implementation of all educational policies including provision of appropriate infrastructure, budgets and staff. They are also charged with monitoring the

service delivery and collection of data to assess performance through the district information systems.

These stakeholders are critical demand and supply determinants. Collecting data would thus include interacting with and observing them in their habitat in an atmosphere of trust wherein they can go about their business as normal.

5.4 Data Collection: IREAD Activities (Stream 1)

The IREAD charter and the rules of the Association state that the principal objective is to “promote initiatives for the development of rural schools in India” (IREAD incorporation rules as filed with the administering department, DMIRS, Government of Western Australia). A target school for the activities has been Lakhnu Junior School and IREAD members have been visiting this government school, catering to the most disadvantaged, since 2008 (<http://www.ireadonline.net>). For the purpose of this research, the period of 2011–2019 is analysed.

The initial years, from 2008–2010, were exploratory to an extent and the continuity of those visits was used to establish the IREAD strategy. At that time, it was realised that the heritage old school building seemed to offer opportunities for vocational skill development if it could be restored. While canvassing the community through discussions with influential people in the village, including the village Pradhan (head), a broad measure of support was expressed. The building could potentially be converted to a vocational centre, with classes for men covering construction trades, whereas women could be upskilled in local handicrafts and food products which could have broad market appeal.

As an analogue, the Pardada Pardadi Trust established in 2000 offered a model for such a vocational training aspiration (<https://education4change.org>, 2019). This Trust was promoted by a non-resident American of Indian ethnicity who grew up in that area of Western UP. The school was originally designed as a model to address the issues of gender bias and poverty and focused on the girl-child. Free education would be provided to girls coming from poor households and additional vocational skills be imparted so that they could earn for themselves after completing their education. It took the Founder almost a decade of continuous interaction with

the community to develop the requisite level of trust for families to agree to send their daughters to such a school. The Trust actually guaranteed each girl a job working either in the school itself or one of their supporting organisations. These included local call-centre operators and other higher technology precision equipment manufacturers who were looking at suitable candidates through their corporate social responsibility program. The school was then built and a daily financial incentive provided to encourage attendance (personal discussion with Sam Singh, Founder).

In 2010, IREAD hired the services of an architect from the Ansal School of Architecture in Gurgaon, India who made two trips to the site to survey the building and put together plans for rehabilitating it. The state administration was consulted as well but there was little interest in restoring the old building for any purpose. Unfortunately, the cost of restoring the building was very high (over AUD 100,000 in 2011) and there was no organisational structure that could maintain and manage it even if restoration were to be funded.

The priority of this activity was lowered and the IREAD strategy developed to do the following:

1. Support Lakhnu Junior School by improving its facilities and teaching through the following:
 - a. Direct support with books, sports gear, and exercise kits;
 - b. Direct supply of computers and laptops as teaching aids;
 - c. Informally represent issues raised by teachers and parents or observed directly with the state administration to improve the infrastructure – e.g. classroom benches, adequate teaching staff, electricity connection, boundary wall, and library. The representation is deemed as being informal as IREAD has no formal role in India's education system but acts as a voluntary interested party akin to a NGO;
 - d. Support through hiring specialist staff directly on a short-term basis to familiarise children with computers and teach word processing and simple spreadsheets;
 - e. Consider applicability of other initiatives and/or educational products as teaching aids.

2. Develop awareness on health and hygiene issues with diagnostic camps for eye testing and vaccine support.
3. Encourage children to study and attend school regularly.
 - a. Prize distributions for children who perform well at school. Each year prizes are given to students, both boys and girls, studying in Year V and VIII, who stood 1st and 2nd in their exams in the previous session.
 - b. Discuss with parents the importance of continued education and encourage them to send their wards to school.
4. Engage with and honour parents, teachers and other community members. Felicitate them in an open forum with speeches and small gifts.
5. Raise the brand of the school and visibility of the village by providing a conduit to reach other resources in the country and outside. This could, as an illustration, include facilitating visits by external parties related to education and development and providing computer education for the children.
6. Consider community issues that may impact education and liaise with the State authorities to get them actioned.
7. Research successful poverty alleviation and employment generation schemes and consider their applicability to the village particularly for the parents of the children in the school.

Several health camps were held and the prize distributions have become an annual feature which has now been continuing over a decade. Table 5.1 below lists the IREAD visits made and the key activities undertaken.

Table 5.1

IREAD: Summary of field visits and data collection/ implementation activities

Period	Principal Activities	Comments
Feb 6-7, 2011	Regular school and village visit in line with IREAD objectives. Prize distribution.	Evaluate options for Curtin Project. Consult with Basic Shiksha Adhikari (BSA) on old school building utilisation.
Aug 28-29, 2011	Village visit to discuss the Curtin Projects and gain acceptance. Visit the State administration to inform about the Curtin Projects and follow up on school infrastructure needs.	Assess and discuss logistical and security support for overseas visitors with District Magistrate (DM).
Nov 15-26, 2011	Arrangements for the Curtin visit # 1. Meeting with the administration, community and school in line with IREAD objectives. Project launch program and function to introduce the Curtin Project.	District Management and State Police support for security of visitors. Organise their visit to the village.
Mar 27-28, 2012	Regular school and village visit in line with IREAD objectives. Prize distribution.	DM, BSA visits for representation. Deliver and discuss Curtin Project report.
Nov 1-6, 2012	Arrangements for the Curtin visit # 2. Meeting with the administration, community and school in line with IREAD objectives.	State support as before for overseas visitors.
April 1-2, 2013	Regular school and village visit in line with IREAD objectives. Prize distribution.	DM, BSA visits for representation. Deliver and discuss Curtin Project report. Approval for site for Edu-play for the State.
Dec 4-5, 2013	Regular school and village visit in line with IREAD objectives.	DM, BSA visits for representation. Discuss setting for the next Curtin visit.
Feb 8-14, 2014	Arrangements for the Curtin visit # 3. Coordination with local labour for Edu-Play construction. Meeting with the administration, community and school in line with IREAD objectives. Prize distribution.	State support as before for overseas visitors.
Nov 9-10, 2014	Regular school and village visit in line with IREAD objectives.	State validation of communal land selected for toilets as legally appropriate.

Period	Principal Activities	Comments
Feb 5-13, 2015	Arrangements for the Curtin visit # 4. Coordination with local labour for toilet construction Meeting with the administration, community and school in line with IREAD objectives. Prize distribution and construction of private school toilets.	State support as before for overseas visitors.
Jan 6-7, 2016	Regular school and village visit in line with IREAD objectives. Prize distribution.	DM, BSA visits for representation.
Sep 16, 2016	Special visit to interview computer teachers and prepare for Curtin visit.	Discuss setting for the next Curtin visit with DM.
Nov 29-Dec 6, 2016	Arrangements for the Curtin visit # 5. Coordinate the state government CLTS scheme launch. Meeting with the administration, community and school in line with IREAD objectives.	Coordination with local leadership (village head) and community members for addressing toilet audit concerns.
Feb 22-23, 2017	Regular school and village visit in line with IREAD objectives. Prize distribution.	DM, BSA visits for representation.
May 8-9, 2018	Regular school and village visit in line with IREAD objectives. Prize distribution.	Investigate background on cooperatives and understanding the issues.
Mar 4-5, 2019	Arrangements for visit by Prof Sastry (Cooperative Founder in Southern India) Regular school and village visit in line with IREAD objectives. Prize distribution.	Discussion on formation cooperatives and benefits. Potential for local people to visit Southern India villages.
Mar 3-4, 2020	Regular school and village visit in line with IREAD objectives. Prize distribution, existing laptop refresh process and distribution of two new educational tablets with literacy and numeracy Apps in English and Hindi. For the case study, the thesis information was tabled and consent sought for the semi-structured interviews with the stakeholders.	All stakeholders (DM, BSA, parents and teachers) shared their views. However, only the teachers, through a representative, agreed to sign the consent form. This was not unexpected as parents being largely illiterate are reluctant and government officials do not sign any such documents.

5.4.1 IREAD Stakeholder Inputs: Government Officials

All IREAD activities have been linked to Lakhnu Junior School and over the years marked progress has been seen in terms of the available resources being directed towards teaching. During the early years, there were no benches for the students who had to sit on woven floor mats. There were two teachers, including the principal, for children in three classrooms for Years VI, VII and VIII. Furthermore, there was no electricity and the toilets, while constructed, were always locked and not functional. The boundary wall and gate were broken and while the village had been electrified, the school had no power.

A lot of positive changes were implemented through IREAD direct activities and representation. This informal representation brings issues in the school to the forefront of the administration through educated interested people, namely IREAD members, who generally are able to obtain an audience with the administrators. The district has over 400 schools and given the short tenures of the officials, they are rarely able to visit all the schools to personally assess the needs. Normally, the village Pradhan (head) or the Village Education Committee/School Management Committee would be charged with bringing such grievances to the District Offices but that is not happening for Lakhnu Junior School. The classrooms are now better equipped with benches (since 2011), two additional teachers have been transferred (in 2018), the school has power (since 2017) and computers are being used to support teaching. A dedicated computer teacher was hired as a consultant for two years (2016–2018) but after she left following her marriage, no suitable replacement has been found. These changes in themselves are not measures of improved outcomes of learning but are key enablers which can make a significant difference.

Government policies are implemented through the state bureaucracy. The state of UP has a rich bureaucratic legacy which remains coveted to-date as being the most populous state in India, it is critical in national politics, thereby providing the bureaucrats with significant influence. Of the fourteen Prime Ministers, eight have had their constituencies in UP including Pt Jawaharlal Nehru, India's first PM. The UP bureaucracy was considered as an example of his vision (Frankel, 2005). It has been observed that UP bureaucracy views legalism as being paramount and are not as

concerned about outcomes. This makes them more procedural and less flexible in their approach to policy implementation and results measurements (Mangla, 2013).

The hierarchy in the district administration follows a matrix organisation wherein the various functional heads, such as the police superintendent or education in charge, report upwards within their departmental structures but also to the District Magistrate (DM). The DM role is the most senior and is responsible for all matters of the state. For primary education, the key state administration officials are the DM and the Basic Shiksha Adhikari (Officer in-charge of Primary Education). As discussed in section 4.6, it is hard to secure firm appointments with these officers as their schedules are determined by other more senior bureaucrats, the politicians and any unexpected events that may occur in the District. So far, IREAD has been successful in meeting with them during each visit, probably because we are educated out of country visitors. As they are transferred frequently, the background has to be repeated each time, another reason for stating the reasons for your visit in writing. This lack of continuity makes it difficult even for the most conscientious officer to make a change and see its effects through.

Taking the local school issues up the chain to the state administration has helped raise the visibility (and prioritise the issues) of this school in the eyes of the district administration and directed the extra resources required. As a principle, IREAD has submitted all requests and reports of its activities in writing to the DM during each meeting. The impact of writing “as a form of everyday state action” has been considered as a modality which can influence the poor either positive or negatively (Gupta, 2012, p. 141). Bureaucracies are a mechanism for policy implementation, wherein a paper trail can serve both as a facilitator or detractor (Gupta, 2012, p. 143). The creation of a file, as a record of this paper trail and in the Indian system, becomes a central repository of all information pertaining to the matter. Any document not in the file does not exist, seems to be the mantra (Chatterjee, 1998). In cases, where the officers are transferred frequently, the decisions of the incumbents are based on past deliberations recorded in the file and changes are rarely made, particularly if it is required overriding a previously expressed negative sentiment (Gupta, 2012, p. 147). So, if the majority of action is perpetuated through writing, one can easily see how illiterate and daily wage workers

will be severely hampered in being able to represent their woes and be dependent on others to represent them. Oral complaints are not of any use and ironical as it may be, an educated well-spoken person with a formal letter of request can get an audience and possibly initiate action faster on behalf of the truly needy. As a form of validation, it would be reasonable to construe that the IREAD representations through letters, which are a part of the project data set, have seen success even in the face of changing administrators.

An analogue exists between the state of government schools and health centres. The village has a Yunani (traditional medicine) clinic. In all but one of the IREAD visits, the clinic was closed. During the 2015 visit, the clinic was open and the practitioner inside relayed his story. He was from Basti, a town in Eastern UP very far Lakhnu. He had apparently secured the government job through a payment of INR 150,000/- (AUD 3,000) and accepted the post in Lakhnu. However, he had no desire to be here and wanted to return to a location closer to his home. His efforts were primarily aimed at appealing to the politicians and officials and was looking to secure a mobile handset from IREAD as his was not functional. He must have been successful as the clinic has been found locked in subsequent visits. This is but one example of how while the policy caters for a health official, the implementation is problematic and the service is not delivered as the clinic remains closed.

As an illustration of the benefits of the IREAD representation to the district administration is the electricity connection to Lakhnu Junior School. The village itself was electrified in the early 2000's but no wires were drawn from the nearest pole, located approximately 300 metres away, to the school at that stage. The reason was that the budget for the school electrification came from a different department. When IREAD raised the issue with the Principal in 2008, his response was that electricity is not essential as the children only attend during daylight hours. However, with the introduction of computers, electricity became an imperative as otherwise the laptop battery would run out limiting their usage. In 2016, IREAD raised the issue with the DM who asked the electricity department engineer and the BSA to consider it. A series of forms were provided and were completed by the Principal, but it still took many months for a budget to be allocated by the BSA and only then was the electricity connection completed.

In the following sections, the discussions with the district administration officials, the DM, the Superintendent of Police and the Education Officers (BSA and their team) are documented. These represent their views offered informally.

Notes from Interactions with Various District Magistrates (DMs) over the Research Period.

Under the Sarva Shiksha Abhiyan (SSA) or “education for all” educational initiative, hundreds of primary schools have been built but the model is not successfully achieving the outcomes as we see from the statistics. There are too many schools and the administration has limited ability to monitor them. This means that teachers are rarely held accountable for their professional conduct (Bajpai & Sachs, 2011; Banerjee & Duflo, 2012).

Some very fundamental changes occurred after the introduction of the SSA and the Right to Education (RTE) legislation. Unlinked to this, but material to the outcome, is that following the opening up of the Indian economy in the 1990s, the country’s GDP has grown steadily from between 2 to 3% pre-liberalisation to the 6 to 7% we see now. The amount of wealth has increased and the country has seen real wage growth. Commensurate with all this, government pay scales have advanced and public servants now enjoy competitive wages. Government school teachers’ salaries are now attractive with monthly emoluments being upwards of INR 40,000/month (AUD 800) plus other benefits. Agrarian rates of income growth have been significantly lower as food inflation has been contained primarily through import policies. This has created a significant gap between the income levels of government employees compared to the average farmer.

This is a significant change from the past wherein a village school teacher was a local resident and earned similar levels to the parents of his pupils. The teacher’s children also studied in the village school. Now, because of this relatively new-found affluence, most teachers have migrated out of the village to the nearby town. Most now live in Hathras and their children study in the town schools. The Hathras District has 474 gram panchayats (or local governments presenting a large village or an agglomeration of smaller villages) over an area of 1800 km². Depending on the school you are assigned to, some teachers do not want to do the

daily 20 to 30 km commute and find creative means of dealing with this issue. Some have established informal (and illegal) arrangements with the ABSA (Assistant Basic Shiksha Adhikari), their supervisor so that they do not go and are warned in advance if inspections are planned. This allows them to run alternative businesses or do private tutoring to grow their income. Some, particularly women-teachers, create situations that cause them to be suspended at 50% of pay. The proceedings continue for years and often after gaps of eight to ten years they are reinstated with emoluments for the period they were suspended. Clearly not all teachers do this, but enough do so to make it noticeable. No matter what the technique, the result is that teachers are not present and education suffers.

The government administration has limited options as they cannot fire employees and do not have the capacity to monitor all. For District Magistrates to raise such matters formally to their seniors in the State Government is tantamount to admitting failure; so it does not happen. Hiring more teachers is contingent on State policies and takes time. Recognising the shortfall, the concept of para-teachers has been instituted. These teachers are called Shiksha Mitras (Friends of Education) and are hired as contractors with salaries of around INR 3,000-4,000 (AUD 60 -80) per month. Despite the ten times difference, aspiring teachers apply for the Shiksha Mitra positions believing that it would help them eventually secure a permanent job. The same differential can be seen in private school salaries as well; the teachers at Deeksha School have similar earnings to the Shiksha Mitras.

By comparison, the system at the level of high school and inter-college (Years IX to XII) works more efficiently. There are far fewer schools, better staffed and accountability can be maintained. However, if the feedstock of knowledge from the primary and junior schools is of poor quality, how can the same be rectified at a high school level?

Different DM's have acknowledged this state and admitted that the system is functioning because there are still a reasonable number of teachers who are committed to their jobs. Unfortunately, they are also form the most accessible group of educated state employees to do other tasks which are episodic, such as the national census, voting registration camps and other similar activities. This further reduces the

availability of the teachers in school. In the village schools all data from attendance to teacher presence is collected manually and is not easily collated or interrogated. There is a plan to get these all online but the process will take time. Some model or “smart” schools have been suitably equipped in the State and if this is successful, the approach will eventually be rolled out to all schools.

Discussions with ADM’s (Assistant District Magistrates) were not as revealing. Normally these people are older, have been promoted to the administration service and belong to the same area. The DM’s are a much more mobile cadre and can be posted anywhere in a State or the Centre. For the ADM’s, the state of the village is something they have seen for years and they did not seem particularly concerned about the systemic issues occurring.

Notes from Interactions with the Superintendent of Police (SP).

While not directly connected to education, these officers travel widely across the district and have insights on the community behaviour and priorities. The society is fragmented and polarised along religion and caste lines in that order. While discrimination is prohibited under law, the practices continue and people of the same social cohort tend to behave in similar ways. While this may be less evident in the cities, in rural areas it remains prevalent.

Rich and influential people are generally better educated and able to represent their cases to the administration. As the poor often depend on them for daily work, they are in a way “indebted” and often unable to speak. This is changing to a certain extent as some of the younger members of the family are moving away and earning in the cities. They see life differently and are less subservient than their family members who have stayed in the village. The average villager in the lower social-economic cadre has very limited ability to think long-term and is focused literally on where the next meal is going to come from. Priorities and spending behaviours are often dictated by the social and cultural systems requiring unmanageable levels of spend for weddings and festivals. This is frequently funded through debt taken from a local moneylender of an upper caste at a high rate of interest.

The police are understaffed and underpaid. This leads to a level of corruption that is hard to manage. A lot of effort goes towards providing security to politicians and safeguarding their wellbeing. This limits the resources further and priorities have to be set continuously, generally driven by preventing communal activism.

It will take a generation before extreme poverty can be eliminated, significant social change occurs and these social customs lose their rigidity. Behaviour enculturated over a lifetime is difficult to change and only the younger people who become educated and can see beyond their parents' vision can bring meaningful change. That said, the incumbents in power try and keep the systems static.

Notes from interactions with: Basic Siksha Adkhar and Education Officials over the Research Period.

This stakeholder group was not as responsive in sharing facts or suggesting that the problem needed fixing. They acknowledged being short-staffed and having tasks not related to education assigned to them, which further diluted their already meagre resources. With 683 villages and around 500 primary schools (one per gram panchayat or local government seat), there were just too many to manage. Under the current schemes they had to concentrate on certain villages which had been designated Lohia Grams due to political reasons by the party in power in 2012 (Shukla, 2013). Anecdotally, these selections were made based on a higher percentage of lower caste residents, who were generally affiliated with the incumbent political party. Lakhnu was not one of the selected villages and did not benefit from this scheme.

The approach taken by IREAD to representations with the district administration was top-down by always going through the DM. With the DM's support, the BSA and his team were willing to help on specific causes and assisted in getting the electricity connection completed and the boundary wall partially completed.

Reflecting back to Table 3.12, the officials corroborate factors related to policy and administration that contribute to poor educational outcomes hold true in

Lakhnu. There is little governance capacity; corruption and nepotism are endemic; and funding shortfalls prevent adequate service delivery.

5.4.2 IREAD Stakeholder Inputs: Teachers

It has been revealing to see the staffing levels of the school. For three classes, the sanctioned number of teachers should be three with the administrative duties managed by the Principal who could also function as a substitute teacher. For several years the school functioned with one teacher and the Principal supported by a Class IV employee. This cadre of employees is the lowest in the government scale carrying out duties of a guard, telephone attendant and file runner. It is unclear why such a person would be assigned to a local school where such a role is not required. One can only guess that he wanted to be in the area for personal reasons and managed to get either a politician or bureaucrat to post him accordingly. The Principal did not seem to get involved with the teaching, so a lot of the time the one teacher took classes in rotation while the children from the other classes played outside.

Teachers were responsive and shared information over a period of time as they felt comfortable with the role IREAD was playing and the genuine intention to help the school and children. A very important point raised was that there were just not enough teachers in the state system, thus necessitating the use of para-teachers. Previously assigned teachers had been transferred and now they were down to just two, including the Principal who had to manage the administration of the school as well. Due to this shortage, the Class IV employee who had undergone (or would undergo) no teacher training acted as a surrogate teacher. In addition, the BSA often assigns teachers other tasks where educated people are needed for administrative work, thus increasing non-teaching hours away from the school, further restricting teaching and learning. The Principal confirmed that he is overloaded with reporting duties as there is a vast number of forms to be filled and submitted for the DISE database. He was close to retirement and while not proactive is supportive of IREAD activities.

Two different models for providing midday meals were implemented over the past few years. The midday meals were the responsibility of the teachers up to 2017. Until 2017, there were three cooks who would come and cook meals in two

anterooms constructed for this purpose near the school. The raw materials would be procured by the teachers and the food cooked fresh on site. Feedback was that this took time and sometimes personal funds as the grants meant to fund the meals were not always available on time. The teachers did not receive any transportation allowance for this and had to manage using their own motorcycles (which is the common mode of transport). In addition, the salaries of the cooks were sometimes delayed, so the associated follow-up and administrative matters also took time. Subsequent to 2017, the State Government outsourced the provision of meals to a private supplier. Notionally, the teachers can complain if there are quality or delivery issues, but in general no one does. If there are any issues, they simply send the children home for lunch and hence lose control over their return to continue classes.

All teachers state that they have responsibilities but little enforcement authority. Student absenteeism levels are high and they have no ability to enforce discipline as any kind of pressure on the child, physical or mental, is prohibited. They can only appeal to the parents and children, a task which is rarely pursued vigorously. The SSA norms call for children to be registered in age-appropriate classes and a fourteen-year-old seeking enrolment has to be admitted in Year VIII irrespective of the level of knowledge. According to SSA rules, the curriculum has to be completed each year, irrespective of whether the children have absorbed the material or not. Thus, each class has vastly varying levels of knowledge and it makes the task very difficult for the teachers.

School infrastructure budgets are limited. The boundary wall remains broken and as a result animals wander in. The school area is very large (800 metres by 200 meters) and because of the old school building, youth from Lakhnu and other villages often come and play or just amble around the ruins. Any attempts to keep the school grounds clean are wasted as these folks often leave litter behind. Beautification attempts by planting flowers and trees are not worthwhile as animals roam freely inside and would devour or trample them. A safai karamchari (cleaner) has been appointed by the government to keep the village clean and that should include the school as well. However, this person is seldom available. He typically shows up when there are any official visits to the village. Anecdotally, he is known to hire daily wage cleaners to do his job when absolutely essential as being a

government employee he is paid very well and can afford to hire daily-wage labourers. In any case, the teachers have no ability to influence his behaviour.

The school session commences in July, but books are often late and not received until September. Books are for students based on the numbers enrolled and no sets are provided for the teachers. Currently they manage by using old books from past students some of whom leave their sets behind on quitting the school or progressing to the next class. The lack of electricity connection was not viewed as a limitation as in the words of the Principal, “the school functions only during daylight hours”.

Absenteeism levels are typically around 20–30 % but are significantly higher when potatoes are being harvested or chillies being picked. Under SSA, teachers are obliged to follow up on delinquent students by visiting their homes and talking to their parents. While they say they do it, it is another impost on their already limited time and resources.

The teachers expressed that they were generally blamed by parents for their children not being interested in studies. At the same time, the parents are often not involved with the school issues and do not raise them through the sanctioned forums, such as the School Management Committee. The broader community does not afford a high priority to education. Similarly, the BSA and other officials do not have enough time to understand and address the problems and are only perfunctorily engaged. It is hard at their level to raise concerns as someone senior within the District administration may take umbrage and then transfer them or otherwise assign them to more remote locations. In essence, they keep quiet and nothing changes. They were appreciative of IREAD discussing these matters with the DM, especially about the understaffing as it has resulted in action being taken.

Lakhnu is a microcosm of the rural areas in state of UP and while there are no Scheduled Tribes (ST) in the area, many residents are classified as belonging to a Scheduled Caste or SC (Jatavs, Dhobi, Kori, Harijan) and Other Backward Class or OBC (Kumhar, Dhimar, Bhagel, Teli, Yadav). There is thus a complex web of hierarchies and behaviours. While there are no restrictions on anyone attending the

school, most teachers acknowledged that only the economically challenged and poorest of the poor enrol their children here. One of the teachers graduated from this very school and recalls that in his time there were over 200 students and well over a dozen teachers. It was a much larger school and was successful in imparting quality education. In current times however, enrolment levels were declining and based on population increases, new schools were being opened in nearby villages (Koka, Jaffarabad) which put additional pressure on numbers. Similar to the observations made by the DM, he wondered whether the SSA scheme was indeed the best way to improve education outcomes.

There are two government schools for children in Years I to VIII in the village. The government primary school (Years I-V) has around 150 students and they are from the poorest of families often representing the first generation ever to attend a school. This school is the feeder school to Lakhnu Junior School but there is no mechanism of tracking where each child leaving the primary school goes. Some parents enrol their children in Deeksha Private School in the village or may even send them elsewhere.

In Table 5.2 a record of headcount made over the years by IREAD in Lakhnu Junior School is recorded. As the IREAD visits are planned in advance due to logistical reasons, teachers have always been present, but student numbers are indicative of absenteeism being significant and at a percentage higher than indicated by the teachers during discussions. Table 5.3 looks at the data by caste as formally recorded in the school register. This caste-based classification is pervasive across UP and reflective of the social systems being deeply embedded in society. Notwithstanding, the teachers confirm that there is no differentiation on a caste basis in Lakhnu Junior School, a fact consistent with IREAD observations.

Table 5.2

Lakhnu Junior School enrolment data based on enrolment register and physical count during visits

Year	Enrolled	Boys	Girls	Head Count	Teachers
2011-12	73	41	32	30 (6 Feb 2011)	2
2012-13	84	48	36	Not recorded	2
2013-14	68	30	38	30 (5 Dec 2013)	2
2014-15	76	42	34	15 (11 Feb 2015)	2
2015-16	74	38	36	50 (6 Jan 2016)	2
2016-17	84	48	36	20 (23-Feb-2017)	3
2017-18	121	68	53	65 (8 May 2018)	4
2018-19	122	71	51	25 (4 Mar 2019)	4

Note: Adapted from the school records, 2011–2019. The headcount was done during field data collection visits.

Table 5.3

Student breakdown by caste in Lakhnu Junior School

Year	Scheduled Class			Backward Class			Minorities			General Category		
	M	F	T	M	F	T	M	F	T	M	F	T
11-12	20	21	41	5	7	12	12	1	13	4	3	7
12-13	29	24	53	5	7	12	8	2	10	8	3	11
13-14	21	28	49	2	3	5	5	5	10	2	2	4
14-15	29	24	53	1	1	2	7	6	13	1	5	6
15-16	26	24	50	3	2	5	7	6	13	2	4	6
16-17	31	24	55	4	3	7	12	4	16	1	5	6
17-18	43	33	76	2	3	5	22	14	36	1	3	4
18-19	38	48	86	2	2	4	11	19	30	2		2

Note: Adapted from the school records, 2011–2019.

The vast majority of the children are from the Scheduled Caste (SC) which is named so as there is a provision for such people in a schedule of the Indian Constitution. They have historically been disadvantaged and responsible for work that others would not do. Mahatma Gandhi called them Harijans (children of God) and these days the preference is to use Dalit which means poor or disadvantaged. Backward Class or Other Backward Class (OBC) is a term used to classify castes which are socially deprived for any reason. In many cases the OBC families are economically progressive, so the number of children enrolled are low. Minorities are generally referring to Muslims and on average comprise 15 to 20 % of the

population. As can be seen, very few children from the general category are enrolled as most of the upper castes fall in this category and they prefer to send their children to the private schools. This is confirmed by looking at the data for the private school in the village.

Deeksha School located in the village is privately owned and charges fees, even if these are nominal. The school has very limited facilities – no benches, no playground, no laboratory or library, yet their enrolment numbers are comparable or higher than that of the government school. The school has over 350 children accommodated in eight classrooms from Years I to VIII. The school has twelve teachers in addition to the Principal and as such can cover for anyone who is absent. The numbers in Table 5.4 are for students in upper primary sections (Years VI to VIII) and a breakdown by caste only for comparison with Lakhnu Junior School that is the unit of analysis. The school also has a few students enrolled in Year IX and X, an activity for which they are still pursuing a license.

Table 5.4

Enrolment information on year 6-8 students in the Deeksha Private School

Year	Enrolled	Boys	Girls	Attendance (Approximate)	Teachers
2012-13	93	45	48	70%	4
2013-14	78	45	33	70%	4
2014-15	108	63	45	70%	4
2015-16	101	59	42	70%	4
2016-17	85	42	43	70%	4
2017-18	114	66	48	70%	4

Year	Scheduled Class			Backward Class			Minorities			General Category		
	M	F	T	M	F	T	M	F	T	M	F	T
12-13	28	12	40	13	12	25				14	14	28
13-14	22	10	32	7	13	20	3	-	3	13	10	23
14-15	22	11	33	21	21	42	6	1	7	14	12	26
15-16	18	11	29	24	15	39	7	10	17	10	6	16
16-17	17	16	33	13	12	25	5	7	12	7	8	15
17-18	30	17	47	25	21	46	5	1	6	6	9	15

Note: Adapted from the school records, 2011–2019 as provided by the Principal.

The school charges fees, INR 100/month (AUD 2) for the junior classes and INR 120/month (AUD 2.4) for the senior classes. Taking an average of INR 110 (AUD 2.2) and assuming 350 children, the school earns INR 38,500/month (AUD 770). The teachers are paid around INR 3,000- 3,500/month (AUD 60–70); so any shortfalls are subsidies by the owner who is also the Principal. He is a relatively well-off farmer and believes in education, not pursuing it as an economic pathway. This is refreshing as not too many schools function as such. Here the teachers can be fired and held to task, so generally their attendance is good. Similarly, parents are paying, so they send their wards to school. Despite that attendance is around 70% with absenteeism around 30 %. The Principal has even considered financial leniency to increase attendance, but it has not worked.

This school is also supported by IREAD. Funds were provided to build toilet facilities for boys and girls and these were completed in 2017. Computers were given to the school in 2016 and IREAD-hired teacher used to instruct in this school in addition to Lakhnu Junior School. The Deeksha School Principal is desirous of expanding the school to Year XII in a separate facility. He has allocated a land for that purpose and IREAD is doing its due diligence on the legality of construction on the demarcated land considering supporting the new construction over the next few years.

Consistent with current research, the rural government schools primarily cater to the poorest in the rural community. This is reflected in Lakhnu Junior School pupil register. The factors related to teachers listed in Table 3.12 (Chapter 3) that contribute to poor learning for children—inadequate staffing levels, assignation to non-teaching tasks, poor training and a general lack of motivation—all hold true.

5.4.3 IREAD Stakeholder Inputs: Parents and Community Members

It would appear that the vast majority of the children who do attend school actually want to study and are encouraged by their parents to do so. Based on a headcount, the attendance percentage varies between 40 and 50% of the total enrolments. These numbers are lower during the harvesting season, particularly in February-March when the potatoes need to be excavated.

During the annual prize distributions, it has been encouraging to see the enthusiasm of the children who attend school, even of the ones who have not won awards. The school organises this as an event with speeches from the staff and IREAD along with short cultural performances by the children, where all are encouraged to participate. Several, if not all parents of the awardees and other respected community members also attend. These short speeches are used to encourage as well as educate children. In these speeches, the teachers, the village Pradhan (or head) and IREAD members draw on history and touch on contemporary issues to encourage the children to study and play hard. The current Prime Minister of India comes from a very humble background and is an icon, a leading example to show that one can indeed aspire to the highest post in the land. When asked, the children are not hesitant to share their dreams, they would like to be teachers, engineers, government office workers and join the police force. In recent years, the granularity of their knowledge seems to have increased, wherein they are more aware of what is happening (for example, through news) and instead of engineering say ‘I want to go to IIT’. The Indian Institutes of Technologies (IIT) are premier institutes where the selection process is very competitive. The closest IIT to Lakhnu is in Delhi.

Scanning their schoolwork as a means of assessing knowledge shows significant variations. Some work was very impressive whereas it was clear that some children were struggling. Given the number of children and available resources, there is no facility for one to one tuition and additional support for the lagging children. According to the teachers, these children are irregular in attendance which exacerbates the gap. In addition, the policies mandate age appropriate admission, irrespective of the level of knowledge. Such a requirement results in significant discrepancies in learning outcomes between the children and makes the teaching task more difficult. This has been noted in the ASER data as well where a significant percentage of children is unable to read or compute well below their grade level according to their standardised tests (ASER, 2016).

An effort was made to engage children who are regular absentees by requesting a list based on attendance. All these children are from SC, OBC or Minority backgrounds and their parents are defined as being below the poverty line

(BPL). The IREAD members randomly selected 12 names from the 40 on the list provided by the school and visited their homes. Most houses were on the outer periphery of the village and only the mothers were at home. The child had to be called and when asked why they were not in school, six gave no reason, four worked and two Muslim girls went to the local Madrasa or Islamic school. These families had four or more children, the mothers all had a look of exhaustion and were generally unaware of their children's whereabouts. Being largely illiterate, unskilled and dependent on daily labour, they struggle with basic necessities of food and shelter. Their homes were very basic, made of mud and in poor repair. Most were surprised to learn that their kids were missing school. Some put the blame on the school, saying that teachers do not teach and that the children could not be kept interested in attending. All were in agreement that children should learn but did not believe education would lead to a job. This is despite teachers being icons and examples of children who have successfully enrolled in government service from their own community. Divisions based on economic well-being even within the same community could be seen based on the locations of the homes. One Muslim lady said that she would like her daughter to study and not be like her: "Nahin to bakri ki terhe rehegi", otherwise her life will be like that of a goat, tied to whichever pillar by either her father or husband. Her daughter was also enrolled for religious studies in the Madrasa due to cultural reasons. One common facet was that they all exhibited was a sense of helplessness and they were not able to focus on anything but the immediate. They were open about their poverty and daily struggles, acknowledging that children helping at home or earning money made their lives easier.

The list provided by the school had serial numbers and names of the children written in Hindi. These students were all from Year VII or VIII and were asked to find their name on the list. Six could not find their name, were not able to identify alphabets and could not read. As a snapshot over 50% of the regular absentees could not read, a figure which translates to 23% of all enrolled. These findings seem consistent with the ASER reports (ASER, 2016).

In a general meeting at the school, the parents of children who do attend school were invited to participate in a discussion on education. They were unanimous in acknowledging the importance of education. It was seen as necessary for a better

life, and a government job was not the only aim. They said that they did not discriminate on the basis of gender and were keen for their wards to study. The parents were engaged with the children and kept an eye on what they were doing. When asked as to why their neighbours thought differently and were not similarly supportive of education, their response was “manyta” (mindset). A lady commented that “paise to ek din ka hai, padhai to jindagi bhar ki hai”, meaning “money is for a day while learning is lifelong”. These were clearly very different views from the parents whose children did not attend school regularly despite the facts that they were similar in demography and in socio-economic terms.

Community engagement in taking steps for the betterment of the village seems fragmented. For around half the period of this study, the Pradhan was illiterate and from a SC background. While supportive of IREAD activities, his influence around the village seemed limited. The new Pradhan is from an upper caste but has become embroiled in a political case and has been distracted. Furthermore, the SSA-nominated School Management Committees (SMC) are not effective. These SMC meetings are held and documented in a register, but going through the minutes, no real issues are tabled or actions tracked. As the SMC membership comprises parents, community representatives and teachers, it is interesting to see several thumbprints in the signature section, indicative of the number of illiterate people on the committee. Overall, there appears to be no representation by the people to the state government towards educational improvement. This is to an extent fulfilled by IREAD.

The responses of the Lakhnu community are consistent with those listed in Table 3.12. Poverty is rampant and there is no safety net which limits the time parents can devote to their children. Some parents do make the time, as determined by their individual mindset and one that cannot be easily attributed to any specific factors as others in their community do not do so. Overall, the local community’s engagement with Lakhnu Junior School is limited and education is not a priority in the minds of the people.

5.5 Data Collection: Curtin University Projects (Stream 2)

The Curtin University Lakhnu Community Sustainable Development Project (LCSDP) was aimed at providing a multi-disciplinary group of students an

opportunity to understand a green-field site in an uncommon cultural setting (Lakhnu village) and then develop a series of interventions and projects to help improve the daily lives of the people. Care was to be taken to determine this need based on both the findings and interactions with the local people so that only projects with a perceived benefit by the community are carried out.

Five separate trips were made over the period 2011–2016 as outlined in Table 5.5 with learnings from each trip being used to shape the future ones. In each trip, there were between 25 to 30 students and 3 to 5 academic members. Due to language issues and translation requirements, around six Indian students from universities collaborating with Curtin University in this project were also involved. None of these students was local to the area, coming from North-Western (Rajasthan State) and Western (Maharashtra State) India. That said, their level of Hindi was adequate to communicate with the community members.

Targeted dwelling and community surveys, a series of photographs, maps and other drawings are included as part of the data collected from the University project trips. The information gathered from these visits is an important part of the overall data set and often complementary to the other IREAD activities. Through these projects, the community interactions were broad-based considering the built environment where the child resides, thus offering insights into the indirect factors that influence its education.

The LCS DP's had a broad community focus. These were driven through the children of Lakhnu Junior School and the constituent group of participants came largely from the parents and families of the children. While education as imparted in the school was not directly measured, the learning environment that the children faced in their homes, the village and the broader community was keenly observed and surveyed.

Of particular focus was the role of the heritage building, especially to understand the importance afforded to such artefacts by the local community. While the information gathered suggested that 95% appreciate the building and 72% had

anecdotal stories to tell, the building itself was neglected and in need of urgent repair (Tiwari et al., 2012).

The community indicated that the State Government should be doing more to restore the building and were keen to see it developed as a vocational centre for women. An attempt was also made to instil a sense of pride and sense of legacy in the school children in relation to this heritage building. The building has a pond that was full of mud in the rear yard. This pond was excavated and examined by the Curtin students. It clearly showed the architectural designs and how it would have served as a place for relaxation around a century ago. The school children were shown the excavated pond and its history and design significance explained in the context of the heritage building. They were reminded that this was their legacy and they should be careful around the building as it was unsafe and should not damage any of the carvings or sculptures. The old building roof leaks were patched up and a door installed to prevent people from going upstairs and creating further damage. Unfortunately, during the subsequent visit it was found that the fence around the pond had been removed and rubbish thrown in the pit. The building door was found broken as well, presumably by young people from Lakhnu and nearby villages who wanted to go up to the roof. With no security and an incomplete boundary wall, such vandalism is hard to control.

Table 5.5

Curtin Lakhnu Community Sustainable Development Project (LCSDP): Field visits and data collection/ implementation activities

Period	Principal Project Activities	Comments
Nov 19-26, 2011	Getting to know the area and people, mapping the village and carrying out dwelling surveys and surveying and assessing the old heritage building.	The base survey information would provide a deeper understanding of the community challenges.
Nov 2-6, 2012	Address the information gaps identified in the first set of data through additional dwelling and mapping exercises.	Continued interest in the heritage site by excavating the old pond behind the building.
Feb 9-14, 2014	Three sets of activities were carried out by the students who were divided into groups. Edu-play: Building an educational play area as a common facility in the village. Toilet Survey: Community meetings to discuss the requirements for communal toilets and identification of land for their construction. Old well area survey and potential for its redevelopment as a community gathering place.	Projects selected through discussion and workshops with the community and identified priorities.
Feb 6-13, 2015	Four projects were developed based on the analysis and conclusions from the previous visits. Community Toilet. Cluster Toilet for multiple related families to share. Home improvements with targeted interventions. Old village well rehabilitation as a common meeting space.	The location of the community toilet was selected by the community and validated through the civil administration.
Nov 29-Dec 6, 2016	The focus was to understand usage patterns of previously developed infrastructure. Audit of edu-pay, community toilets, cluster toilets and home interventions. Experiments to consider solutions (such as chimney designs) to improve indoor air quality (IAQ). Sanitation awareness through a combination of street theatre and surveys. New project: Mapping of village Akhoya.	Regular toilet use needed to be supported by educational and sanitation awareness.

As part of the first project in 2011, the Curtin students mapped the village and carried out dwelling surveys to identify the built environment where Lakhnu Junior School children lived. The children themselves took the Curtin students to their homes for this exercise. A mapping of the homes was carried out by the students who also conducted a short survey with the residents (through interpreters) about their work and life. Of those surveyed 49% responded that their children attended school. Observations indicated that the girls were involved in working around the house (cooking, cleaning etc.) and in the fields whereas the boys were mainly assisting in fieldwork and animal husbandry (Tiwari et al., 2012). These dwelling surveys were used to map the infrastructure and identify the family demographics. Principal issues are sanitation, privacy and inadequate lighting. A base map was also developed to represent the village roads and infrastructure. This allowed understanding of the movement network of materials and goods linked to business activities. Most commercial activity in Lakhnu is on the main road connecting the village to others on either side. Traffic is very heterogeneous with bullock carts, bicycles, motorcycles and the odd car and bus leading to slow passage from one end to another (Tiwari et al., 2012).

Separate workshops were held with men and women to understand issues of importance on an everyday basis. The women indicated limitations of home space, lack of privacy, non-availability of private toilets forcing them to use the fields with associated risks of molestation and logistical difficulties during bad weather. Health and associated facilities are limited and travel to Hathras, an inconvenient but only option. There was a level of dissatisfaction with the government school and lack of flexibility particularly during the harvest season, wherein the children could work in the fields to provide extra income. Adult education and skills such as sewing, embroidery etc. were also identified as a gap which if bridged could help the women.

The men work in the fields and/or as plumbers, masons, electricians or labourers. Most skills have been learnt on the job and there is no formal certification. Very obvious through observation was the electric wiring in particular which has resulted in several shocks and even deaths in the past. Unemployment is wide-spread and lack of opportunities for jobs high on the list of issues. Almost everyone wants a government job.

Children expressed their views through drawing and writing about their homes and the areas where they play. They all helped with work at home and in the fields, particularly during harvest times. The old heritage building is a popular area to play hide and seek and similar games (Tiwari et al., 2012).

During the November 2012 visit, the Curtin team was able to fill in the gaps from the previous trip and develop a better understanding of the target areas for the future. A map of the village was left with the Pradhan to mark the Panchayat-owned lands for a possible future community toilet project. There were discussions regarding how the community members would need to take ownership and contribute to any such effort. It was encouraging to see that this did not faze the people and they seemed willing to contribute.

The initial visits also allowed developing an understanding of the commerce and business drivers. The students created a matrix of strengths, weaknesses, opportunities and threats (SWOT) based on their observations and data collected through interactions with the community in an attempt to understand and classify the areas of focus for any development activities (Figure 5.2). The principal strength is in the fertile soils and agricultural productivity of the region. However, the lack of both literacy and unique skills limits opportunities for employment and contributes to the widespread poverty in the region. A concept of multi-purpose hubs in the open spaces was considered promising as it could be used more frequently for village fairs and other communal activities and potentially be leveraged by taking crafts and such material to market. Poor logistics and migration of capable people to the cities are threats as they can impede local development.

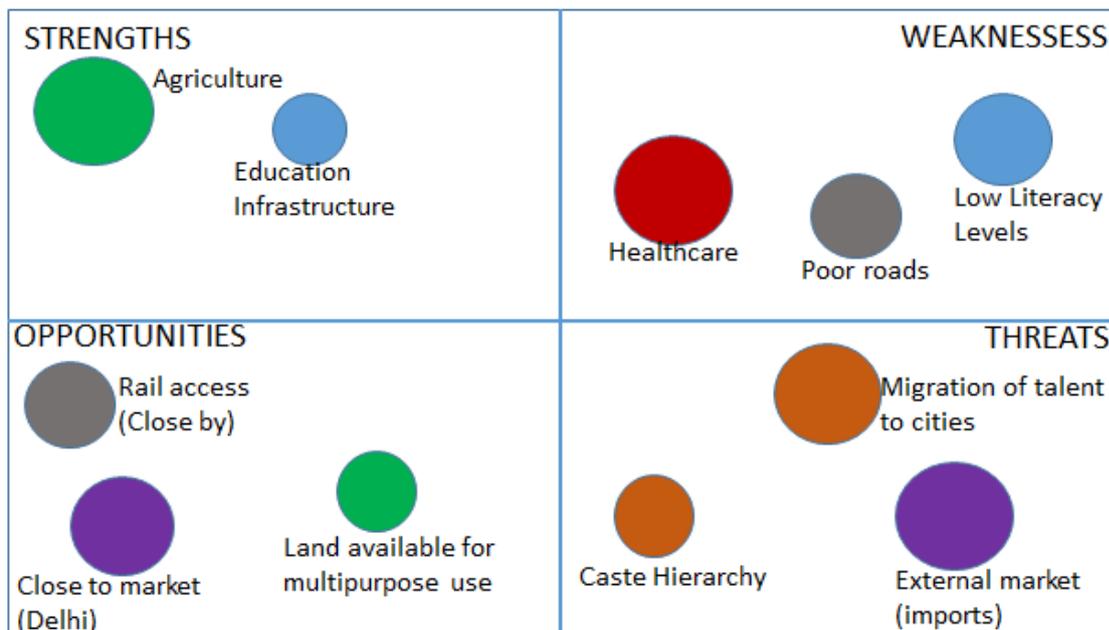


Figure 5.2. SWOT map of the village. The sizes of the circles are indicative of the relative importance. Adapted from *Lakhnu Project Preliminary Report*, by R. Tiwari, J. Stephens, D. Smith, J. Schapper, 2012, Curtin University Report, p. 21. Copyright 2012 by Curtin University.

5.5.1 Positive Action: Curtin University Projects

Education facilities are identified as a strength on the basis of the infrastructure and can become an opportunity if the low literacy levels are addressed. Available land can allow for complementary learning spaces to encourage children. This concept led to the development of an edu-play area where in a common space inside the village, an amphitheatre type design would allow children to play and learn. Sustainability concepts such as using discarded plastic bottles for construction and large blackboards supporting repeated use were part of the design. When done, the area was transformed into a colourful, clean space where children could play. Educational posters were mounted on the walls and chalkboards and other material were made available for the children to express themselves.

It was visualised that clean and beautiful common-use public spaces would engender pride within the community and foster development. In addition to the edu-play area, the old village well which had a cultural significance was identified as such a space. The well is located in front of the temple outside the village. In the past, this was a communal gathering place and newly-wed brides of the village men prayed at the well site seeking blessings as they were about to begin a new life in Lakhnu.

Over time with the installation of hand pumps and the drop in ground water levels, the well went dry and fell into disuse. At present, only the villagers living directly in front come here to wash clothes using water from a hand pump installed near the well. There is no proper drainage and wastewater accumulates, becoming a breeding ground for mosquitoes. A large village fair is held at the site each year, so there was broad agreement regarding its rehabilitation. The aim of this project was to see whether the area could be restored and proper drainage provided to facilitate it becoming a gathering place once again. Consequently, the area near the hand pump was cemented and a platform built. The stagnant water pond was backfilled with soil thereby making the whole area cleaner.

Three potential areas were considered for public toilets with the final choice from the community being in the same compound as the edu-pay area. A set of two toilets with a storage room for cleaning materials and a water pump were built. It was agreed that initially for one year, IREAD would cover the maintenance and cleaning costs, which afterwards would transition to the community and a group of women agreed to manage the process. A cluster toilet was also built in the space provided by the family of an invalid lady and would be useable by the members of her extended family.

A number of targeted interventions were planned in the homes of the economically weaker families, helping to improve airflow, ventilation and lighting. These projects were very successful, and the household members collaborated working hand-in-hand with the Curtin students. Without doubt their quality of life would be positively impacted.

5.5.2 *Community Observations: Curtin University Projects*

All the projects undertaken were defined and developed with community input and support. A number of workshops were held to ensure that the community priorities were unambiguously identified as part of the project development process. Due to the logistics of the University student visits, there was typically a one-year lag between the identification of the need and the implementation of the project. Following the usage patterns of the facilities, an audit was performed and the key observations from this multi-year effort are outlined below (Mariani & Fry, 2016):

- While the community may express a need in a gathering, there may be other factors that are either not fully understood or manifest subsequently that allow the utility to be constrained. Aspects of this can be seen in all common-use projects carried out to date.
- The toilet facility gate had to be locked to avoid animals from ingressing. The individual toilet cubicle doors had to be locked as well to ensure security. To maximise usage, multiple sets of keys were distributed to the women groups so that availability was not a constraint. However, the system did not work as efficiently as envisaged. Night time usage was curtailed due to lack of electricity. During the day, men often gathered there to talk and women were reluctant to use the facility feeling more at risk if there were any men in the compound.
- The day-to-day challenges faced by the local community, especially the economically weaker sections, are multi-faceted and the immediate dominates the thinking. Any projects which require lead times longer than a few weeks are often too far into the future for them to visualise and offer a considered opinion. This could explain how responses change depending on the when and how the questions are posed. As an example, some of the women from the Fakir community did not want to use the toilets as they were in the Jatav community area, an aspect underplayed in previous community gatherings.
- Culturally biased behaviour and other societal pressures may not be fully appreciated in how the project utility will actually be availed by the community. Hitherto silent (or absent from the information sessions) people may impact usage patterns depending on their level of influence or proximity to the infrastructure.
- Past experience with government and other third-party initiatives had left people scarred, so they were sceptical in using any facility created as they were uncertain as to what potential cost impost they may face later on.
- There were personal motivations of certain influential and wealthy members of the community in wanting to restrict the usage of a common facility for self-interest reasons. This became clear when the local well area pump had its chain removed and rendered non-functional. The anecdotal evidence was that one influential family had made a claim to the land on which the well was

located. They did not want people gathering there and using the pump as they felt it may weaken their case. The people impacted did not want to challenge this action and preferred to let it go and forgo the utility it offered.

- In contrast, the interventions carried out in individual properties or infrastructure built (cluster toilet) had a very significant impact both in terms of a utility and more importantly in changing mindsets wherein as one community member notes: “we now feel we can make changes and don’t have to accept things as they are”.

The audits also highlighted the cultural complexities that come into play. A women’s workshop focusing on understanding the issues related to the community toilet was held with over a dozen ladies participating. The issues raised included some that had been identified earlier, such as lack of lighting facilities at night and the presence of men congregating for talks or playing cards in the compound. While most seemed to understand the health risks of open defecation, digging holes to bury the effluent also has challenges as the water table is shallow and the holes led to altercations with the landowners. Cleanliness of the facility is also a challenge and it would appear that some folks left the toilet unclean after use even though the only effort required was drawing a bucket of water for flushing. The IREAD-sponsored cleaner cleaned the facility in the morning and evening, but the operability depended on all users cleaning up after individual use. Caste related queries caused agitation and some women left as a result. Communal facilities were only being used by those proximal, i.e. mostly of the same caste and class.

5.6 Data Collection: IREAD Facilitated Projects (Stream 3)

Community behavioural insights are gained through the IREAD facilitated workshops. The most significant of these are related to hygiene in line with a national initiative and to farmers’ organisations which can potentially give them more control over their future.

5.6.1 Community Observations: Government-led Sanitation Workshop

The central government under its Swachh Bharat Abhiyan (Clean India Mission) scheme had a stated objective of making the villages open defecation-free

by 2019 (Prime Ministerial initiative). This task is enormous, and toilets are to be built in villages all over the country. By 2016 the initial feedback was that the utilisation was poor and that education, awareness campaigns and information sessions need to precede any utility project. This led to the development of a community-led implementation scheme (CLTS) under which education sessions on sanitation benefits were launched and local people recruited to name and shame the ones who were not changing their habits. In large scale schemes, this is challenging as a campaign style initiative may have short-term benefits but is rarely continued over a significant period of time.

In western UP, IREAD representation resulted in Lakhnu being the first village to launch the CLTS scheme and the timing was made to coincide with the Curtin team visit in November – December 2016. As can be seen in Figure 5.3, the CLTS was formally launched in the village with the village Pradhan (Head), government representatives and IREAD members.



Figure 5.3. The CLTS launch with the village Pradhan and IREAD members.

This launch was attended by around 200 village members and the overall response was positive. The attendees were largely from the lower socio-economic

strata as these communities were the most deprived and without access to toilet facilities. Community members had been informed through a multitude of channels, through the school and word of mouth through the panchayat.

At the start of the community meeting, the consultants drew a map of the village using white chalk powder and asked the people to mark the places of significance in blue chalk. He asked the people as to how the village looked. Most people responded saying “very nice”. He then asked volunteers to mark the areas where they defecate in yellow. Participation was limited at the start but eventually became lively with women joining in as well. Very soon the village boundary was ringed in yellow and this time the response to the question as to how the village looked was “not very nice” as can be seen in Figure 5.4. He then explained the ills of open defecation and how it impacts the overall health of their community.



Figure 5.4. The community gathering and the CLTS official giving his speech.

The Government Official gave an inspirational speech invoking religion and history to motivate the villagers to take ownership of their own communal habitat.

He skilfully used examples of how the Indian civilisation was founded on hygiene and cleanliness and how even the earliest archaeological ruins showed evidence of toilet facilities. The official invoked Hindu religious verses to highlight this as well. It was not possible to see how many members of the Muslim community attended as not all sport beards or wear head dresses. Notwithstanding, the message would have been understood by all as through years of proximal living the faith-based religious figures of each community are well known.

In a subsequent informal discussion session, women joined stating their views. They sought safety in numbers and preferred to have a 360-degree clear view around them when performing ablutions. This practice of several women going together at the crack of dawn has developed over many decades and there is a perception of risk in community toilets. They wanted individual toilets and expressed concerns that communal facilities were not maintained and that no one took responsibility. The official stated that while the government was going to help those in need, the community toilets already constructed should be used and the economically well-off should construct their own toilets. He also urged women to persuade their menfolk to build toilets as opposed to spending on luxury goods like motorcycles or more expensive cell phones.

A village committee has been formed to monitor and discourage people from defecating outside. Unfortunately, there are not enough toilets as yet to implement this fully and the government would be building more community toilets to meet the need. The meeting ended positively with the community members present shouting: “we will keep our village clean”.

The CLTS workshop successfully combined education and empowerment in an attempt to create a self-regulatory system. In large-scale schemes, this is challenging as a campaign style initiative may have short-term benefits but is rarely continued over a significant period of time. Old habits die hard and significant effort is needed to create behavioural changes. There has to be an ongoing effort with regular reminders, or else the community attention again withdraws to their immediate priorities of obtaining basic food and income.

5.6.2 *Community Observations: Farmers' Cooperative Workshop*

In March 2019, IREAD invited Professor Trilochan Sastry to Lakhnu to hold a workshop with the local farmers on using cooperative societies as a mechanism to manage the marketing of their farm produce in the primary markets and look at value-added opportunities for higher income. Professor Sastry is a well-known philanthropist and educator who is passionate about alleviating poverty in the rural agricultural sector (https://en.wikipedia.org/wiki/Trilochan_Sastry, 2019). He has set up a large farmers' cooperative in the Southern Indian states of Andhra Pradesh and Telangana. Its purpose is to ensure that farmers get the sales prices recommended by the Government for primary produce and are not forced to sell to agents for a discount. Professor Sastry has also started the manufacture of value-added ready to cook packaged foods from local produce under the brand name Farm-Veda, which are placed in large supermarkets and with hotel chains.

The same concept can be applied to Lakhnu and other local villages. Around 30 farmers attended the workshop with Professor Sastry that was organised by IREAD (Figure 5.5). They had varying land holdings from 12 bighas (2.4 acres) to 350 bigha (70 acres). The farmers identified issues related to being able to get the produce to the market and get a fair price. It was clear that the economics were not always favourable, and some crops were planted at a loss. None of the participants could explain why they persisted with cropping, except to say that it was better than keeping the fields barren. Professor Sastry made it clear that he was not proposing handouts but a mechanism and a process through which they could have greater control over their own futures. He suggested that the best way to understand the benefits was to talk to other farmers who were in a cooperative. The concept sounded interesting to the local farmers and they agreed to send some people to Adilabad (near Nagpur in Central India) in May 2019 to observe the cooperatives in an area where the farmers speak in Hindi.



Figure 5.5. Professor Sastry being welcomed to a workshop with the local farmers on the benefits of forming a cooperative.

In discussions with IREAD, a coordinator was nominated who, together with the Pradhan (village head) would select a group of four to five people for this visit. Unfortunately, despite numerous follow-ups, this trip did not materialise. This is in a way symptomatic of a broader and persistent issue of the community being wary of and reluctant to try anything new. In the future, IREAD will need to persist to make the visit happen over the coming years.

5.7 Data Analysis Pathway

The multifaceted data accumulated through the range of IREAD activities requires a framework for analysis and subsequent validation. This is developed in the next chapter to draw out the inferences and learnings from the observations and diary notes and link them back to the key themes determined from the literature review. The emerging analysis can shape a theory and allow a better definition of the pertinent narrower questions for a set of semi-structured interviews with the stakeholders.

These semi-structured interviews with the stakeholders comprising the fourth data stream, were used to test the theory developed through interpretations gleaned from the earlier data analysis. The stakeholders fell in three main categories: i) school teachers who are at the forefront of delivering education; ii) parents who are enablers but largely not literate themselves and iii) the state government officials who implemented the policies.

In relation to the parents, understanding the decision-making approach of the people is the central question. That will define their thinking and considerations, both current and future, in sending their children to school. Poverty is pervasive and is being addressed by various government initiatives. Even so, establishing the value proposition of education as a worthwhile investment that needs support of all parents requires understanding the concerns of the reluctant parents (Banerjee & Duflo, 2012). For teachers and policy makers, the service delivery of education is a key objective but is beset with problems. As Gupta (2012) explains, the system has become inured to and accepting of the status quo, i.e. has institutionalised the current state (Gupta, 2012). Schools have been built, so access is not a central issue. Understanding the principal levers and touch points may allow for incremental changes and lead to significant improvements. The IREAD provision of (low cost dumbbells and laziums) exercise equipment which the new teacher in Lakhnu Junior School has adapted to physical training exercises has been embraced enthusiastically by the children. This motivates teachers as well, as one of them stated that if the children want to learn it becomes satisfying for all.

The IREAD experience with the children who attend school regularly creates optimism. These children want to learn and have aspirations. While a significant number of their cohort are currently excluded for a number of reasons (see Chapter 3), focusing on these who attend will potentially give them and their families a better future. There has been no systematic way to track the progress of students who have graduated from Lakhnu Junior School. Limiting it to the better performing students and the previous year prize winners, it was gratifying to see that several had progressed beyond secondary education and enrolled in graduate programs. In the future, IREAD is looking at scholarships to support these young adults.

Through the evidence of the data collected, in the next chapter, the study aims to put forward a proposition addressing the research question using key parameters that influence the supply- and demand-side drivers for quality education. Areas where additional research may be needed are likely to emerge wherever there is no clear conclusion. The community support for IREAD remains steadfast and the administration does listen even if actions are sometimes protracted and delayed. This creates a sense of belief and enthusiasm to continue the effort and while one may not reach all Lakhnu children immediately, progress can be maintained and over time the benefits will be perceived by an ever-widening group.

The IREAD approach is incremental but through persistence and continued effort can have positive impacts on children and the broader community. Although with varied durations, a minimum of one visit per year has been maintained. During this phase, the IREAD members themselves have seen significant transformations in their personal lives. Some have transitioned from full-time employment to part-time consulting, their children have found partners and multiple grandchildren made imposts on their available time. It is thus gratifying to see that the IREAD model is flexible and can sustain major changes in the lives of such overseas proponents while preserving relationships with the local community.

Chapter 6: Inferences and Analysis

6.1 Introduction

The number of children not learning in India is staggering. There are an estimated six million children out of school across the country, either having dropped out or discontinued their education before completing primary school (GOI, NSS-SRI, 2014). Of the circa 200 million children currently enrolled, approximately 50% do not have the requisite literacy and numeracy skills for their educational year (GOI NSS 2014; ASER, 2016). The problem of education can thus be daunting. However, as with poverty, academic work often focuses on the big questions – the role of free markets, democracy, development aid – often looking at large programs to find solutions. As an illustration, a socialist view would be that development assistance of USD 195 billion per annum, which includes funding for education, from the developed countries for 20 years can eliminate poverty (Sachs, 2005). Others argue that aid is a trap and kills initiative, only the right market incentives can help (Moyo, 2009; Easterly, 2006). Finding an effective pathway to eliminate poverty or achieve universal primary education (UPE) is not easy. The ideas behind the debates are valid. The challenge is to ensure that whatever resources are deployed create the maximum impact possible and fund the right projects (Banerjee & Duflo, 2012).

Within the pan-India context, the state of UP is considered lagging in development. It is one of the BIMARU (sick) states in the country with high levels of poverty, crime and under-development. While daily life goes on fairly peacefully, social and religious divisions are highlighted through unfortunate incidents that result in destruction of property and human deaths. Corruption, nepotism, criminalisation of politics and a lowering of the moral fabric have resulted in a governance crisis (Ratha & Mahapatra, 2013). Feudalism and social division on a caste basis are high particularly in rural areas and political parties have often exacerbated these to shore up vote banks. One only needs to look at the daily news in India to get a sense of this (India Today, 2019). At a pan-national level, these divisions are not unique to UP and can be seen in other states as well. However, as per the ASER (2016) data tabled in Chapter 2 Figure 2.4, these states perform better in providing primary education. So why are the UP state results in the lower quartile?

Internationally there is evidence in research that top-down education programs like the RTE and SSA have positive impacts on the community. The benefits are expansive and include monetary, health and better choices that citizens make (Spohr, 2003; Duflo, 2001). Researchers have also written extensively about the issues facing rural schools. The terminology is stark: Indian schools are failing their children (Kingdon, 2015); structural violence against the poor is being perpetuated daily and is accepted (Gupta, 2012, p. 19). These are two examples of the types of messages abundant in the literature. While poverty is one common problem across rural India, the pan-Indian differences cannot be explained on the basis of wealth alone. With varying degrees of success across the country, evidence of progress as a result of the SSA can be seen. Schools have been built and infrastructure improved. This is visible in Lakhnu and indications of development can be benchmarked by anyone with a temporal reference. Specific to Lakhnu Junior School, the boundary wall has been mostly completed, extra rooms have been built to serve as kitchens for cooking the midday meals and the general housekeeping has improved.

An argument can be made that infrastructure is of little use if there is no demand for the service, i.e. no benefit through education is perceived. This can be challenged as there are several cases of children from the village who have completed higher studies and are now well placed. These children do return to the village and are visible to those around. The majority send money home, so the progress and improvement in the well-being of their families are tangible. In any discussion with the parents, no one commented on education being worthless and not to be pursued. Inherent is that there may be other priorities that take precedence. A teacher from Lakhnu Junior School commented that the staff come every day and they would teach if the students attend and show interest. It is indeed a conundrum, money is being visibly spent, demand is implicit, access to schools is available, yet results are unsatisfactory, particularly in UP. Year on year, the ASER reports continue to show that the situation is not improving and may even be deteriorating. This raises some debate in the media, change is demanded, but these concerns are ephemeral and the following year the same cycle seems to repeat (Chavan, 2016; Banerjee & Duflo, 2012, p. 75).

Most children enrolled in government schools across India are from very disadvantaged backgrounds and it is this very group that the educational policies are meant to benefit the most. Considering poverty as the central causal theme, Banerjee and Duflo (2012) suggest that the picture is very complex. Responses such as “free markets for the poor” and “give more money to the poorest” are clichéd and result in policies that support simplistic decisions. These ideas only convey a partial picture and the poor appear “as the dramatis personae...to be admired or pitied...but not as a source of knowledge about what needs to be done” (Banerjee & Duflo, 2012, Foreword). Many argue that the problems take time to understand and one needs to consider all evidence and not rush into offering simplistic solutions, which are not likely to have sustaining beneficial effects. This is consistent with the experiences gained through the IREAD activities and the Curtin Projects.

As an analogue, another illustration of the complexity behind securing the desired outcomes is one where the Government had tried to address the issue of pulmonary problems due to the indoor use of biofuel fired cook-stoves in villages across India. The Curtin LCSDP surveys also identified this as a problem stated by the community, especially in the wet season wherein the wood is damp and smoke pollution is exacerbated by people having to cook indoors (Tiwari et al., 2012). Cooking gas (LPG) burners and connections were given free of cost and people encouraged to switch. The impacts in Lakhnu are minimal as the most marginalised sold their cylinders and continued to use locally collected wood. This prompted the Curtin team to consider a project aimed at solutions (such as chimney designs) to improve indoor air quality (IAQ). Drawing an analogy with malaria prevention, a scourge which resulted in the death of several hundred thousand children in Africa (<https://www.afro.who.int/health-topics/malaria>, 2019), some advocated distributing free mosquito nets (Sachs, 2005), whereas the counter-argument is that people do not value (nor use) anything that is free, become used to hand-outs and will not be inclined to buy in the future (Moyo, 2009). Weighing into this debate, Banerjee and Duflo (2012) scaled it down to three questions: (i) will people pay the full price for the nets or go without?, (ii) if given free would they be consistently used or wasted? and (iii) if getting the net at a subsidised price, would they be willing to pay for it in the future? They point to randomised trials with comparable groups as used in medical research as a mechanism to find answers. Of particular relevance is their

message of moving “from broad general questions to much narrower ones” and once we know how the people are likely to respond, the net distribution mechanism can be determined (Banerjee & Duflo, 2012, p. 8). The experience in Lakhnu is consistent with the above and these questions are as applicable for the Curtin community toilet project and can give insights into the thinking of the villagers which impacts all aspects of their decision making, including education for their children.

Globally the First MDG was aimed at poverty reduction with the poverty line defined as one dollar a day. As costs are different across countries, these are scaled for purchasing power parity (PPP) adjusted rates of consumption. This allows national poverty lines to be considered in local currency and the US dollar using the PPP rate as determined by the International Comparison Program (ICP) (worldbank.org/en/programs/icp, 2019). The poverty line in the poorest 50 countries in the world was determined by this method to be Indian Rupees (INR) 16/day (AUD 0.32) (Deaton & Dupreiz, 2011). That amounts to a few US cents a day and it is inconceivable that anyone can live on that in the western world, but in the poor countries in question several hundred million do. These folks have to make their choices carefully to survive and practise sophisticated economics, which should really put them in the centre of any programs being instituted for their benefit (Banerjee & Duflo, 2012). Poverty and the lack of a reliable safety-net are very much central to a lot of the decisions that parents make. There is a complexity behind these decisions which warrants a deeper analysis. These people are resilient and live their lives “as pleasantly as possible, celebrating when the occasion demands it” (Banerjee & Duflo, 2012, p. 38).

Within this cycle, what do these parents think about the benefits of and thus value of education for their children? Understanding the decision-making approach of the parents at a finer level of granularity is thus relevant. How do they think about sending their children to school? Is there a process they follow which results in different decisions at distinctive times (e.g. during harvest season) and if there is a break in education, do they think of the consequences for the child in the future? Do they make choices between their children? Schools have been built, so access is not a central issue. Is it the lack of demand for education (including belief systems which support that it’s not worth it) which leads to apparent parental nonchalance? How do

the economic demand and supply forces balance out? Key to addressing the issues is to understand the choices they make and the role of education, if any, in these.

The observations and associated discussions with stakeholders in this case study support the development of an understanding of some of the deterrents in children being able to attend school and learn. This chapter considers the evidence from the data collected to identify the principal determinants for this study's unit of analysis, Lakhnu Junior School. A framework with IREAD embedded is proposed to examine the information and propose a theoretical construct to address the research question. This is tested through targeted semi-structured interviews of the key stakeholders and either validated or modulated to the new data.

Based on the evidence of the data collected, the analysis aims to show that the problem is not intractable and that progress can be made, even if it is slow. Persistence and continuity of effort are needed. This is an essential aspect of getting to understand the community and possibly starting to influence behaviour. The IREAD model is aligned with this and suited to making these incremental changes in behaviour and improvements in the supporting infrastructure.

6.2 Contextual Considerations for UP and Lakhnu Case Study Data

The rationale behind any particular suite of outcomes as a result of the implementation of a common policy set is often confounding. For example, why do people not use toilets when they exist? Or why do they not send their children to school? While it is true that these issues are symptomatic in impecunious societies, the variations seen are not uniform and comparable policies applied to broadly similar cultural and economic communities have significantly different results. Within the Hindi heartland of northern India, the social, cultural and economic envelopes appear very similar and the commonalities would far exceed any differences in dialects, food habits or dress patterns. Yet, educational performance is different (ASER, 2016).

The differences can thus only be attributed to service delivery of school and teaching infrastructure that result in higher dropout rates and lower rates of learning. In Table 6.1 below the standardised test outcomes from rural areas in four states are

compared to the national average and it can be clearly seen that UP is far behind its proximal states in performance (ASER, 2016).

Table 6.1

Learning outcomes are poorer in UP compared to proximal states with similar culture

Class VIII data (rural)	All India	Himachal	Punjab	Haryana	UP
% of children who can read class 2 text	73%	87.9%	86.3%	83.7%	67.9%
% of children who can divide	56.8%	59.2%	58%	65.4%	37.4%

Note: Adapted from *Annual Status of Education Report (Rural)*, by ASER Centre, 2016, p. 55. Copyright 2016 by ASER Centre.

Mangla (2013) compared educational outcomes across three northern states including UP considering the influences of the state and civil society. He postulated that states in which the bureaucracy is legalistic in its approach have poorer outcomes whereas the ones where the officials are more deliberative engage better with the community and secure better results (Mangla, 2013). It has also been postulated that the Hindi heartland of India lags behind the Southern States because it has had no major labour-driven social movements nor left-leaning politics, making the community more passive in making demands (Dreze & Sen, 2002). This is also paradoxical as UP has the largest electorate and residents have on a number of occasions exercised their right at the ballot box and installed new parties to govern.

The case study analysis needs to consider these contextual parameters which have been identified for UP and are likely to be prevalent in Lakhnu and scrutinise them in more detail. These include: (i) service delivery of education through a bureaucracy that is more legalistic in its behaviour and implements policies in a rigid and deterministic fashion and (ii) the local community not being very proactive in demanding improvements in education. The decision-making processes of the parents in relation to the benefits of education also need a detailed examination. In the following section, a framework is developed to analyse the case study data

considering these and other issues determined through the research to isolate the principal factors affecting the answer to the research question.

6.3 IREAD Interactions: Developing a Framework for Analysis

Looking at the current state of rural education in North India through a review of contemporary research resulted in identifying key themes impacting educational outcomes. These were further refined for relevance to Lakhnu by looking through the IREAD lens. The sub-set summarised in Table 3.12 of Chapter 3 includes parents, the community, the school infrastructure, teachers, policies and their mechanisms of implementation. While all are relevant, the relative importance may vary. To consider these themes, validate their applicability and understand the underlying causes, the analysis framework must be centred on the research question and finally guide the IREAD activities which can improve the educational outcomes for children in the Lakhnu School.

6.3.1 *Progressive Macroeconomic Environment*

Over the research timeframe, there has been marginal progress in the village. New shop fronts have been built and there appear to be more motorcycles on the road. Toilets have been constructed under government schemes but anecdotally issues of utilisation and functionality remain. There is no local or District level empirical data on economic growth rates and comparisons with the national figures are difficult. The national GDP growth has been robust as shown in Figure 6.1. Correspondingly, there is visible progress even if one cannot quantify it or consider how uniformly the benefits have been spread across the community.

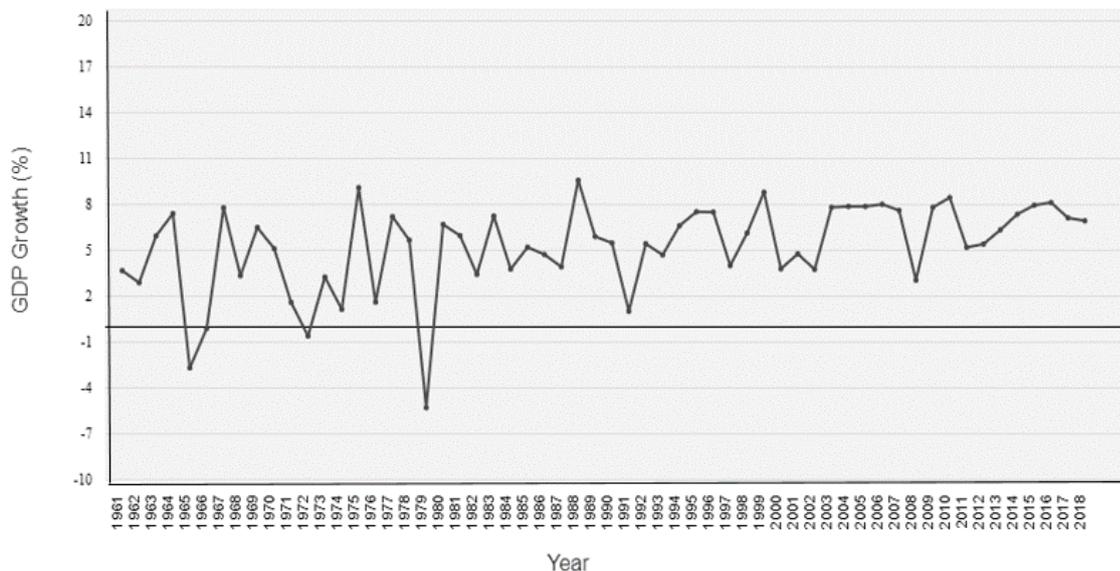


Figure 6.1. GDP Growth Rates of India. Adapted from *World Bank India Country Data*, by The World Bank, 2019, Copyright 2019 World Bank.

The expatriate community-based organisation IREAD has contributed towards changing the educational environment in Lakhnu in two principal ways: a direct contribution to the local economy through all projects it has facilitated and an indirect influence wherein the increased focus on the school and village results in government funds being deployed sooner than may otherwise have been. Being an organisation registered in Australia, IREAD is under Australian reporting obligations. Its annual reports required under the Australian registration legislation oblige the direct cash contributions to be documented each year. Over the research period this cash component of IREAD’s work totals Indian INR 10 Lacs (AUD 20,000) which is not insignificant. The school infrastructure improvements and the added staff in the school, including indirect benefits, can be estimated at around INR 40 Lacs (AUD 80,000). Thus, the total contribution to Lakhnu and the local area is around \$100,000 over the nine-year period, a reasonably meaningful sum (IREAD annual reports prepared for DMIRS each year). The non-monetary contributions which include the donated computers provided to the school, and the time of the various participants are even more significant. This support has allowed a progressive educational environment to emerge that mainstreams participation in primary education in these rural settings. It influences decision making by parents, the children’s expectations and the attitudes of the entire community.

6.3.2 *Demand-Supply Dynamics for Education in Lakhnu Junior School*

Considering a supply-side perspective, one can make a case that the facilities in the Lakhnu school are getting better and a capacity for improved performance exists. The school infrastructure has improved over the years. Benches have been added in the classrooms, the boundary wall was completed in the front part and an electricity connection was obtained. In 2018, a laboratory was also added. Computers were introduced by IREAD in September 2014 with a contract teacher made available to assist the school. A new young teacher was transferred to the school in 2016 and he started programs for physical training and sports. The school children have since then received some medals in the inter-district events for their performance. This younger educator is also familiar with computers and uses them more effectively as a teaching aid than the contract teacher who has since departed. A change in delivery of the midday meals schemes from in-house cooking to provision through a contractor occurred in 2016 as well. This freed up teachers who no longer had to manage the provisions and cooks, thereby increasing teaching hours.

The demand-side dynamics are less clear. While enrolments have increased over the research period, the attendance levels are inconclusive. The data point in February 2017 (Table 5.2, Chapter 5) is a possible aberration as during the potato harvesting season, absenteeism is higher than normal. Parents are a critical demand driver and can influence their children to attend. However, over the research period, no major change was evident and there remains a small cohort of parents who seem to value education more than others. However, parents' involvement in the school functioning and village education committees has remained marginal. By comparison, the increase in enrolment at the privately run Deeksha School would suggest that the demand is increasing and that some parents are preferring private versus public despite the fee impost.

In considering the demand/supply debate, there may be some key factors which, if absent, can lead to a high level of dissatisfaction with the process and dissuade children from attending school. These can be considered analogous to the hygiene factors of Herzberg (Herzberg et al., 1959). In the original theory, the

authors considered factors impacting job satisfaction and dissatisfaction. The key findings identified that the themes behind satisfaction and dissatisfaction factors were different. As an example, stories of dissatisfaction centred on bad company policies but good company policies did not feature in the satisfaction factors (Sachau, 2007). Herzberg called these negative influences hygiene factors in a term borrowed from epidemiology, wherein “good medical hygiene does not make people healthy, but it can prevent illness” (Herzberg et al. 1959, p. 113). Herzberg’s use of the expression “hygiene” relates to prevention of dissatisfaction (or dis-ease) and this is the meaning implied in this research. It should not be confused with the medical term related to cleanliness and prevention of diseases.

For education, this is a useful concept, as it helps identify the minimum requirements that are essential for children to attend school. While their presence will not guarantee attendance in school, their absence will deter children from participating. The concept can be also considered in a framework of demand and supply influences and help determine the role these play in Lakhnu Junior School.

6.3.3 *Elements for a Framework for Analysis*

A framework for analysis based on the well-known Porter’s Five Forces can be considered (Porter, 1979). This framework (Figure 6.2) is conventionally used to understand and assess an industry’s attractiveness as a business. The analysis can be used to improve corporate performance by defining the forces (pushes and pulls) that affect competitive responses. Successful businesses would be able to establish a competitive advantage whereas others would be diminished in profitability.

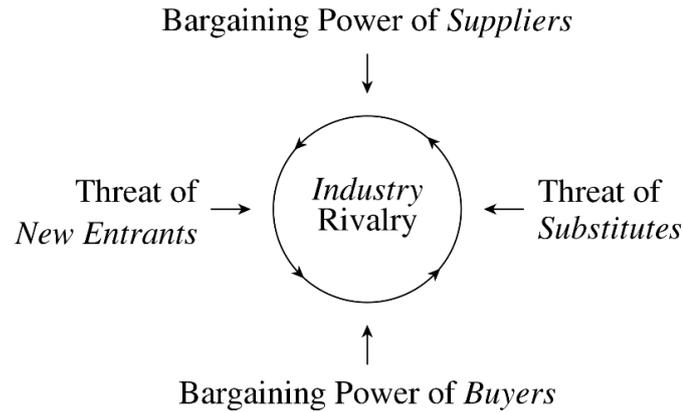


Figure 6.2. Graphical representation of Porter's Model. Adapted from Denis Fadeev CC BY-SA 3.0. 2019. <https://commons.wikimedia.org/w/index.php?curid=32946157>

Combining the Herzberg approach and considering viable learning through an attractive Lakhnu Junior School, as the central goal, the Porter framework can be adapted to identify the forces for and against children attending and learning. Conceptually, if the hygiene factors are present and the right combination of push and pull parameters can be put in place, children should attend school and learn. Minimum hygiene factors would be the availability of a school, teachers and access for children. The demand drivers, as an example, would include expectations from the parents and the broader community for the younger generation to be educated and the children themselves wanting to attend school. On the supply side, minimum requirements should be ensured through legislation or otherwise for the availability of at least basic facilities and expectations for children to attend school. This framework should also facilitate understanding the subtle influences of caste and social norms on both the push and the pull factors.

The framework being considered centres on Lakhnu Junior School with both the demand drivers (push factors) and supply drivers (pull factors) working in tandem to encourage children to attend school and learn. The IREAD organisation's activities are positively viewed by the broader community (primary push factors) and supported by the school and district administration (pull factors). Its efforts can thus impact both the demand and supply drivers with the positive reinforcement of both having an accretive effect on education provided by the school. Figure 6.3 presents

such a framework illustrating the various forces with IREAD as an influencer and its activities facilitating linkages between the users and the providers.

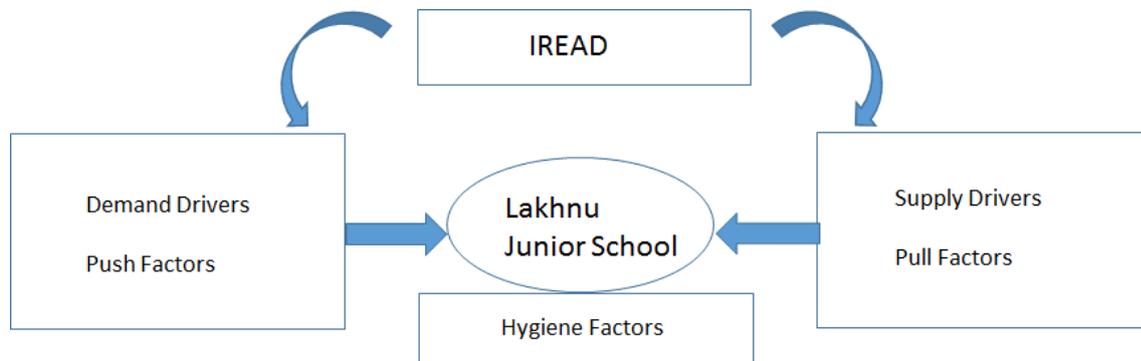


Figure 6.3. IREAD embedded framework considering the demand-supply and hygiene factors impacting attendance and learning

The push-pull model is also commonly used in innovation research to describe the interplay between forces shaping the adoption of new behaviour (Marinova & Phillimore, 2003). In India’s poor rural settings, and Lakhnu in particular, the dominant tradition is for children not to attend school beyond Year V; hence, transitioning and studying at junior school is a novel behaviour. The hygiene factors identify the minimum requirements that are essential for children to attend school. They can also be described as preventative factors in the same way hygiene prevents the spread of communicable diseases. In other words, the existence of hygiene factors will not motivate children to attend school, but their absence will generate dissatisfaction and deter them from participating.

In the subsequent sections, the generic framework defined above is populated with themes and underlying factors affecting education imparted in Lakhnu Junior School. Within this framework, themes relate to broad directions as “demand” and “supply” drivers whereas factors and/or parameters are specific issues under each theme that impact education. These factors can be classified under the push or pull side of the model and their efficacy considered.

As not all factors have the same weight on the learning outcomes, an evidence-based theory can be postulated to consider the most influential ones. The IREAD activities can then be guided to improve their impacts by focusing on these specific factors. Hence, the analysis to follow considers these aspects in greater

detail. This allows for improving the understanding of the role of IREAD and identify potential gaps which can be useful for future research.

6.4 IREAD Interactions: Granulising the Research Inputs

In this case study, all stakeholder interactions occur through IREAD activities as illustrated in Figure 4.3 in Chapter 4. The data was collected by the researcher while carrying out these activities over eight years from 2011-2019. Three data streams are considered: (i) through direct IREAD activities; (ii) through IREAD facilitated projects, such as the Curtin University LSCDP; and (iii) other (government or other group) led organised community activities at IREAD's behest. The data itself is multifaceted including observations, discussions, interactions and additional evidence, such as photographs of infrastructure and other artefacts related to the children attending school and learning. As the researcher, my role is to collect, record and analyse the stakeholder interactions and develop a consistent understanding of the issues with them (Thoillent, 2011).

The key themes impacting education of children in rural schools can be classified as parent-specific, child-specific, related to the social systems and community, and policy and legislation. Each of these themes can be refined with factors that can be effectively cast within that thematic. The various demand and supply drivers can be examined at a finer level of granularity to establish the ones of critical influence. These factors or parameters determine the decisions taken on both the push side and the pull side. In Table 6.2, the data gathered from the IREAD activities is classified accordingly. For each of the themes, some key decision-making criteria related to education were mentioned by stakeholders during the various IREAD interactions. These are the questions they apparently struggle with in considering schooling for the children. They are classified in as "tussle factors", i.e. representing the mental tussle in the decisions by the various players.

Table 6.2

Parameterisation from IREAD Data

Factors impacting exclusion of children from schools and education in general		
Demand Drivers (Push to school)	Supply Drivers (Pull towards school)	Comments /Tussle Factors (Considerations)
Parent Specific - Income levels - Landownership - Caste - Education levels - Mind Set - Religious beliefs	Parent Specific - Free - Proximal - Benefits? - Religious teachings	- Immediate income vs perceived future benefit - Inability to monitor child - Decision making “in the moment”
Children Specific - Gender - Work pressure – housework - Work pressure – External income	Children Specific - Proximity to school - Fun and interesting - Incentives (learning, food) - Away from housework	- Lure of earning (boys) vs learning - Lure of avoiding housework vs learning (girls) - Avoidance of failure or falling behind by not attending
Community and Social Systems - Heterogeneity and discrimination - Safety nets, security - Engagement with school and education system - Engagement with bureaucracy - Teachers’ motivation	For Parents / Children - No bias in school - No discrimination - Confidence in teachers - Engagement with teachers and the school management - Empowerment to represent to the bureaucracy	- Inherent class biases - SC/ST economic levels - Teachers engagement levels or indifference - School management committee needs to be functional and open - Teachers interacting within village to encourage attendance
Legislation and Policy - Free and compulsory - Teachers – Number - Teachers- Motivation - Mid-day meals - Scholarships - Easy access (distance) - Governance	For Parents / Children - Books and stationery - Regular teaching in class - Teachers engagement not indifference - Regular attendance of teachers - Decent and regular meals (Mid-day Meal Scheme)	- Supplies often late - Few teachers so no ability to adequately teach or supervise - Motivation of teachers - Teachers assigned to other duties - Broader governance issues – ability to penalise limited. Quick transfers so no time for real engagement

There are nuances associated within these classifications as gleaned from the data. These are discussed in detail as a precursor to populating the analysis framework.

6.4.1 *Discussion on Key Factors: Parents and Children*

The parents of the children attending Lakhnu Junior School are in the lowest socio-economic and class structure in the village with several living below the poverty line. Largely illiterate, their day-to-day life is consumed by finding work and managing around the social fabric of the society they live in. Male members go away to find daily work. The women are at home managing the housework, cooking, and animal husbandry to the extent that they have no time or ability to supervise children. Almost nothing is consistent, and a high degree of uncertainty is associated with daily activities relating to income, health and survival. Sickness of self, family or animals, too much rain or too little rain; the list of variables, or reasons, is long and constantly changing, all impacting families' decision making. The tussle factor of decision making in the moment, characteristic of the rural families, is driven by these variables which are themselves uncertain.

How can these uncertainties be considered as they impact the factors influencing education decisions? The literature defines two kinds of uncertainties – one due to randomness where defined laws of randomness (state of nature) are known and apply and the other category is where they are truly random (Chernoff, 1959). The second group is more complicated as no patterns can be easily defined. The decision-making processes of the Lakhnu Junior School parents are directed by the uncertainties they face on a daily basis. Both classifications can be considered. For example, some labour demands are predictable, but with changing weather patterns the bias towards an undefined state of nature is increasing. These risks are local in nature and not easy for an outsider to understand. They are not significantly impacted by national or international events insofar that local policies are not changed. All of these add to create a unique confluence which brings together the impacts of poverty, limited opportunity and a continuous balancing of risk and opportunity, each of which impacts their decisions in the context of their children's education. To improve the parents "push" towards their children's education, there is some value in analysing these uncertainties and the associated risks in more detail.

It is important to understand that the rural families are constantly exposed to different levels of risk. This is very different to the urban environment where there is some predictability and certainty in terms of jobs, availability of food and water, transport and access to many other services. Applying established techniques to understand and mitigate risk can provide some insights as to what rural families have to confront. The traditional definition of risk is the probability of an event multiplied by its consequence (Watkins & Bazerman, 2003).

Likelihood tables are built based on experience and relevance. As an illustration, Table 6.3 is one form of likelihood definitions. For the parents of the children in Lakhnu Junior School, the probability of a negative occurrence impacting their daily multifaceted variables – work, earning certainty or health, all fall in the almost certain category. The likelihood of these events occurring would thus fall in categories 4 (likely) or 5 (almost certain).

Table 6.3

Example Likelihood Table for Risk Assessment

Likelihood Table				
Rating	Descriptor	Expected Frequency	Probability	Probability
1	Rare	Once in 15 years	Highly unlikely but may occur in exceptional circumstance. It could happen, but most likely never will.	0-10%
2	Unlikely	At least once in 10 years	Not expected, but there is a slight possibility that it may occur at some time.	11-40%
3	Possible	At least once in 3 years	The event might occur at some time as there is a history of casual occurrence or similar issues.	41-60%
4	Likely	At least once per year	There is a strong possibility that the event will occur as there is a history of frequent occurrence or similar issues.	61-90%
5	Almost Certain	More than once per year	The event is expected to occur at some time as there is a history of continuous occurrence or similar issues.	91-100%

Note: Adapted from *Risk Assessment Template*, by Department of Education, Organisational Safety and Wellbeing, 2018. Copyright 2018 by Government of Queensland.

In determining consequences of these events, classifications range from “inconsequential” to “catastrophic”. While the specific brackets can be defined differently, for Lakhnu Junior School parents, any untoward events will have “major” or “catastrophic” consequences. An example of a “major” consequence, the

lack of a casual labour job can lead to no income which may mean limited food and no discretionary spend for the family. On the other hand, if the principal earner or someone in the family falls ill or has an accident, all income stops for a period of several days which can have severe repercussions as very limited safety-nets exist. So, with adverse events occurring regularly and each having significant consequences, the risk profiles in a matrix of probabilities and consequence cluster in the extreme category as shown in Figure 6.4.

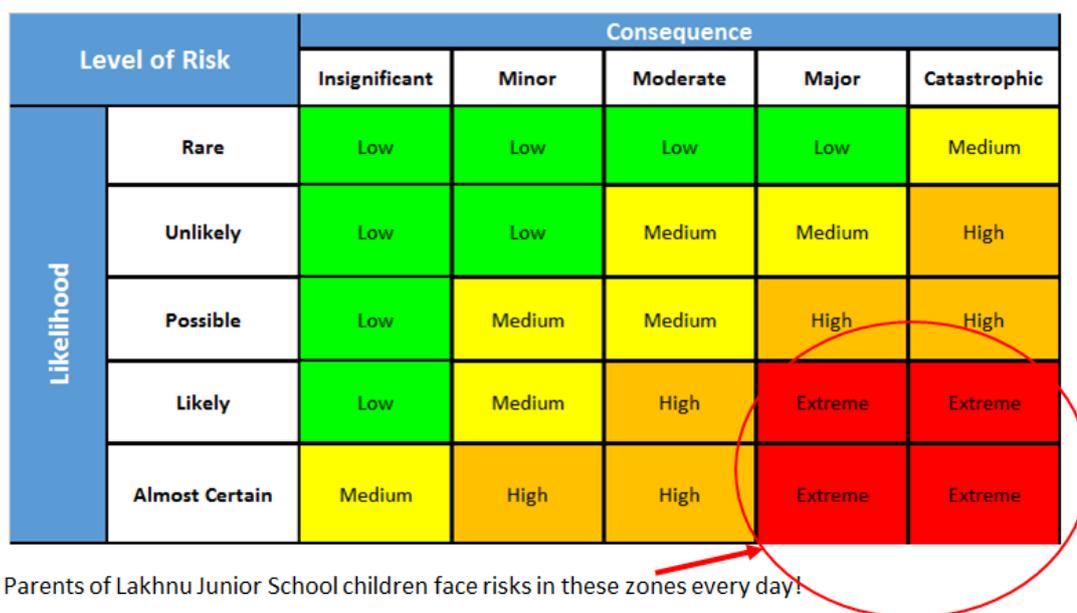


Figure 6.4. Typical risk matrix which allows classification based on probability and consequences. Adapted from *Risk Assessment Template*, by Department of Education, Organisational Safety and Wellbeing, 2018. Copyright 2018 by Government of Queensland

This conventional approach sees the risks for the daily wage workers and farm labourers in Lakhnu unusually concentrated in the red boxes. Even though this is qualitative, this concentration would be unusual for most people in the western world, and a perspective to keep in mind when analysing problems related to this environment.

Social and cultural factors can also influence the behaviour of such parents in Lakhnu. Forms of communal compulsions can exacerbate social violence and entangle them in a web of perpetual debt to unscrupulous money lenders. As an example, money may need to be borrowed for sustenance or debt incurred for dowry and expenses in the marriage of their daughters. The interest rate charges are high

and add to the burden faced by the people, further intensifying their daily risks. Typical approaches to minimising risk are to take specific steps to stay away from the red or “extreme” sectors as shown in Figure 6.4. Solutions ranging from public and private sources, such as microfinance and insurance schemes have been attempted but with marginal success (Banerjee & Duflo, 2012). Thus, as these people live by the day, any attribution of causality and a deeper understanding to the decision-making concerning education must consider this aspect.

Throughout the years, the IREAD projects and interactions have also identified the lack of consistency in the way the parents express their needs. This can now be better understood as their response is to the most pressing challenge they are facing at the moment. For parents, the benefits of education are long-term and either not immediately apparent or poorly understood. While some parents may be able to conceptualise and believe in them, they tend to be overshadowed by daily exigencies and as such need regular reinforcement. During the discussions, some parents acknowledged the benefits of education and were aware of how families with children in decent jobs are faring well in the village. However, the temptation to deploy a child towards immediate income generating tasks can be overwhelming in comparison to a future perceived benefit. Religious studies seem only to impact the Muslim community who may direct their wards towards Madrasas as opposed to a normal school. Free education and midday meals are helpful but not strong enough incentives in themselves to attract and keep children at school.

For children, the push and pull factors are not as varied. Lakhnu Junior School is close to the village, so distance and associated risks for girls are not significant. As they are young, a good meal and fun in school can be incentives as well as a mechanism to avoid chores and repetitive housework. Boys are more likely to be pulled away towards income generating activities, especially during the harvest season. Falling behind in class can act as a deterrent and discourage them from regular attendance. The better performers attend school regularly. They also seem to be more confident in stating their dreams of wanting to succeed and do not hesitate to perform in school functions. Teachers and their enthusiasm can be an important factor. The young teacher seemed to encourage both genders of children and they seem to accept the discipline imposed for exercise and sports training willingly.

There is a substantial consistency between these factors and those identified by the NSS 2014 report as being the determinants for not attending school (GOI, NSS, 2016). As indicated in Figure 6.5, only the subject of religious studies has been stated as a factor in Lakhnu (mainly for Muslim girls), something that did not feature in the NSS data.

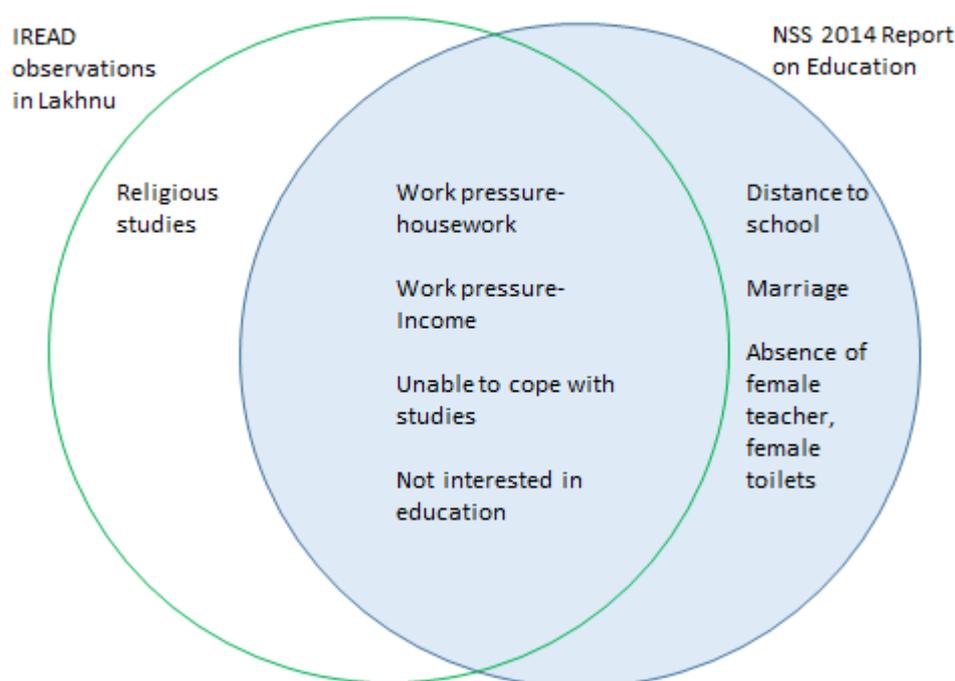


Figure 6.5. IREAD uncovered factors impacting children attending school compared to the NSS 2014 report. Adapted from *National Sample Survey 71st Round, Report 575*, Ministry of Statistics and Program Implementation, 2014, p. 117. Copyright 2014 by Government of India.

6.4.2 Discussion of Key Factors: Community and Social Systems

Social and community engagement in school activities appears to be limited. There is no viable school management committee (SMC) and over the years no evidence of the community and parents demanding more teachers or petitioning the authorities about improved infrastructure for education. Teachers claim that they interact with the parents and encourage them to send their children to school but based on the numbers, the efforts appear inconsequential. While there is some heterogeneity amongst the students in caste and religion, the common base is the low economic status of the families. There is no evidence of discrimination in the school on a racial or class/caste basis. The students who are regular and keen on learning are from all castes, including the Fakirs (Muslims). For the community, the RTE policy

factors act in both directions. The lack of books and delays in getting uniforms become reasons for complaining, but the most significant issue seems to be that several parents believe that the teachers are disinterested and do not teach. The children are left on their own and the school time is not productive. Consequently, directing children to housework or extra income generation irrespective of the compulsory policies is a real outcome. During the visits of government officials to the village, at the invitation of IREAD, the community raised concerns relating to water and road works. The issue of education has not been raised. This is indicative of it not being foremost in the minds of the people. All IREAD efforts in petitioning the authorities have been based on issues seen by members and validated with teachers. The teachers themselves have only been forceful in stating the need for extra staff.

Support from the community can and does help its members (the parents of the children) by providing a partial security net and can thus be considered a “push” factor for education. Community funding, particularly within the same caste through the extended family, can provide buffer funds in times of need. Marriages of daughters in neighbouring villages are also a way to spread this risk. In 2012, a gas cylinder exploded in a house severely injuring a young girl, her mother and aunt. The family rushed her to hospital in Hathras and income generating activities ceased as they were not able to staff their small food outlet. Savings and extended family support were the principal funding options. IREAD donated a significant amount of cash to help with the expenses but this was fortuitous as members from the Association were present when the event occurred. It was gratifying to see the extraordinary resilience exhibited by the two brothers. Maybe living with such risks on a daily basis inures one and lowers sensitivity, making it all the more difficult for people living with safety nets and support systems to understand.

The Curtin Lakhnu Community Sustainable Development Project (LCSDP) Projects have been targeted towards the community, several members of whom are parents of children attending Lakhnu Junior School. While these projects have been multifarious, the principal interactions have been at either a community level (communal spaces, heritage sites, common-use toilets) or at an individual level (personal space improvements, cooking pollution alleviation and personal toilets). In

this context, one needs to distinguish between physical facilities and human capacity development, involving both subtle factors and more specific ones such as dental hygiene and sanitation awareness. The subtle factors were acknowledged by some people as resulting in an altering of their mindset and a more “can-do” attitude. These are much more important from a sustainability perspective and encompass a sense of empowerment based on knowledge and self-confidence (Mariani & Fry, 2016). This can cover many areas, including sanitation, health, gender and education in general.

The LCSDP’s allowed greater insights into the children’s habitats and the community in which they were being raised. While the relevant themes distilled from literature have been examined in more detail through IREAD observations, the Curtin LCSDP’s provided complementary information on a number of factors that affect education. These key interactions and their impacts are listed below and summarised in Table 6.4.

- School-related: Donation of sports equipment, laptops and other educational materials, such as drawing books and coloured pencils, created excitement among the children and desire to be at school. The young teacher was particularly pleased as he could use the computer as a teaching aid.
- Child-specific: Continuous interactions with children proved to be a confidence booster, particularly for the young girls as several of the Curtin students and the ones from other Indian universities helping with translation were women. Guiding the Curtin team through the village and taking them to their homes for the various surveys was done with a sense of pride and self-esteem. Such interactions also improved the knowledge base of the local children and expanded their horizons.
- Parents-oriented: Seeing an egalitarian approach taken by the Curtin team with no sense of caste or class, was a very positive experience for the parents of the school children. They welcomed the Curtin representatives to their homes and shared their problems. The small-scale targeted interventions were performed together. These were expanded by the parents on their own later on as independent projects based on a new sense of self-assurance. To an extent these projects also fostered the value of education.

- **Social systems and engagement:** The community meetings in which issues were discussed and projects proposed were open to people from all classes. Such participation helps in a small way to break barriers as people share issues openly. Efforts to create a sense of communal harmony and educationally biased play areas (e.g. the edu-play project, Chapter 5) reinforce the relative importance of education.

A very significant achievement of the Curtin LCSDPs has been the trust that has developed between the community members and the visitors. While the University students have been different each year, the continuity of some staff members and Curtin University's commitment has been perceived as one that is only working entirely in the local interest. For children to see the western students perform manual labour was very instructive. Within their culture mired in established caste-based roles, this was an eye-opener and hopefully they will respect the dignity of all labour as they grow.

The community priorities, in terms of their needs, have been expressed with a great degree of variability. This is consistent with the IREAD observations wherein decision-making variables for the parents are many and vary temporally, impacted by externalities which are dominant at that time. This has impacted the efficacy of some projects that have been less successful than expected. However, at an individual level, people have acknowledged that through the Curtin interactions, they feel confident to approach their challenges and find solutions as opposed to accepting the status-quo.

Table 6.4

Key impacts of the Curtin LSCDPs on education

Factors	Curtin LSCDP Interactions	IREAD Observations
School infrastructure	Distribution of books, colouring pads and drawing material, sports equipment and computers.	New materials and experiences make learning fun and attract students.
Child Specific	Interactions in English. Games, drawing and expression sessions.	Confidence booster, particularly for girls to see female students from Curtin and the Indian universities.
	Guiding the visitors through their village and showing them their homes.	Assurance and self-esteem allowing children to show their family possessions and express their dreams of becoming engineers, doctors, teachers.
	Concepts of recycling and sustainability through the construction projects.	Broader knowledge base developed while working with the Curtin students. Understanding that no work is big of small – respecting the dignity of all work.
	A sense of history and pride in heritage through the restoration projects.	While there was a curiosity and initial interest, the sites could not be maintained.
Parents	Home and habitat surveys. Specific projects helping with the homes or other issues.	Views on education did not include any gender bias at the year 6-8 level. Parents developed a sense of self confidence and assurance in their abilities to fix their own problems. Fostering a relevance of education as being critical for development.
Community-Social Systems	Workshops with the community especially women.	Women (mothers) empowerment. Breaking barriers between castes to some extent by bringing all together in one forum.

For education, push factors for parents have been and can continue to be improved through these interactions, allowing them to be more future-orientated in their thinking. The impact of female visitors and students is likely to be particularly strong as the village mothers can potentially visualise their daughters' development as opposed to being a "bakri" (or goat that can be tethered anywhere by either a

father or husband). Pull factors for children can be improved if school can be fun, whether through coloured pencils and paper or cricket sets. Seasonal variability in attendance is not likely to be impacted as economic reasons dominate.

It has to be recognised that in the Lakhnu environment the immediate always dominates and that if lasting benefits are to be seen and mindset changes maintained, small level interactions need to continue. The IREAD model is aligned with this through support, representation and continuity of effort.

6.4.3 *Discussion of Key Factors: Legislation and Policy*

The policy makers are pursuing a UPE target wherein each child has similar opportunities. These policies are implemented through the state administration which is hierarchical. As detailed in Chapter 5, the structured approach allows no flexibility and the curriculum has to be completed as defined. Comparative studies between different states have indicated that the UP state bureaucracy is legalistic and more procedure dominated than outcome focused (Mangla, 2013).

This aspect has been corroborated numerous times during the IREAD visits. Despite being invited on each visit by IREAD, not once has the District Magistrate (DM) or the Basic Shiksha Adhikari (BSA) ever visited the village, generally opting to send their subordinates instead. Of the many DM's IREAD has interacted with, only two have shown any interest in what the association was trying to achieve. Others have been helpful but in a procedural way, asking the BSA to see whether the electricity connection can be expedited and the boundary wall completed. Seemingly trivial tasks have required numerous petitions and requests. As an example of the rigid adherence to rules, in the Curtin Community Toilet Project (see Chapter 5), one land site was rejected by the DM as it was a place designated for bio-fertilisers. While the physical land was suited for toilets and there were no bio-fertiliser pits, the DM did not want to make a decision to allow this and relocate the pits on the plan, should it raise queries in the future. Discretionary decision making was in general avoided. The administrators who have shared their views highlight the lack of resources, delayed allocations and transfer of funds and having to respond to demands made by the politicians. No noticeable evidence of inspections of the school, monitoring of the Mid-day Meals Scheme, or performance monitoring of

teachers was seen during the visits. Supplies are often late, school teacher training lags and permissions to enrol teachers in private training programs (paid by IREAD) have languished. Notwithstanding this, IREAD's requests have been heard, even if with delays. The implementation of the CLTS scheme in Lakhnu (Chapter 5) is one example of being able to expedite initiatives by channelling requests within the bureaucracy. Flexibility in implementation and improved governance could help with outcomes, but in UP that does not seem to be forthcoming (Mangla, 2013).

The age-appropriate admissions policy and the necessity of completing the curriculum each year, while well-meaning, makes the task of teaching very difficult for the teachers as some of the children in the class are woefully behind the others. This acts as a disincentive to the children themselves and avoidance of failure becomes a preferred choice. The NGOs are trying to bridge this by establishing remedial classes conducted by volunteer teachers. Pratham has been successful in this effort by concentrating on supplementary programs teaching basic skills to the children falling behind. Experiments wherein children are allowed to learn at their own pace have shown positive results (Banerjee & Cole, 2007).

In this case study, the data suggests that the policies, while they have their lacunas, are not a limitation to the provision of education. It is the delivery and governance that need to be improved. Following a period of implementation, the existing legislation is updated from time to time and it is expected that some of the issues will be addressed over time.

6.4.4 *Discussion on Key Factors: IREAD has a Role*

The top-down approach through SSA in UP has resulted in the infrastructure being built and education made more accessible to the rural children. This has improved enrolment but learning levels are poor (ASER, 2016). Significant challenges remain within each of the influencing themes and many factors need to be managed to allow the “push” and “pulls” to work together to provide better education for the children. The current approach may achieve the desired results in some distant future but at present, given the policy implementation limitations and socio-economic settings, other strategies may need to be tried concurrently.

This is consistent with IREAD's role. Through continued presence and regular interactions even if only a few times a year, the message of "education being important" is being passed. Modest improvements to the educational infrastructure are being supported as well. It was gratifying to hear one pupil's mother say that she would continue to send her children to school as it is important for their future, even though she was not able to articulate the prospects.

The IREAD experience also shows that far more effort is needed in trying to capture those who do not attend school and are way behind in learning, rather than focusing on the children who do attend. For schools and teachers, this will also deliver homogeneity in the classroom and allow progress through the curriculum. However, in trying to reach all, we risk not teaching any. Teachers have expressed similar views. There is no silver bullet and it is clear that "a patient, step by step approach" is more effective (Banerjee & Duflo, 2012, p. 16). The framework can now be used to analyse the factors, consider the key messages and postulate a theory. This will also assist in identifying the control factors where IREAD can focus for achieving maximum impact.

6.5 Populating the Framework: Data from 2011-2019

Having considered the various aspects of the research data, the analysis framework drawn in Figure 6.3 can be populated with the demand, supply and the hygiene drivers. Figure 6.6 illustrates this, listing the key factors drawn from the themes impacting education. These can be used to outline the most influential in the case of Lakhnu.

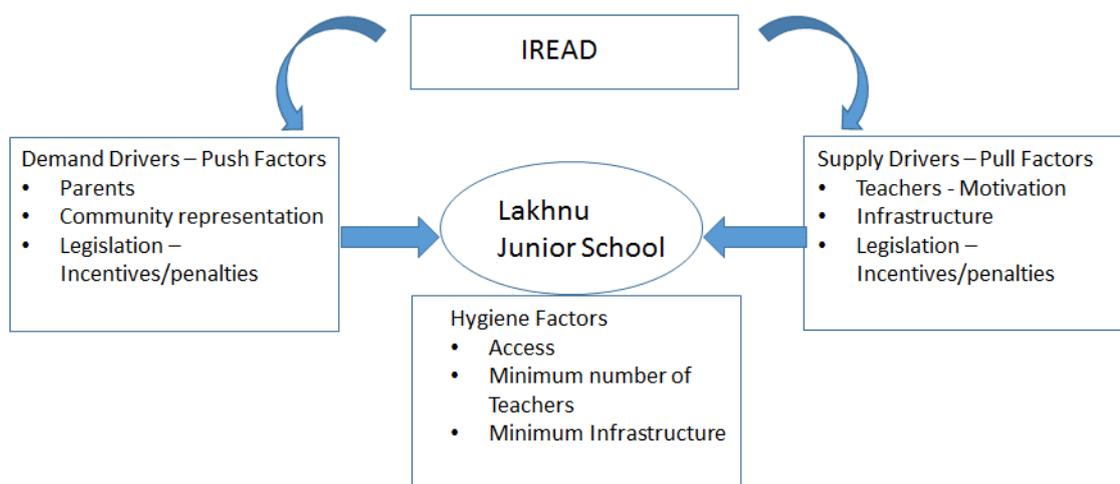


Figure 6.6. IREAD embedded framework with the key parameters influencing the demand-supply and hygiene factors impacting attendance and learning.

The school is proximal and the facilities, while basic, exist. These should not be a limitation to children studying and learning. It is thus plausible to consider that the hygiene factors in the case of Lakhnu are present. The IREAD’s contributions can improve these hygiene factors potentially making the school better equipped and more attractive to students.

Viewing the data acquired in light of the push and pull factors can be quite insightful. It shows that IREAD can influence these to varying degrees and while some of the avenues have not been explored to date, they may be feasible and within the Association’s mandate.

6.5.1 IREAD: Influencing the Demand Drivers

For any child at a primary school age, the parents are the most significant influencers on all aspects of their life including their education. The IREAD data for Lakhnu confirms that as well. Given their socio-economic status and the daily challenges, it is clear that several of the Lakhnu school parents are not in a position to either supervise their children on a daily basis or even consistently think about their future. The RTE Act mandates education so parents have to send their children to school. Theoretically if the child is not attending school, the parents can be considered in breach of the law but clearly it would be unenforceable due to the sheer numbers involved. Can incentives be provided? Experiments with conditional cash transfers (CCT) have worked in certain jurisdictions (Banerjee & Duflo, 2012, p. 78).

The Pardada Pardadi Trust had an innovative scheme in which each day a girl attended school, INR 10/- (AUD 0.2) were transferred into her account. Over twelve years this accumulates into a substantial sum and acts as an incentive (discussions with Sam Singh, Founder). In government schools, scholarships have been considered and modest sums allocated, but these are enrolment-based and do not depend on attendance.

The analysis indicates that the principal demand drivers are the parents themselves. While they may be supported by the community and have knowledge of the legislation, they have to voice the demand for education as an important issue. In an ideal world, they should be involved in the School Management Committees (SMCs) and interface with the teachers to be abreast of the performance of their children. At present, for all the reasons previously discussed, this is not happening with any efficacy. The ASER (2016), in conducting their surveys, encouraged the parents and community members to be engaged in the testing process and see first-hand the level of knowledge their children had. They were rightly disappointed with poor results, but apart from venting on their children or blaming the teachers and government, had limited options to offer. This is not surprising and even with the best will in the world, the parents' focus would soon shift to the next daily exigency. Social capital accumulated with community support can be a powerful tool and there is often a disconnection between such force and education in rural India (Iyengar, 2011). Deprivation in parts of the community and embedded caste structures impair village development and limit collective action (Dostie, 2006). In rural Lakhnu, these include limited engagement of the community in government schools, an aspect that eliminates any direct pressure on the elected officials as to the community desires. The community impact can be substantial. Just as people exercise their power through the ballot and vote out sitting members, they need to feel the same level of passion for education.

Economic benefits of direct cash transfer schemes may work as incentives as experienced by the Pardada Pardadi Tust school. However, these would be difficult to implement in a government school like Lakhnu unless initiated by the government. The IREAD annual prize distribution scheme can be extended to include scholarships for children subject to performance and attendance criteria. For parents and children,

retired teachers and other educated people can be invoked to run supplementary classes. Vocational courses can also be considered. The extent of involvement is limited by the time and funding available to IREAD. This Association can also play a greater role in the SMCs as currently all representations are done directly and not through the community bodies such as the SMC. Its members can be invited to all IREAD events and be consulted as part of the current community engagement process.

6.5.2 *IREAD: Influencing the Supply Drivers*

Gurus or teachers always have a much-respected place in the Indian society and are well-regarded. They impart knowledge, act as councillors and help mould values. For any child, they are likely to have the maximum influence, possibly even more than parents, who may be illiterate themselves, as is the case in Lakhnu. Senior community members, who have retired and returned to the village, have reminisced that when they studied in the school (then in the old building), the facilities were even more basic, but the education imparted was meaningful. The researcher's father-in-law also studied in the same school and later moved to the city to pursue engineering before a very successful career in the State Government. One fundamental difference between now and the education in the 1960s and 1970s is the role of the government school teachers. As a result of their high salaries, they have shifted from being residents in the village to living in nearby towns and commuting to work. The consequences have been multi-dimensional, from poor attendance to no real empathy or knowledge of the village folk. Notwithstanding, individual teachers can make a significant difference as seen following the transfer of the young teacher to the Lakhnu school in 2016.

The principal pull has to come from the teachers themselves. Challenges in remaining motivated when faced with poor attendance, a disinterested classroom and diversions from the administration are well-defined. They are caught between teaching and responding to the state-assigned non-teaching tasks, such as census and election duties, to managing the midday meals. The recent outsourcing on the Mid-day Meal Scheme was welcomed by the teachers as it gave them more teaching time. Furthermore, the disparity challenges in the classroom due to the age-appropriate admissions policy, inability to discipline and lack of resources to staff classes

adequately, let alone manage catch-up sessions, act as demotivators and negative pull factors. Despite all that as a senior teacher said “hum yahain roj aate hain, agar bacche padna chahain to hum kyon nahin padhayenge” (“we come here daily and if the children want to learn, why would we not teach?”).

Teachers are by and large from the upper castes and have on occasion been accused of bias against children from lower castes. This has been explored through studies wherein teachers gave lower grades to children when their caste was known as compared to when it was not. This study found that even lower caste teachers were harsher in grading the lower caste children (Hanna & Linden, 2009). Such prejudices lead to teachers ignoring the ones who need the most help and the same cohort have no support from parents. Another study found that children from lower castes compete well with children from upper castes in solving mazes if all are caste agnostic but do worse once their names (and hence castes) are known (Hoff, 2004). This creates self-doubt, and children may become further disinterested in learning and stops attending school. No specific evidence of caste-based bias was seen in the Lakhnu case as the vast majority of children are from lower castes and are very well represented amongst the IREAD prize winners.

Even children making average progress can experience discrimination, with the more successful learners receiving the most attention. With only one teacher and limited ability to handle different learning levels in the same class, the teacher proceeds with the curriculum irrespective of whether the class is ready to move on. The richer families can afford more attention and ensure their child extra opportunities to bridge any weaknesses. Thus, the gaps between those who can cope and the ones falling behind widens. “The poor end up in schools that make it very clear quite early that they are not wanted unless they show some exceptional gifts” may be a stark observation, but it reflects a truth about why children are left behind (Banerjee & Duflo, 2012, p. 95). Some evidence of this is seen in Lakhnu Junior School and one only needs to look at the classwork done by the students as the differences are glaring.

The system is thus not geared to allowing each child to rise to its potential. Despite the RTE and a substantial education budget under the SSA; the social and

economic biases act as a load on the children from an early age. Even as stories of success detailing how children from under-privileged backgrounds have succeeded in becoming leaders exist, they are modest in comparison with those ordinary children who have no chance of exploiting their talent.

Ironically, disparity is further being intensified. While the RTE and SSA are trying to level the playing field between the haves and have-nots, the lack of pull factors in the government schools are leading to even more discrimination. The poor already start at a disadvantage which is then accentuated by prejudices and biases of the teachers and even parents, even if unintended. There is pessimism seen in the eyes of the mothers whose children were not attending school and this said it all. Many such guardians have limited capacity to impose any discipline. The PROBE report noted that teachers had expressed an inability to deal with uncouth children (PROBE, 1999). Pardada Pardadi School also experienced that the children from the SC Kanjhar community were “wild”. They had developed a program wherein for six months, these children just learnt how to listen to instructions, sit in one place, form a line and understand other aspects of basic discipline. Several of the Lakhnu absentees would fall in this category wherein the school is not able to provide the additional support they need and the parents are distracted by immediate priorities. These children remain excluded from education.

It is apparent that if children enjoy school, they will be keener to attend. Computers, cricket gear and other such supporting infrastructure are useful attractions. The teachers are the critical link and their enthusiasm and motivation levels are the biggest pull factors, as seen from the data. Alternatively, a disinterested teacher can be a significant negative and instead of pulling children into school, would keep them away. Sometimes it takes the enthusiasm of just one teacher to revitalise the school. In Lakhnu the evidence of this has been seen and since the transfer of the new teacher, the energy levels of all seem to have gone up.

Program flexibility has been advocated in research whereby the school term needs to accommodate periods of low attendance due to harvesting requirements (Mangla, 2013). This is managed in other states but the curriculum in Lakhnu Junior School is rigidly followed. It is possible that an adaptable curriculum can benefit the

children, but it will need to account for more than the harvest seasons, as the issues of non-attendance are seen throughout the year. Pratham has had remarkable success in improving basic literacy of children who have fallen behind by organising remedial sessions and summer programs. In some, the same government teachers have agreed to teach and with tangible improvements in the literacy and numeracy skills of the participants. They have shown that bridging courses work and have demonstrated a mechanism to allow students to catch up where necessary (Banerjee et al., 2010).

The IREAD association can continue to lobby and petition the administration to ensure proper staffing levels for the school and the upkeep of infrastructure. It can also support teachers through hiring some staff directly as in the case with the computer teacher and can also explore direct training of teachers through third parties with the permission of the State administration. Other motivators are recognition in front of the community, raising teachers' profiles with the administration, and inviting distinguished educators to visit the school. With the supply of supporting infrastructure and assisting the teachers, IREAD can influence the pull factors positively.

Expanding this inductive approach, a broader hypothesis can now be considered using the grounded theory. This construct is derived from the IREAD data and is consistent with the bottom-up approach being pursued in this case study.

6.6 Developing a Grounded Theory

This case study is a longitudinal study centred on Lakhnu Junior School and aimed at understanding the root causes affecting the uptake of primary education in rural India. Not starting with a predefined hypothesis, the case study uses the data collected and its analysis to develop a theory, a grounded approach (Glaser & Strauss, 1967). The qualitative research design as articulated in Chapter 4, utilises the methodology to develop inductive assessments based on the case study data.

6.6.1 Framing the Data

The existing scholarship includes positivist modes of research. Policy decisions such as the requirement that each village should have a primary school

within one kilometre is a likely result of such work. However, such empirical analysis, like the ASER reports is gathered from data collected by volunteers who are not likely to be known to the people they interact with. Despite their skill, one can assume that the trust level of IREAD members, with whom they have interacted with for years, would be higher. The repetitive data-analysis cycle of the grounded theory should lead to patterns emerging from the data through participant observation and dialogue journal notes (Dana & Pitts, 1993).

A grounded theory approach is also appropriate for educational research as the qualitative design can explore specific issues and confidence through the emergence of repetitive insights (Babchuk, 1997). In this case study, the two-pronged approach is aimed to first arrive at a theory and then attempt to validate it as far as possible. In summary:

- the data acquired and analysis performed over the period 2011–2019 allow the construction of theoretical propositions;
- the interviews scheduled in 2020 endeavour to conceptually test the theory.

The available data is considered by key-phrases or codes as extracted from the myriad of sources during the IREAD interactions with the stakeholders over the research period. It is estimated that the data represents sixty interactions with teachers of over three hours each, fifty interactions with parents of two hours each, fifteen interactions with the district officials of around thirty minutes each and eighteen education related interactions with the community members of around fifteen minutes each. This all adds up to approximately 290 hours of primary material. The qualitative data is classified as either being supportive of education for children or not. While all these keywords have come up frequently and characterise the repetitive insights emerging from the data, the ones highlighted in Tables 6.5 to 6.8 have come up on almost every occasion.

Table 6.5 categorises these for the parents. “Manyata” means belief system or mindset and was expressed by almost all parents who sent their children to school. They firmly believed that if educated, the child would have a better chance of getting a job. The midday meals, free uniforms were also attractions. On the other hand, the

parents who were indifferent focused on their struggles and questioned the value of education as there was no guarantee for a job. They felt that the teachers were often not present and not interested in teaching.

Table 6.5

Key phrases expressed by parents. The bolded phrases were repeated

Stakeholder	Codes not supportive of education	Codes supportive of education
Parents	<p>We are very poor and every day is a struggle.</p> <p>Children can help with work and income.</p> <p>No guarantee of a job.</p> <p>Not interested – does not understand what is being taught.</p> <p>Teachers don't come, don't teach</p> <p>We don't know what is happening (in school).</p> <p>Nothing will change for us (fatalism).</p> <p>Girls have to learn housework (for marriage). More important than school.</p>	<p>Manyata (individual mind-set).</p> <p>Free food (Midday meals).</p> <p>Free uniforms, shoes, books.</p> <p>School facilities are ok.</p> <p>The child will learn something.</p> <p>Better chance to get a job.</p> <p>No caste bias in the school.</p> <p>Will learn from others.</p> <p>May learn computers.</p> <p>May learn English.</p> <p>Master sahib (teacher) will teach them only good things.</p>

Similar constructs can be applied to the other stakeholders, namely the teachers, the state and administration and the community. These are summarised in Tables 6.6, 6.7 and 6.8 below.

Table 6.6

Key phrases expressed by teachers. The bolded statements were repeated

Stakeholder	Codes not supportive of education	Codes supportive of education
Teachers	Parents are not interested. Not enough teachers. We are assigned non-teaching jobs. We get little respect. We get blamed by parents for children not studying. Community does not care. We are blamed by our masters if the numbers drop. We feel ineffective. School schedule not flexible with farming. Our training could be more relevant. Too much paperwork. Nepotism in the administration.	We go home to home to bring children to school. We want to teach. It is our job. We do the best we can. We are willing to do extra work if the children are interested.

Table 6.7

Key phrases expressed by the officials

Stakeholder	Codes not supportive of education	Codes supportive of education
Administrators	We have staffing issues. Budgets and curriculum controlled from HQ. Teachers are often negligent, but we can do much under the rules.	We have built schools. We provide all the essentials as per the policy.

Table 6.8

Key phrases expressed by the community

Stakeholder	Codes not supportive of education	Codes supportive of education
Community	We have so many issues – roads, drainage etc. to raise with the administration. Government does not care.	The community helps each other. We don't pressurise parents on religious grounds.

The above codes can now be attributed to stakeholder categories. For example, some expressions from parents apply to the teachers and the reclassification will support a coherent response merging.

6.6.2 *Deriving a Theory*

The codes from Tables 6.5-6.8 above are now reclassified against the stakeholders to whom they relate. This should afford greater transparency and in Table 6.9 below, these codes have been classified by the stakeholders affected. The administration codes have been classified into policies which are not made at a district level and implementation issues which are within the District Magistrate's jurisdiction.

Table 6.9

Expressions classified by affected stakeholders. The bolded phrases were repeated

Stakeholder	Codes not supportive of education	Codes supportive of education
Parents	<p>We are very poor and every day is a struggle.</p> <p>Children can help with work and income.</p> <p>No guarantee of a job.</p> <p>Not interested – does not understand what is being taught.</p> <p>Nothing will change for us (fatalism).</p> <p>Girls have to learn housework (for marriage). More important than school.</p> <p>Parents are not interested.</p>	<p>Manyata (individual mind-set).</p> <p>The child will learn something.</p> <p>Better chance to get a job.</p> <p>Will learn from others.</p> <p>May learn computers.</p> <p>May learn English.</p>
Teachers	<p>Teachers don't come, don't teach</p> <p>We don't know what is happening (in school).</p> <p>We get little respect.</p> <p>We get blamed by parents for children not studying.</p> <p>We are blamed by our masters if the numbers drop.</p> <p>We feel ineffective.</p> <p>Teachers are often negligent but we can do much under the rules.</p>	<p>No caste bias in the school.</p> <p>Master sahib (teacher) will teach them only good things.</p> <p>We go home to home to bring children.</p> <p>We want to teach.</p> <p>It is our job.</p> <p>We do the best we can.</p> <p>We are willing to do extra work if the children are interested.</p>
Policy	<p>School schedule not flexible with farming.</p> <p>Budgets and curriculum controlled from headquarters (HQ).</p> <p>Too much paperwork.</p>	<p>Free food (Midday meals).</p> <p>Free uniforms, shoes, books.</p> <p>We have built schools.</p>
Administration & Policy implementers	<p>Not enough teachers.</p> <p>We are assigned non-teaching jobs.</p> <p>Our training could be more relevant.</p> <p>Nepotism in the administration.</p> <p>We have staffing issues.</p>	<p>School facilities are OK.</p> <p>We provide all the essentials as per the policy.</p>
Community	<p>Community does not care.</p> <p>Government does not care.</p> <p>We have so many issues – roads, drainage etc. to raise with the administration.</p>	<p>The community helps each other.</p> <p>We don't pressurise parents on religious grounds.</p>

With quantitative data, a sensitivity analysis can be performed to gauge the impact on the outcomes of each of the influencing factors. With this qualitative data,

a simple algorithm can be constructed by assigning 1 point to each key phrase and 2 points to the repeated (highlighted) ones. The resulting tornado chart of the influences the stakeholders have is depicted in Figure 6.7. A longer bar length refers to the factor being more significant in both directions as a motivator or detractor.

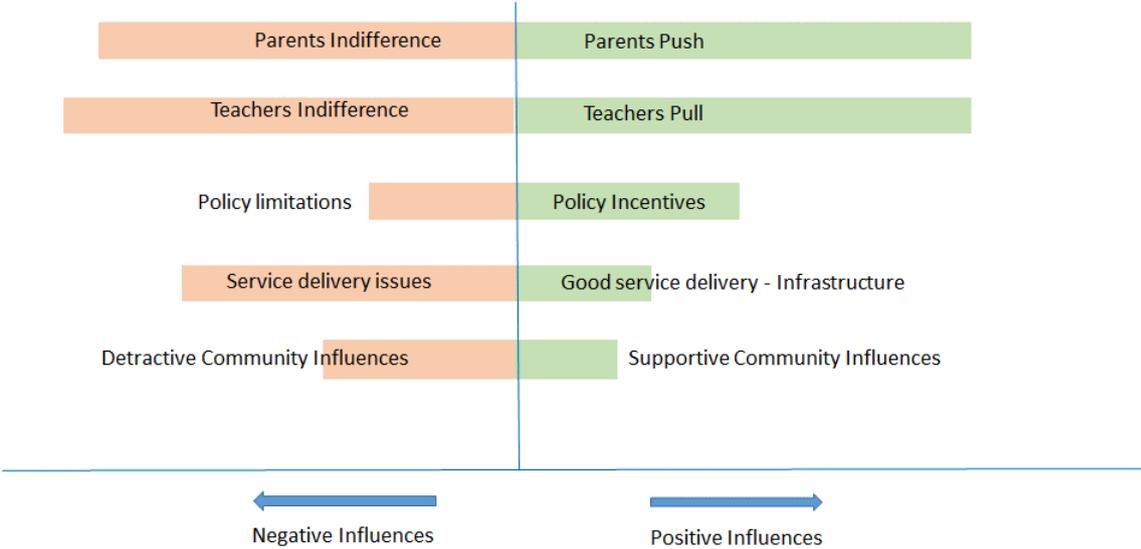


Figure 6.7. Qualitative tornado chart based on repetitive insights gleaned through IREAD experiences to reflect the most important parameters influencing children attending school and learning.

Based on the case study data and perceptions, the parents and teachers seem to exert the maximum influence on children’s ability to attend school and their actual performance at school. Indifferent parents have a detracting influence by lack of “push”; however unmotivated teachers can result in children being completely turned off school. It is likely that children who are self-motivated will be less impacted, but the average student will need a pull from the school to attend. Policy incentives such as scholarships and midday meals can act as incentives, but penalties are hard to enforce and limitations cannot be overcome locally, so have a smaller influence. Supporting infrastructure and other attractions can be accretive and magnify the pull factors. Service delivery issues such as shortage of teachers, assignation of teachers to non-teaching roles, delay in provision of books can be a very significant disincentive for children to attend school. Community influences can be negative if they remain disengaged from the educational and school activities. They can become a significant positive if the community can demand better services and present its

case to the administration. Detractive community influences are small in Lakhnu as no particular race or caste base bias is seen in the school.

In summary, teachers need to be motivated and the parents, together with the community, can effectively counteract shortcomings from the administration by becoming more involved with the school. Given the community's power in a democratic society, issues raised by teachers and parents, if expressed regularly and forcefully, will be heard. This will also provide a system of checks and balances allowing the school to function more effectively. It would be an effective way to force the administration to improve service delivery and allocate the necessary resources. Experienced bureaucrats will perform if that is demanded by the politics of the day.

This system of feedback is depicted in Figure 6.8. It shows that a key to good performance is for the community and teachers to work together with mutual respect. A metric for success would be to see an empowered community looking after the educational outcomes for the children in Lakhnu where IREAD plays a supportive role in dealing with teachers, parents and the administration without interfering with the educational process itself.

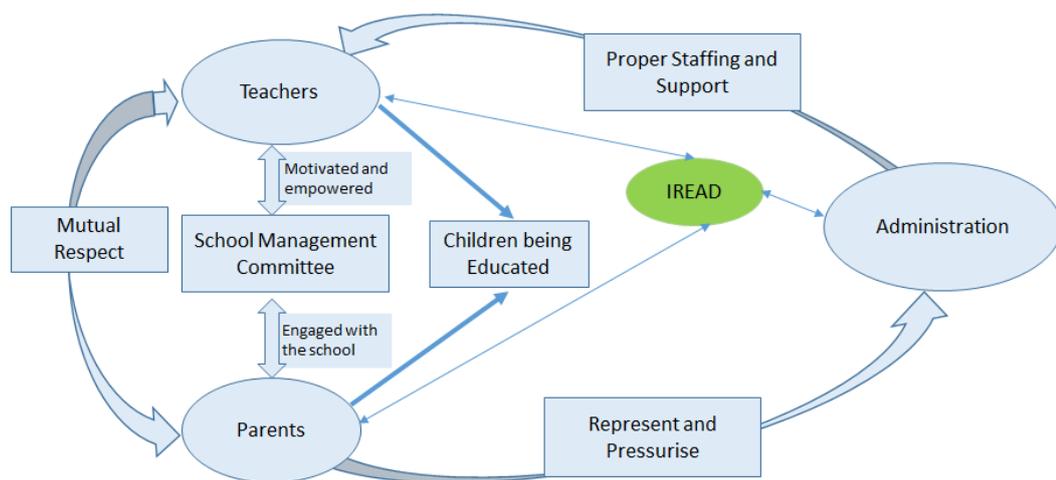


Figure 6.8. Role of IREAD within the confines of the current primary school system.

A theory for this case study can now be construed based on the above. Recapitulating the original intent, the research is aimed at understanding how a collaborative relationship developed between non-residents Indians through IREAD

can improve primary education outcomes in Lakhnu. Thus, from an IREAD perspective, the construct should focus on what is achievable and within the remit and capabilities of the organisational constraints. The analysis can thus propose:

Within the existing policy framework, using an IREAD model, an expatriate organisation can engage with the parents, teachers and the administration to influence the educational process and deliver improved learning outcomes for the children.

This is certainly a hypothesis IREAD can work in alignment with. The analysis also illuminates the influential factors which can impact education most in Lakhnu Junior School.

6.7 Conceptual Testing of the Theory

To further improve the learnings, semi-structured interviews of the stakeholders impacting the most significant variables and the elements of the proposed theory from the case study analysis were conducted. Taking the major parameters from the qualitative tornado chart, the stakeholders fall in four main categories: (i) school teachers who are at the forefront of delivering education; (ii) parents who are enablers but largely not literate themselves; (iii) the state government officials who implement the policies and (iv) the community who needs to be encouraged to take ownership of its village educational outcomes.

The initial questions for these interviews were drafted as part of developing the methodology for data collection (Chapter 4). They were subsequently adjusted to ensure that a better understanding on each of these can be developed. The teachers' motivation question can be posed to all stakeholders to see how they view this critical element. Training and upskilling are a government responsibility but to an extent the teachers can propose and the parents can demand this from the authorities as well. Knowing the daily exigencies of the parents, the effort should go more towards understanding why they are not more demanding of the teachers/authorities and make the School Management Committee (SMC) useful. What are the impediments if any? While not evident in the school, are there any issues faced

because of class and caste structures? The private school angle can be explored as well. If money was not a determinant would they prefer to send their children to Deeksha School? Not much is to be gained by asking them to increase supervision of the children. Do they make choices as to which child is to be supported through to higher education? What is their thinking and do they discriminate in favour of boys? For the educational administrators, discussions can be conducted on computer training programs and how upskilling can help in motivating the teachers. Functionality of the SMC is important and how the district can make the same more effective is important. The issue related to the veracity of the educational data, i.e. DISE, can be more sensitive as officers may not want to admit that the information needs validation. Remedial programs and any CCT schemes are within their purview and can be discussed.

Over two days in March 2020, these questions were explored through semi-structured interviews. Consistent with the university ethical mandates, the information regarding the research was shared with the stakeholders. As expected the parents and government officers were not willing to formally acknowledge any information shared. Only the teachers agreed to sign a consent form through a nominated representative. Recordings were not possible and the field notes had to be completed later in the evening.

The teachers outlined that the principal reasons for non-attendance of children were requirements to work outside or do domestic chores if both parents were in the labour force. Poor health of either the child or any family member was also an important contributor as the work was redistributed amongst those who were well. Attendance was particularly poor during the harvesting season and no amount of influence exerted in the village had meaningful effects. Prior to the school opening, they were going to the village to encourage parents to send their children to school, but home economics dictated that in such times all contribute. “A child attending school is missing out on INR 150 to 200 /day (AUD 3–4), a sum quite meaningful for the family”, commented a teacher. Asked about the influence of village children who had obtained prestigious government jobs, they responded that the influence of such icons was limited as the numbers who secured such jobs were dwarfed by those who did not. “The lack of employment leads to negativity and

lowers the belief parents have in education” said one of the senior teachers. This is poverty-determined and independent of race, but Muslim families are poorer and the children do not want to study, they added. Of the children who attend school, caste is not relevant and evidenced by the fact that students from varied castes, including Muslims, have claimed the IREAD academic prizes.

Interviewing the teachers confirmed that while computers were an attraction for children, the government training facilities for teachers were inadequate in imparting the skills needed in this domain. Additional training conducted at a private facility would be welcome but only in the form of short sessions. They could not be away for even a full day. They also expressed the need for more flexibility from the state administration and the education department. In order to bring uniformity across the state, the administration had brought forward exams to mid-March, which was immediately after the potato harvesting season. It was thus hard to prepare the children and run catch-up classes as the children were not even able to attend. The May exam schedule of a few years ago was better suited to this region and the policy makers seem unaware of the local rural issues and cycles. Some aspects of the infrastructure have improved such as timely availability of books and uniforms. However, their non-teaching duties remain and several were being deployed for census work in preparation for the national survey to be carried out in 2021. The paperwork demands under SSA were significant and the Principal could not effectively allocate teaching time. Hence, the teachers feel caught between the administration and the parents, blamed by both sides and not respected by either. The Lakhnu Junior School SMC meets every month and the minutes are recorded in a register. From a reporting perspective, all seems functional. However, reading the minutes and noting the number of members who had used thumbprints, the reasons why this forum is perfunctory and ineffective become clear. One can see how the evidence of minutes can contribute to a tick and a higher score or 8/10 for the school (Chapter 2, Section 2.6), without having any impact on educational outcomes.

The parents of Lakhnu Junior School children interviewed were largely below the poverty line and working as daily labourers. One Muslim parent while himself uneducated and a cleric himself, preferred to send his children (including girls) to school instead of a Madrassa. He acknowledged that not everyone in his

community thought like that and he was an exception. Another parent said that the individual “manyta” or value systems were different when it came to education. The parents acknowledged the efforts of the teachers in encouraging children but admitted that they were not very involved with the school. While all were concerned about the daily income, few assigned a higher value to education than others, as one parent said “the benefits of education are more than just jobs”. Housework and income generating work needs to be balanced, but it was very hard during harvest times to forgo the extra income through their children working in the fields. Interestingly, while they were all aware of the village children who had secured employment in the police and become icons, they attributed it to “kismet” or fate and did not believe their children would be as lucky. A consensus opinion was that more employment opportunities would encourage more people in the community to send their children to school.

According to the District Magistrate (DM), the policies were being implemented effectively. Nepotism was being targeted and efforts being made to ensure that schools were adequately staffed. As a stop gap Shiksha Mitras (para-teachers on contract) were being assigned. Recruitment is a state capital (HQ) governed centralised process that he is not in a position to influence. The DM did acknowledge that the SSA progress was “slower” in UP but would not comment beyond that. Curriculum flexibility could be considered if amended by HQ and not otherwise. No views were offered on the inaccuracies of the DISE information system or any initiatives to encourage presence of NGO’s in the area. Notwithstanding, he was keen to help in addressing the issues raised in the IREAD petition letter which asked for additional teachers in the primary school and other infrastructural improvements in Lakhnu Junior School. It was very clear that he managed his district in a legalistic fashion and he was not prepared for using deliberative norms if it led to better outcomes (Mangla, 2013). If an issue was brought to his office in writing, it would be dealt with as mandated by the current policy. The education official (BSA) was very new and was still trying to understand the district school issues. He was aware of my meeting with the DM and keen to address the concerns raised. As I had experienced earlier, any items that were highlighted were actioned while others languished.

The influential community members interviewed, including the Pradhan (village head), were not aware of the SMC functions or objectives. For example, IREAD was given a petition to the administration prepared by the Principal asking for eight issues to be addressed. Ideally this should have been handled through the SMC. Education is not high on the agenda as the influential community members do not send their children to Lakhnu Junior School. The parents of the children who attend the school are largely illiterate and not confident in raising such issues. Neither are others in their socio-economic group. The need for a functioning SMC has been recognised in the research (PROBE, 1999) and there remains work to be done to make this one effective.

The interviews with the teachers validated their need for motivation and respect. On the other hand, the administration confirmed that they work within the policy framework and any changes to the policies must come from above. No flexibility was possible. The mechanism to achieve the active involvement of the parents and broader community in the school affairs remains untested but is clearly identified as a gap.

It would thus be reasonable to conclude that IREAD should focus on areas it can influence within the current policy framework. Fostering mutual respect between the teachers and the parents and having the parents actively engaged in the school should work. More time and effort are needed to convincingly validate the theory, but conceptually it appears plausible as seen from the progress made in Delhi. The Delhi State Government has actively been improving its government schools under a five-point program (Pareek, 2018). These include increased budgets, better infrastructure, and teacher training, make up classes for students falling behind and modifying the curriculum to make it more holistic. Results are encouraging and one critical aspect that the educational advisor stressed was the school's engagement with the parents and their taking interest in the learning of children (Pareek, 2018).

6.8 Demarcating the IREAD Focus Areas

The tornado chart in Figure 6.7 also demarcates the areas of focus and it is gratifying that several of these can be impacted by IREAD. This organisation's ability to provide educational material and introduce new technology quickly and

regularly makes the school interesting for the students and teachers. The IREAD can also support remedial learning classes through either Pratham or other means, such as direct financial support. This should result in building self-confidence and enthusiasm amongst children and foster a desire to learn. Parents' interest should symbiotically pique if they see their children gaining new knowledge. The IREAD can encourage community engagement with the school. For example, IREAD can try and influence the school in having the School Management Committee meetings straight after the prize distribution and support the community in raising issues to the administration. Until such time as the community takes up the mantle, IREAD can continue highlighting the school with the state administration, thereby bringing improved visibility to the village and school and acting as a motivator to the teachers in particular. In the summary table 6.10, the activities of IREAD, both ongoing and potential are listed against the critical tornado factors identified through the above process.

There is good reason to feel optimistic but expectations need to be kept grounded. Expectations of children and parents from education seem to be primarily focused on getting a job, preferably a government one, as a teacher or a police inspector. While some children have expressed hopes of becoming engineers and doctors, for most the horizons are determined by the positions of influence and respect seen in their vicinity. Irrespective, these expectations are illusory. There just are not enough government jobs, and we have seen only a small number of children actually get the minimum educational qualifications to attempt selection for such jobs. The disappointment of unmet expectations is palpable and faith in educational benefits diminished. Realistic expectations must be set and IREAD activities should be geared towards those who come to school and want to learn as opposed to trying to reach all.

Table 6.10

IREAD activities both ongoing and potential can influence the significant factors

Factors of influence	Ongoing IREAD activities	Potential IREAD tasks
Parents Push	Regular discussions on the value of education.	Scholarships for children and other economic support.
Teachers Pull	Hiring additional staff to support. Honour the teachers in an open community forum.	Third party training in computers. Providing other teaching aids such as tablets preloaded with teaching software.
Policy Incentives		Interface with influential organisation like Pratham to share issues and where the policies need to be amended.
School Infrastructure	Sports and exercise kits, computers. Government lobbying for building and such support.	Improve functionality of the toilets. Provisions of fans in the classroom. Build a library.
Community Influences	Regular discussions on the value of education.	Canvassing retired folks residing in the village to conduct make up classes for children and also educate parents. Getting the community more engaged in the School Management Committee.

While IREAD can continue to contribute meaningfully, it is important to focus on areas of maximum impact consistent with the proposition considered. The conceptual validity of this theory can be tested through semi-structured interviews of the key stakeholders. Empirical results will only be known in a few years following the parents' and community's embrace of the approach. Continued evaluation will determine the long-term sustainability of the IREAD model. Other research considerations are discussed in the subsequent section.

6.9 Considerations for Future Research

India's desire to be a knowledge superpower, was articulated initially by its President and subsequently reinforced by the Prime Minister in 2015 (India Today, 2015). Such aspiration will most likely succeed if the populace is educated and healthy (Banerjee & Duflo, 2012). The nexus between poverty and education is

pervasive in this case study research. Parents send their children to earn rather than learn as the immediate requirements for income outweigh everything else. The national family health survey figures on health and nutrition in rural areas are dismal and largely attributable to poverty (GOI, NFHS, 2018). Banerjee and Duflo (2012) identified five areas that impact the poor: (i) the poor often lack critical pieces of information; (ii) the poor bear responsibility for too many aspects of their lives, e.g. are isolated from large civic and municipal services; (iii) they have limited access to some markets and services; (iv) policies often fail them; (v) expectations and lack of belief often become self-fulfilling (Banerjee & Duflo, 2012, p. 268–271).

The advent of low-cost smart phones has facilitated information flows in villages like never before and from the above areas will support (i) and increase awareness towards (ii). As an example of points (iii) and (iv), a range of insurance schemes to cover against risks of weather and health have been tried but unfortunately are beset with low uptake and implementation issues mainly caused by poor governance and corruption. Design issues have also played a part as the policies were restrictive, had rigid definitions and covered only catastrophic risks, an aspect poorly understood by the target audience (Banerjee & Duflo, 2012). The policies are often not clear to the purchasers and when their claims fail, they do not renew. Those who have socialist inclinations suggest more use of public funds to underwrite the premiums, whereas the capitalist-oriented policy makers maintain that the users must want it, else the system is of little use. Suffice to say that there is a substantial chasm at present and the trust between users and providers of such schemes needs to be built (Banerjee & Duflo, 2012). Parents see a government job as an end result of education for their children, an expectation hard to fulfil. Disenchantment entrenches the belief in “kismet” or fate and as articulated in point (v) above often becomes self-fulfilling.

As expressed in Section 6.4.1, people such as the parents of the Lakhnu Junior School children, live under some extreme risk conditions every day. Any attribution of causality to their actions concerning education must consider this aspect. Kahneman and Tversky (1984) postulated that cognitive and psychophysical determinants play a role in decision making and that there is a relationship between decision values and experience values (Kahneman, 2012, Appendix B). People are

generally risk-averse and such aversion decreases with increasing wealth (Kahneman 2012, Appendix B). Stability is preferred over change and immediate loss aversion reduces the potential benefits of alternatives (Kahneman, 2012, Appendix B). According to Banerjee and Duflo (2012), “change seems all too often to benefit other people, unseen people, unreachable people” (Banerjee & Duflo 2019, p. 324). This is consistent with the observation that in Lakhnu, the benefit of educating children is an immediate cost with an uncertain potential future benefit.

In addition, Banerjee and Duflo (2012) assert that parents believe that the value of latter years of education is higher than the value of the earlier years. They tend to see education “as a lottery and not a safe investment” (Banerjee & Duflo 2012, p. 87). The lottery ticket is one leading to a government job. In Lakhnu, a Jatav family’s daughter recently was selected to enter into the police service. The status of the family immediately went up and the father became more forceful in airing his opinions in the community. When his daughter visited, he would walk with her dressed in a formal uniform through the village showcasing his strength.

For aspirational parents, this has some consequences as finances are limited. It may mean supporting the education of one child while the others work and supplement the family income. This may be the youngest or the child who shows the most interest. Gender issues play a role here and girls generally have less opportunities than boys as the parents believe that they will eventually marry, while the boys are the ones who will look after them. Banerjee and Duflo (2012) conceptualised a S curve to depict the correlation between future income versus income today as shown on the left side in Figure 6.9. Through their research they show that for people on subsistence incomes, single events can take them down the S curve as they struggle to get out of the crisis created by the event. A small decline in income today may have disproportionate decreases in future earnings, which would embed the individual deeper into the poverty trap (Banerjee & Duflo, 2012). People outside the poverty trap zone have reserves to recover and can manage such events more effectively while the poor rural villagers cannot.

The same can similarly be considered for education. Parents may be forced to limit who and how many of their children receive the educational support needed. An

analogue with the poverty S curve can be considered for education as misperception on the time value variance of education which can inadvertently create a trap for those who miss out. The end result is that winners are picked and other siblings are deprived of resources as shown on the right-side picture in Figure 6.9. The children who miss out and receive no benefits from early education will likely never catch up over time and will get caught in the poverty trap zone. If the one who is educated does not do well or does not support the family, the situation is exacerbated.

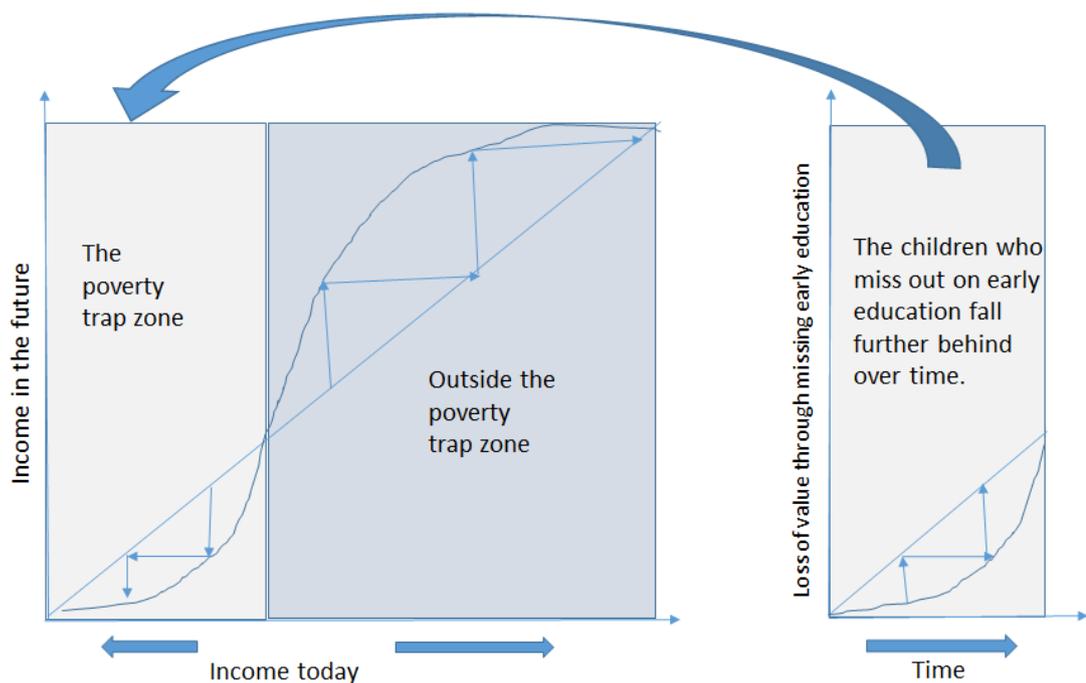


Figure 6.9. The S curve of the poverty trap (left side) and the misperception of early educational benefits leading to increasing value loss and enhancing disparity over time. Adapted from *Poor Economics*, by A. Banerjee and E. Duflo, 2012, Penguin Books, p. 12. Copyright 2011 by A. Banerjee and E. Duflo.

The areas outlined above, particularly understanding the decision-making processes of people in poverty and their perceptions about education need greater insights. These can then be the basis for more effective policy formulations and a sustainable set of interventions. Appropriately designed randomised control trials (RCT) have been used successfully to understand behaviour and can have an application in the area of primary education as well (Banerjee & Duflo, 2019).

Another potential area of interest is the viability of conditional cash transfer schemes (CCT) instituted through the government. It deserves a greater scrutiny as some of these have proved viable in countries like Mexico (Banerjee and Duflo 2012, p. 78). For parents, these could be additional push factors augmenting the midday meals and the school uniforms. These could include forms of outcome-focussed direct cash transfer schemes, with money payable if children attend school and meet predefined learning metrics.

Pre-primary and lower primary school activities are also in need of attention. In Lakhnu, the primary school (school years I-V) has even fewer resources than Lakhnu Junior School. The infrastructure is poorer, and the children still sit on the floor. In between the two IREAD visits in 2019 and 2020, two teachers were transferred out of Lakhnu primary school leaving one teacher and two para-teachers to manage over 100 children, some of them being the first to attend any school in their family. The Pardada Pardadi Trust experience was that small children from such marginalised families need at least six months of watchful instruction to learn how to sit still or stand in a line (discussions with Sam Singh, founder). Early childhood education is good for all, the children, the parents and the whole of society. According to Chavan: “We need to expand early childhood care and education based on what we know about the growth of the child” (Chavan, 2019, p. 6). The National Policy on Education (NPE) is currently being revised to consider the poor learning outcomes evidenced through ASER and other data. More than 50 million children could be left behind under the current system and the draft policy expresses the need to address early childhood education. While the Anganwadi (rural childcare) system in India is well established, the integrated child development system (ICDS) has not been effective in preparing children for school (Banerji, 2019). The Anganwadis were set up under the Indian public healthcare system covering neo-natal care, immunisation services and nutritional needs for young mothers. Providing pre-school education was a secondary objective. Scholarship in this area could benefit the design of the system and an effective integration of pre-school and primary school education.

Bureaucratic approaches in hill states like Himachal Pradesh, where primary education is being successfully provided, offer a template for further examination.

Mangla (2013) has posited that officials in these states are more deliberative and less normative than their UP counterparts. Some green shoots are starting to appear in UP as well. In 2019, a graded learning program (GLP) was piloted by the UP government in partnership with Pratham in selected district primary schools wherein children in Years I–V were grouped together based on their numeracy and literacy knowledge. A special class was established for two hours each day to bring them in line with the curriculum requirements. The teachers exhibited ingenuity and resourcefulness using smart phone-based Android apps to monitor progress (Mukerji, 2019). This is very encouraging as it exemplifies the use of technology, stimulates teachers and reduces the age appropriate lacunas created by the current rules. Such an initiative happened because of a few administrators who were bold enough to experiment. Additional research on similar techniques and other mechanisms to motivate teachers would be useful.

Flexibility in the curriculum and teaching pedagogy in rural settings with varying farming cycles may also be explored in the future. Meaningful and sustained change requires alignment with all within the system. A former deputy chairman of India's central planning commission believes that Indian bureaucrats are largely socialist in their views as fostered by education in universities and have an anti-business ethos enhanced within the civil services culture (Panagariya, 2019). Bureaucracy even slows down the reforms approved by the Prime Minister (Panagariya, 2019). In India, officials in the central cadre develop education policy while those in the state cadres are responsible for the delivery. Additional research here could help identify whether their approach to this sector can be altered and additional flexibility provided as with the GLP program, improved results may be seen.

The role of technology in rural education needs to be explored further. There is a significant uptake of smart phones in villages and areas of investigation could include applications covering benefits of education, monitoring performance of their wards and self-learning. Existing research in education indicates that “a key challenge for educators is linking learner needs, technology and pedagogy in order to construct more interactive, engaging and student centred environments” (Parker, 2013, p. 227). In Lakhnu, IREAD has introduced tablets with teaching apps but their

efficacy is to be determined. The fact that teachers are not trained in the product is a limitation and unless they are technology savvy, the usage can be limited. Getting the developers to remote locations to train the trainers is also a challenge. While the deployment of technology has significant potential, teachers need to be trained and experience the new learning environments as learners first (Maor, 1999). Rather than an approach in which technology is introduced because it is available, a tailored and integrated approach from policy to product deployment and training should be considered. The views of children could be canvassed as well, as the younger generation is savvier with technology and could provide useful inputs.

The adequacy of funding for achieving universal primary education needs further research. While the budgetary allocation in India is around 4% of GDP, numerous advisory bodies instituted by the government itself have recommended that this be raised to 6% (Venkatanarayanan, 2015). This percentage was initially recommended by the Kothari Commission in 1968 and has been repeated by the Central Advisory Board of Education (CABE) Committee in 2005 (Venkatanarayanan, 2015). Within this allocation, the share of expenditure on recurring expenses (non-asset building or liability reduction expenses) like salaries of teachers, paid by the centre to the states was reduced from 75% in 2006 to 50% in 2011 (Venkatanarayanan, 2015). This has resulted in a shortfall in recruitment of teachers at a state level and increase in the hiring of low paid para-teachers. The IREAD has experienced this during the March 2020 visit with the Lakhnu primary school being staffed with only one teacher and 2 para-teachers. It has also been argued that the neoliberal political economy since 1991 has been focused on deficit reduction as required by funding bodies like the World Bank while education and health budgets have suffered as these expenses are soft targets and easy to cut (Venkatanarayanan, 2015). The nexus between globalisation, an outcome of the neoliberal economy, and its effect in increasing educational disparity between the rural and urban citizens of India needs further examination.

6.10 The National Education Policy: 2020

A new National Education Policy, NEP 2020, was approved by the Government of India on July 29, 2020, proposing an overhaul of the entire education

sector. The policy document is adapted from the 2019 draft developed by a government-constituted panel of eminent scientists, educators and bureaucrats which incorporated previous recommendations and considered the nation's future needs (GOI, MHRD, draft NEP, 2019).

The central tenet of the policy is to encourage children to “learn how to learn” (GOI MHRD, NEP 2020, p. 3) and that the learning process should be holistic, enjoyable and engaging (GOI, MHRD, NEP 2020, p. 12). The policy reiterates the needs for high quality universal education for all Indians and is built around the concepts of: (i) access, (ii) equity for all, (iii) quality; (iv) affordability from early childhood and (v) accountability by those charged to deliver the service. These foundational concepts are stated as being essential to India's growth on the world stage as it heads towards becoming a USD 10 Trillion economy, the third largest in the world (GOI, MHRD, draft NEP 2019, p. 33). India is a signatory to the United Nations Sustainable Development Agenda and this policy is consistent with the stated SDG4 goal of “inclusive and equitable quality education and (promoting) lifelong learning opportunities for all” (<https://sdgs.un.org/goals>).

According to the policy document, children's cognitive capabilities should be developed at two levels, starting with basic numeracy and literacy which are needed to support higher order critical thinking and problem solving (GOI, MHRD, NEP 2020, p. 3). A new educational structure is proposed to imbue values of integrity and equity from early years, drawing on the Indian heritage of knowledge, wisdom and truth as shown in Figure 6.10.

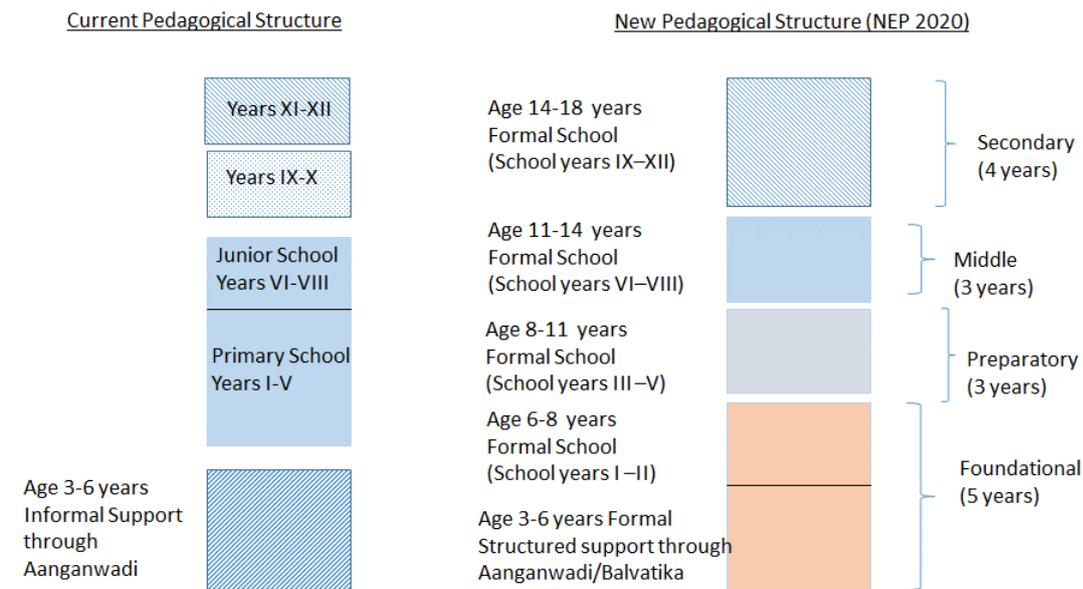


Figure 6.10. Changes in school pedagogical structure. Adapted from The National Education Policy 2020, by the Ministry of Human Resource Development, 2020, p. 6. Copyright 2020 by Government of India.

The salient features of the new pedagogical structure are around strengthening the early childhood care and education (ECCE) so that foundational numeracy and literacy competency are achieved by the time the child enters Year III. As can be seen in Figure 6.10, a 5+3+3+4 curricular and pedagogical structure is proposed with a Foundational Stage leading to Preparatory, Middle and Secondary School Stages. In addition, a new parent curriculum is to be developed to teach children at home up to the age of three years to help prepare them for school.

Eight policy areas are detailed: (i) Early childhood education; (ii) Foundation literacy and numeracy skills; (iii) Curtailing drop-out rates; (iv) Engaging curriculum pedagogy; (v) Focus on teaching staff; (vi) Equitable and inclusive education; (vii) Efficient resourcing and effective governance; and (viii) Standard setting and accreditation. The policy document openly recognises the existing issues related to children learning particularly in rural areas. Some key existing weaknesses are listed below:

- The current system of learning through existing Aanganwadis is not working well and needs to be augmented.
- Young children need to enjoy the learning process. Play- and activity-based curricula are needed.

- There is a “learning crisis” (GOI, MHRD, NEP 2020, p.8) and until the new systems are implemented, interim systems to support weaker students are needed.
- Teachers need to be at the centre of the educational system, be empowered and considered as the most essential and respected members of society (GOI, MHRD, NEP 2020, p. 4).
- Non-teaching tasks for teachers need to be eliminated, transfer frequency reduced and continuous professional development plans instituted.
- Community engagement in the school management committees and mentoring should be enhanced.
- Dropout rates are high, particularly at transition points after Years V and VIII. A focus on retention is essential.
- Technology needs to be leveraged at all levels and infrastructure to support this is needed:
- Basic school performance data captured at a district level needs to be improved.

The policy document is rich and comprehensive, listing agency roles, training requirements and stressing governance. Regulation, provision of education, accreditation and funding should have separate roles to avoid centralisation of power and possible corruption (GOI, MHRD, draft NEP 2019, p. 32). Budgetary requirements are outlined targeting a gradual increase to reach 6% of GDP from the current levels of around 3% as infrastructure and labour force expenses increase (GOI, MHRD, draft NEP 2019, p. 406). Implementation priority is to be given to the most disadvantaged areas and communities, including Uttar Pradesh. The task is recognised as being mammoth and the policy suggests encouraging philanthropic support for education where possible. This policy document is important as it does not shy away from recognising the issues and lists mechanisms to address them. There are details of implementation that are left to the various States but the main direction is that of an important shift. It remains to be seen how the States will consider the activities related to service delivery on the ground. The policy is open for comment to educators at present and their input on specifics is being sought.

It is interesting to note that the IREAD model appears to be congruent with what the NEP 2020 is seeking. Past projects like the edu-play developed through Curtin University, teacher and infrastructure support and the introduction of

computers and tablets are consistent with the policy aims. External training programs for teachers through IREAD may now get state administration support as the policy encourages NGO participation. The postulated theory to support education as outlined in Figure 6.8 appears validated by the policy directions which call for teacher empowerment and community engagement. Hence, the effectiveness of the IREAD approach should only be strengthened as the NEP 2020 is implemented given that it is less intrusive and builds on establishing relationships and commitment. “It works at the grassroots level and engages with the local players which allows it to have direct influence on the children within a community” (Sharma, Marinova & Bogueva, 2020, p. 15).

6.11 Conclusions

On the basis of the evidence, the directions identified for IREAD are congruent with the existing research and will be pursued. Within such a rural landscape in UP, the Association’s role can be positive. Research gaps remain and some have been identified through the work undertaken.

The developed IREAD model is very different from other existing ways of influencing primary education in India and Uttar Pradesh in particular. Tilak (2018) considered the influence exerted by the World Bank and other donor organisations since the 1990s through shaping educational reforms, policies and legislation as well as providing direct assistance in the form of aid. Whilst debates persist as to whether such direct aid complements or substitutes for local government efforts, is either holistic or divisive within the Indian society and what its effectiveness is (Tilak, 2018; Banerjee & Duflo, 2012), the model developed by IREAD is less intrusive and builds on establishing relationships and commitment. It works at the grassroots level and engages with the local players, which allows it to have direct influence on the children within a community. At the other end of the spectrum are voluntary engagements by people who visit India as tourists. For example, many travelling English speakers, including expatriates, become teachers in India’s primary school system finding unpaid temporary jobs in the state sector (Griffith, 2017). Although such contribution may generate interest from local children and motivate them to attend school, it may further demoralise the local teachers. The IREAD model leaves

the school education process at an arm's length through providing assistance aimed at strengthening the local delivery of teaching and is less disruptive.

“This study is the first to investigate a gap in previous research related to the role of expatriate organisations in influencing rural primary education in India. By comparison with the dominant previous snapshot approaches, this is also a longitudinal study over nine years. It produced a new theoretical model for understanding what the role of NGOs could be in supporting and facilitating an environment that encourages improved educational outcomes for the village children. Working within a space defined by push and pull factors, the IREAD model highlights the importance of long-term commitment in engaging with the main stakeholders in the village—parents, teachers and the administration, without interfering with the actual education delivery process, to positively influence the learning environment” (Sharma, Marinova & Bogueva, 2020, p. 15).

There are however factors that the IREAD model cannot influence and these limitations should be acknowledged. For example, flexibility in administrative policies, tuning of the educational curriculum to the village agricultural cycle will also contribute to improving both attendance and actual learning. The Himachal Pradesh approach may one day be applied in UP. However, it is difficult for IREAD to engage and impel such changes. The IREAD model has a place in the overall portfolio of solutions for non-residents as they constructively influence the demand and supply factors of education. This seriatim is considered in the concluding chapter, which also recapitulates the proposed theory addressing the research question.

In the final and concluding chapter, the longitudinal case study is summarised and the outcomes considered through a re-examination of the original research question. Some choices expatriates have in contributing to the cause of rural education in India are discussed, highlighting how the IREAD model fits within that set with the principal contributory variables being time and money. In closing, the original contributions of this research are listed, confirming the IREAD approach as a viable way to improve rural education, incrementally in concert with the existing policy framework.

Chapter 7: Conclusions and Future Research Possibilities

7.1 Introduction

The Government of India recognises that education is a fundamental building block of a progressive society and significant policies have been instituted to promote primary education at scale within the country. The numbers are very large, over 200 million children need to be educated and despite the signature initiative of Sarva Shiksha Abhiyaan (SSA) or “education for all” being active since 2000, the results are not satisfactory. Over six million primary school age children remain excluded from schooling (GOI, NSS-SRI, 2014). Of the children who are enrolled, attendance is poor, attrition rates are high and learning outcomes are unsatisfactory. A significant number of children are not credibly literate, failing both basic numeracy and literacy standardised tests (ASER, 2016). This situation is particularly pronounced in rural India where parents and children are facing additional challenges due to poverty related demands on their households, social and cultural complexities as well as the conditions in primary schools.

The education administration’s ability to manage the supply side and fulfil the policy mandate is dependent on a proper understanding of this context. A rigidly applied policy that mandates school attendance has had limited success because of the numerous counteracting factors that support the status quo and create resistance to change. To be able to disrupt the existing situation and facilitate a transition towards better provision of primary school education, the IREAD association of Indian expatriates has been undertaking a range of activities in Lakhnu.

Non-resident people of Indian origin have explored different ways of contributing back to India in the field of education. These range from purely hands-off financial donations on one end of the scale to those who have relocated to the area and given everything they have to the cause. This thesis highlights the role and importance of an alternative option, a new model, through which desirous non-residents can contribute to education in rural and remote parts of their country of origin.

This closing chapter retraces the research journey and provides a summary of the stakeholder influences as obtained from the research. The original research question is then reviewed in light of the case study findings and conclusions on the IREAD approach drawn. Within a seriatim of options available to non-residents who want to contribute to education in India, the IREAD model is then considered. Additional research opportunities and gaps in current knowledge as identified by this research are also summarised. The original contribution of this research is reviewed, validating the IREAD model as being accretive to education in rural India.

7.2 The Research Journey

In this thesis, constructed as a longitudinal case study, one government village school, Lakhnu Junior School, was the unit of analysis and the IREAD activities (summarised in Table 7.1), direct and facilitated over the period of 2011–2019 were analysed to understand the determinants affecting primary school education. Without a predetermined hypothesis, the research examined the existing state of education and how the intricate interplay between the policy mandates and the associated delivery of the service affects the various demand and supply drivers impacting school attendance of children. The complexity arises due to a myriad of caste and deeply rooted cultural dogmas in an overall environment of abject poverty.

Three principal streams of data, were considered—one through IREAD activities directly, the second garnered through the IREAD facilitated projects, including the Curtin University Lakhnu Community Sustainable Development Projects (LCSDP), and the final one through government or other group organised community activities performed at IREAD’s request.

Table 7.1

IREAD activities supporting the longitudinal case study over the research period

Focus Area	IREAD Activities
Support Lakhnu Junior School by improving its facilities and teaching	<ul style="list-style-type: none"> - Direct support with books, sports gear, and exercise kits - Direct supply of computers and laptops as teaching aids - Informally represent issues raised by teachers and parents or observed directly with the state administration to improve the infrastructure—e.g., classroom benches, adequate teaching staff, electricity connection, boundary wall and library; the representation is deemed as being informal as IREAD has no formal role in India’s education system but acts as a voluntary interested party akin to a NGO - Support through hiring specialist staff directly on a short-term basis to familiarise children with computers and teach word processing and simple spreadsheets - Consider applicability of other initiatives and/or educational products (e.g., tablets with educational apps) as teaching aids
Encourage children to study and attend school regularly	<ul style="list-style-type: none"> - Prize distributions for children who perform well at school and also a forum to honour their parents and teachers – prizes are given to boys and girls who come first and second in year V and year VII exams each year (the year V students come from the primary school and transition to the junior school, whereas the year VII students become the senior class in the junior school for the following academic year) -
Engage with and honour parents, teachers and other community members	<ul style="list-style-type: none"> - Discuss with parents the importance of continued education and encourage them to send their wards to school - Felicitate parents, teachers and other respected community members in an open forum with speeches and small gifts
Broader community engagement and support	<ul style="list-style-type: none"> - Raise the brand of the school and visibility of the village by providing a conduit to reach other resources in the country and outside – this could include facilitating visits by external parties related to education and development, and providing computer education for the children - Consider community issues that may impact education and liaise with the state authorities to have them actioned - Increase awareness on health and hygiene with diagnostic camps for eye testing and vaccination support - Research successful poverty alleviation and employment generation schemes and consider their applicability to the village, particularly for the parents of the children in the school.

Note: Adapted from *Transitioning to Better Primary Education: The Role of an Expatriate Organisation in India*, by S. Sharma, D. Marinova and D. Bogueva, 2020, *Sustainability*, 12(16), 6489, p. 7. Copyright 2020 by S. Sharma, D. Marinova and D. Bogueva.

The bottom-up methodology used in this longitudinal study is based on locally relevant data collected over nine years during eighteen separate visits with sixty-six days in the field interacting with school teachers, parents, the broader community and administrative officials. This data is multi-faceted and includes observations, interactions, artefacts, factual information and targeted interviews, thus requiring a structured approach for analysis and subsequent validation. The research database represents approximately 290 hours of primary material collected through over 143 stakeholder interactions and consultations (Sharma, Marinova & Bogueva, 2020). A novel framework was developed to draw out the inferences and learnings and link them back to the key themes impacting a child attending school and learning as determined from the literature review. As this data was collected and analysed, certain recurrent themes were conceptualised. This is consistent with using a grounded theory approach, wherein the paradigm results from the methodical gathering and analysis of data (Glaser & Strauss, 1967). These factors were investigated qualitatively and ranked in a tornado chart (Figure 6.7) in order of their impact on the desired outcome. On this basis, a theory was proposed and the key stakeholders were interviewed to create a fourth data stream and test the validity of inferences drawn from the initial data analysis.

Such an approach is accretive to the existing body of knowledge in the domain of primary education in India where the majority of research centres either on large-scale surveys or targeted activities using focus groups and interviews over concentrated periods of time. Instead, a prolonged nine-year period of observation and secondary data collection were followed by targeted interviews. The temporal aspect of data collection and analysis in a trusted environment, provides a novel approach to addressing the research question.

Efforts to meet the objective of universal education for all children in India, including those in rural villages, are laudable; but even after two decades of concentrated attention and energy, metrics for learning are dismal. All viable approaches—incremental and transformational—must be tried to further educational objectives and achievements. The IREAD model is part of a portfolio of options available to influence these goals positively. It is likely scalable across India subject to the essential criteria of continued interaction being fulfilled. The salient aspects of

the IREAD model and the characteristics that have sustained the associations' activities over a decade are depicted in Figure 7.1.

This longitudinal case study tells a story centred on Lakhnu Junior School and outlines a pathway to better understanding the education in rural settings using IREAD as a vehicle. As an incremental approach, the contribution of IREAD appears promising. In essence, the Lakhnu village is a microcosm of rural India where psychophysical constraints imposed by these tenets impact the parents' decisions about education for their children. Any story, however, presents a particular perspective providing an improved assessment in some areas while unearthing queries in others. These have been identified as gaps in understanding where future research may be directed.



Salient features of IREAD	Description
Targeted and focused on education and community benefits	<ul style="list-style-type: none"> - Direct and tangible benefits to the children and community at no cost to them - Opportunity to identify and support deserving students for higher studies - Mechanism to introduce new ideas and constructs, enhance skills and widen horizons - Opportunities to celebrate the village, its heritage and raise its profile within the District
Non-denominational and respectful to all	<ul style="list-style-type: none"> - No religious or communal overtones - Non-controversial and thus gets broad-based community support
Culturally consistent with no language or other major communication barriers	<ul style="list-style-type: none"> - The principal members come from the area or have ancestral links. This provides initial access and a platform to start engaging with the community. - If not so, an introduction through a respected local member may also work but would likely require additional initial effort to gain community confidence
Continuity of engagement	<ul style="list-style-type: none"> - Supports building trust over time - Continuity is deemed to be more important than the duration of engagement in any one visit to the village - Eminently manageable by non-residents who can only visit occasionally
Scalable at a village level and beyond	<ul style="list-style-type: none"> - Level of engagement (scope) can be increased or decreased as desired provided a basic minimum is maintained - Financial support can be modulated based on proponents' constraints. At a base level, a low by western standards (of < AUD 1000/year) financial impost is created
Access to decision makers and officials	<ul style="list-style-type: none"> - IREAD members being educated (and non-local) access support from the local administration to carry out their activities and are not viewed as having any ulterior motives
Maintained philanthropy by members	<ul style="list-style-type: none"> - Philanthropic satisfaction of being able to give back to the community with direct interactions at a level which can be maintained over time

Figure 7.1. Salient aspects of the IREAD model.

7.3 Summary of Stakeholder Influences

The research identified the principal stakeholders as the parents of the children attending the school, the school teachers and the district administration officials who are responsible for implementing policies and delivering the educational services to the community. Parents represent the most relevant demand-side driver whereas teachers and the administrators have the largest sway on the supply-side forces that influence a child attending school and learning or being excluded. This grouping of stakeholders is not a surprise, it is the knowledge of how they think about education and their actions which gives an improved insight into the primary school education challenges.

The parents of the Lakhnu Junior School children themselves are, by and large in this cohort, impecunious and their decision making is influenced by a myriad of factors primarily related to getting the next meal and survival. Safety nets are limited, and strength is gained from others within their own caste and not the broader populace in the village. Here, upper-class lenders await to prey on the misery of the poor with usurious interest rates. In the midst of this battle for survival, the parents have to make decisions in regard to their children's education weighing the alternatives of foregoing immediate income or assistance at home versus some future and uncertain benefit. Attractions for sending the children to school include food under the midday meals scheme and clothes in the form of uniforms and shoes. On the other hand, parents often see alternative roles for their children, particularly when they can be deployed for other activities. This can happen for financial reasons during harvest times or can represent just additional domestic support when extra help is needed because of illness or other reasons. Understanding the decision-making processes is hard as very few people can actually appreciate the parents' living environment and the extreme risk conditions under which they live their daily lives.

In Lakhnu, the community is not engaged actively in the school activities. In the village and in the state of UP, social divisions are entrenched and poverty rampant. This can lead to public apathy as villagers are too busy dealing with daily challenges to demand better education for their children. However, these same people have turfed-out nonperforming political parties at a UP State level and

installed others thereby using their ballot-box power. Change at a local government level is more nuanced and constrained largely through legislation. For example, while elections are held every five years, the leadership of Gram Panchayats (local government) is rotated between the castes resident in the area and membership is usually on a proportionate basis with a third of the seats being reserved for women (UP Panchayati Raj Act 1947 and Amendments). It would appear that the community in general is aware of its power but does not choose to exercise it in demanding better education for its children. The perception of the value of education is unclear with large variations observed within the same community. A “manyata” or value system in this regard is individually determined. The parents who believe in education support their children while the others are indifferent with the overwhelming result being insufficient school attendance. This perpetuates a generational trap where uneducated parents do not encourage their children to attend school and potentially prevent them from opportunities to improve their quality of life in the future.

Historically, teachers in Lakhnu have been recruited from the village itself or other nearby locations with a similar lifestyle and income level. The liberalisation of the Indian economy in the 1990’s growth accelerated mainly in the services sector and by 2018, the economy had grown nine times. In the same period agriculture declined from 30 % to 17.4% of the economy (Mudgil, 2018). Private sector salaries increased based on market forces and government salaries were adjusted through various pay commissions. The Fifth Pay Commission (1994) recommended significant salary increases for central government employees and also advised revisions at a state government level (Pandian, 1996). Being part of the Uttar Pradesh state education department, teachers are public servants and their salaries have been revised upwards quite significantly since the Fifth and subsequent Pay Commissions. In villages, the government school teachers now earn multiples of their private school counterparts and other average daily wage earners. Accountability in government is difficult to assign and irrespective of their performance, teachers rarely lose their jobs. Promotions and increments are time-based; so, the principal focus of the teachers is to appease their management. The good salaries and increased wealth have resulted in teachers moving to live in nearby towns and thus losing touch with the local village life.

Many government teachers find creative ways of not getting assigned to remote villages or limiting their school attendance. Those who work in remote rural locations, such as Lakhnu, often express dissatisfaction and voiced their grievances to IREAD. Age-appropriate class policies result in very varied levels of learning in a particular school year, which makes teaching hard. This is further exacerbated by the policy mandate that no child can be failed. Under the rules, punishment in any form is forbidden and teachers can only ask that children study and are not permitted to enforce discipline. The teachers' non-teaching duties are multitudinous and vary from census-type work to procuring fresh food for the midday meals. Working conditions are often poor and the school infrastructure is broken. Frequently, schools like Lakhnu Junior School are understaffed with just one or two teachers as compared to the mandated allocation of five. There is little appreciation of education shown by either the state administration or the parents and when attendance is poor and many children are not interested in learning, demotivation sets in quickly.

The interactions with the state administration have been indicative of an organisation that is process-oriented and procedural in approach. This has positive and negative ramifications. Some centrally run projects, such as the delivery of school buildings and infrastructure development under the SSA are completed quickly but operational matters which rest with the local district administration, and where people interactions and interfaces are involved, are bogged down and become slow to resolve. Paperwork is emphasised and a whole host of data on the schools is collated at the district level on a regular basis. The Lakhnu Junior School Principal admitted to spending most of his time complying with reporting requirements. However, there are no checks on the veracity of the information, thus limiting its effectiveness.

Getting electricity to the school a few years after the village was electrified highlights the inter-departmental inefficiencies that exist in Hathras District where Lakhnu is located. Officials change frequently limiting accountability further. Staff shortages are acknowledged, both in teaching and monitoring roles, such as school inspectors. Patchwork solutions like contract para-teachers are used to fill the gaps, but they are poorly paid with little incentive to perform on the job. Nevertheless, there is a desire to help and any IREAD requests in writing are generally considered

with priority. It is likely that the officials feel that educated people like the IREAD members are expressing genuine concerns and not particular vested interests.

The experience over the research period shows that the IREAD model has the capacity to influence all the stakeholders positively, albeit to varying degrees, and make small improvements year on year. Over the last decade progress can be seen, enrolment is up, the school is adequately staffed and the teachers appear more motivated than in the past. Prize distributions are annual events where teachers and parents are recognised in front of others and speeches given highlighting their role in shaping the future of India. This open felicitation boosts the teachers' morale and increases the confidence of the parents. While Lakhnu Junior School's formal channels of asking for extra support are slow, IREAD representation, informal as it may be, does bear results. Technology introduction through computers or tablets acts as incentives for both the children and teachers but upskilling them through training programs is a challenge. It is hard to get the teachers on a training program and seemingly harder to get a qualified person to teach in the village on a regular basis. The newly distributed tablets with teaching apps may be more amenable to teaching and learning as they are akin to smart mobile phones which are now widely used in rural India. Table 7.2 summarises the IREAD impacts over the research period (Sharma, Marinova & Bogueva, 2020)

Table 7.2

IREAD impacts over the research period

Factors of Influence	IREAD Activities	Impacts seen over 2011–2019
Parents' Push	Regular discussions on the value of education	School attendance has improved from 50% to around 75%
Teachers' Pull	Hiring additional support staff Honour the teachers in an open community forum	Higher motivation levels and enthusiasm to use new teaching aids, such as laptops and tablets An empty room converted to an art room
School Infrastructure	Provision of sports and exercise kits and computers Government lobbying for building and such support	School benches installed, electricity connected, and a small science laboratory built Boundary wall largely completed and functional toilets
Community Influences	Regular discussions on the value of education	Respected members attend the annual IREAD prize distributions to encourage children's education
Policy Administrators	Regular meetings and written representations on school issues to the administration	Teacher availability increased from two to four and infrastructure improved

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Policy lacunas and their impacts on the delivery of public educational services are not easy to influence. The success of centralised schemes like the SSA ultimately depends on delivery and governance in the field. Leeway must be given to local leadership to experiment with schedules and curriculum as it sees fit. However, the short tenures of most officials preclude such experimentation. Although IREAD cannot influence this either, it has interacted with the bureaucrats in Lucknow, the UP State capital, but only episodically. The last time was to get the community-led total sanitation (CLTS) workshop organised in Lakhnu to improve awareness about the risks of open defecation. As a result of this specific request, Lakhnu was the first village in which such a workshop was conducted. Such targeted requests would be more within the scope of IREAD as opposed to seeking sweeping changes in either the policy framework or behavioural changes in the state bureaucracy.

All of these aspects have been witnessed by the researcher as an IREAD member during the Association's interactions over the years. The facilitated projects, the Curtin University program and visits by social scientists to promote farmers' cooperatives also act as eye-openers to the local community. A sense of belief has been fostered that if they raise an issue with the IREAD members a solution would be found. This confidence allows IREAD to act as a conduit between the parents, teachers and local administrators without any fear or suspicion for vested interests or malevolent intentions.

The IREAD has developed a committed presence in Lakhnu with continuity in its loyalty and dedication. Many years of experience in the village have allowed the identification of trustworthy people who may be willing to lead individual initiatives with IREAD support. This opens opportunities for additional initiatives which may be beneficial to the school or the community. The value of a trusted voice cannot be underestimated.

This situation positions IREAD with unique capacities to influence primary education in the village, even if incrementally. The Association's genuine interest in improving children's education and wellbeing is the driving force behind its operations. The next section considers the findings of the investigations in light of the original questions being pursued.

7.4 Conclusions: Revisiting the Research Question

The principal research question was to understand how a community-based collaborative relationship with non-resident Indians through the observations and activities of an association like IREAD can be used to improve the uptake of primary education in rural India, using Lakhnu as an example case study over the period 2011-2019. Succinctly, the research question this thesis addresses is: How can a non-resident organisation make a difference to primary education in rural India?

It is a common practice for Indian expatriates to maintain interest in their country of birth and IREAD as an example of such genuine involvement in rural Uttar Pradesh has been active there since 2008. For research purposes, the activities over the period 2011 to 2019 were analysed, focused on Lakhnu Junior School, in a

situation where the current educational policies are not providing the desired results in rural India.

This case study examined the current state of primary education options and models in India and the policy frameworks covering them. The scale of the challenge is enormous and addressing these will require addressing a number of areas from the policies themselves to funding and service delivery. Analysing the current literature allowed for the key elements of these to be researched extensively and tabled as areas of focus. Based on this, a list of determinants likely to impact the participation of children in schooling and their learning outcomes in Lakhnu was developed for further examination. Through participatory research conducted as part of regular IREAD activities, new data was collected combining observations, artefacts including photographs, attendance sheets and interviews with the main stakeholders, namely parents, school teachers and administration officials. This data was analysed through an original framework (Figure 6.6) and the learnings used to identify the most relevant factors affecting education in Lakhnu Junior School (Figure 6.7). The analysis concluded that IREAD can influence a few of these and an approach to proceed down this path while being cognisant of the other areas that need modulation is considered reasonable and consistent with the aims of this thesis.

The postulated theory states that *“within the existing policy framework, using an IREAD model, an expatriate organisation can engage with the parents, teachers and the administration to influence the educational process and deliver improved learning outcomes for the children”*.

While recognising the limitations within which IREAD functions, the research identified the critical need for increasing the involvement of the parents and the broader community in the school, in a situation of mutual respect with the teachers, to make the learning environment better (Figure 6.8). An effective school management committee (SMC) will be able to ask the local administration for compliance with the SSA policies and elevate to their political representatives in the event no action is taken. In a democratic environment, the politicians will not be able to ignore such requests and will eventually ask the bureaucrats to comply. Having the right level of resources will motivate the teachers as has been the evidence from

Lakhnu ever since the school has been properly staffed. If teachers are keen and enthusiastic towards teaching, children will likely attend and learning outcomes will improve.

This can be supported by IREAD and is consistent with the organisation's objectives. The research question was answered and the objectives of analysing the activities of a non-resident association like IREAD in furthering educational outcomes were met. Hence, the research concludes that the IREAD model is applicable and supportive towards improving primary education in Lakhnu Junior School.

The IREAD model has inherent constraints and limits, which have been identified and within these the approach can be widely applicable and scalable. Locally, opportunities for enhancing the scope were identified within Lakhnu Junior School (Table 6.10) and the Deeksha School. These will be developed over the coming years. The model can also be a viable option for other non-residents who want to contribute in the field of education to consider.

7.5 Alternative Options for Non-resident Proponents

The research question was focused on assessing the impacts of non-resident proponents. While the IREAD model has been examined in detail, other options are available for those wanting to participate and contribute towards education. There is no one solution and these alternative options have their own areas of applicability in which they may be more effective.

Almost every Indian child grows with the notion of seva (or service) to be done by “tan (body), man (mind) and dhan (money)”. The most common Hindu prayer chant invokes these concepts as “Tan, man, dhan sab hai tera, tera tujhko arpan, kya lagey mera”, or “I offer my body, mind and wealth to the lord in service”. People move, migrate away from their countries of origin but cultural values are largely retained. Today there are 17.5 million Indians who live overseas including an estimated 700,000 in Australia (Varghese, 2018).

Most of these migrants realise the value of education as it allowed them to further their own careers and create a better life. Many want to and do contribute to the overall cause of improved education. While some of these willing contributors donate funds (dhan), others want to contribute through service as well (tan and man). Financial donations are possible through a host of prominent NGOs. In essence, there are many options to choose from if one wants to contribute dhan or money. As an illustration, a small sample list of such organisations involved in the education sector is given below.

Pratham (<https://www.pratham.org/>) which runs the annual ASER surveys is a very prominent NGO in the educational field. Teach for India (teachforindia.org), Vidya (vidya-india.org), Akshaya Patra (akshayapatra.org), Akanksha (akanksha.org), Child Rights & You (cry.org), Bachpan Bachao (bbl.org.in), Deepalaya (deepalaya.org), Bhumi (bhumi.ngo) and the Kalinga Institute (kiss.ac.in) are some other well-established organisations which support education and the community.

The wealthy corporates and privately held Indian companies have set up philanthropic trusts, hired professionals and provided grants to either government-run programs or other grassroots organisations. Their mandates have been generally linked to poverty alleviation, health, gender equality issues or anchored to achieving specific SDG targets in support of their corporate social responsibility objectives. Examples are the Sir Ratan Tata Trust (tatatrust.org), Reliance Foundation (reliancefoundation.org), the Azim Premji Foundation (azimpremjifoundation.org) and the Aditya Birla Foundation (adityabirla.com). Many international NGO's are involved in charitable community activities including education. Examples are World Vision (worldvision.in), CARE (careindia.org), Make a Difference (makeadiff.in), The American Indian Foundation (aif.org) and the Bill and Melinda Gates Foundation (gatesfoundation.org). There are also several foundations supported by grants from philanthropists and wealthy people of Indian ethnicity who either live overseas or service overseas clients. These include LetzDream Foundation (letzdream.org) and Nucleus Software Foundation (nucleassoftware.com). As much as possible, IREAD has met with these organisations and Nuclear Software has donated two tablets for use in Lakhnu Junior School.

While the majority of the NGOs are doing excellent work, there have been some reports on exploitation of the poor by those targeting underprivileged areas and children (Spren & Kamat, 2019). In such cases, it is important that NGOs, or in fact any multinational education providers, work in tandem with the government in order to maintain the quality of education and avoid competition (Jagannathan, 2001). From this point of view, the IREAD model also has advantages that it works in parallel with the existing structures without replacing them. Its aim is to create motivation from all stakeholders in the local community without becoming a disruptor and by enhancing the opportunities for all.

Research into Indian diaspora philanthropy indicates that most funds are distributed through international and local NGOs (Niumai, 2011). It has also been inferred that these donors should be strategic in their donations and influence their recipient towards programs that are most beneficial to the destitute (Niumai, 2011). In their 2018 India Philanthropy Report, the management consultancy firm Bain &Co reaffirmed the same point following detailed interviews with 33 donors (Bain, 2018). The report states that “the seriousness, scale and complexity of India’s social problems require philanthropists to go beyond personal satisfaction” and “ensure that their contributions are strategic enough to have a marked effect on key social development indicators” (Bain, 2018, p. 3).

This reinforces the need for a greater involvement by the donors, i.e. a contribution of tan and man (body and mind). Organisations like Teach for India and Vidya offer an opportunity to participate in teaching in slum schools and mentoring aspirational children. These limited hands-on programs work well in cities but become more difficult to manage in remote villages. In essence, there are many options to choose from if one wants to contribute dhan or money. There are fewer choices however if one wants to support through service in a holistic way and be part of the target community, school or institution’s progress. Most of these choices are in areas with better logistics, such as cities or large towns.

The motivation behind IREAD was to work with the most deprived children in a remote village, in areas where the larger NGOs were not currently active. Given

the constraints of the IREAD members, while regular visits to the village are possible, the ability to spend more than a two-week period at a time is a constraint. The model thus evolved to focus on government schools which already had teachers and some infrastructure. Alternative models examined in such settings fell in two categories:

- The Pardada Pardadi Trust (<https://education4change.org>, 2019) model, wherein the proponent relocated from the US to his village of origin and set up a private school focused on educating girls. This model has been very successful due to the personal commitment of the proponent, but today is facing succession challenges. Through personal discussions with the founder, the extent of his personal sacrifice was evident. His own family remained behind in the USA while he pursued his dream or passion. This is a difficult model to emulate except for the most committed.
- The India School Fund (<http://indiaschoolfund.org>, 2016) model wherein a young entrepreneur set up a school in his father's village as a tribute to his memory. A very well-equipped school was constructed on private land and was very successful as long as he and his family remained directly involved. Efforts to hire quality staff to sustain the school and manage remotely proved unworkable and eventually the school closed. This highlights the difficulty in getting qualified staff to work in these rural and remote areas. The proponents, while in India, were not able to relocate to the village and manage the process themselves.

Learning from the above experiences, IREAD wanted to manage its activities in a sustainable way that could be performed within the constraints of the members. The choice of supporting a government school was a natural selection as the poorest children attended education there and the basic infrastructure was present and managed through the district educational department.

The IREAD model is a niche and works in a defined envelope and can be considered by proponents who want a holistic engagement with education. It however takes time and the path is often tortuous. Educating India's children

effectively is an opportunity for service and the current research has identified areas that can benefit from additional investigations in the future.

7.6 Concluding Thoughts

India has a long tradition in quality education and whilst the country produces large numbers of professionals, such as engineers, doctors and IT specialists, millions of children between the age of 6 and 14 do not attend primary school, particularly in rural areas. Such a dichotomy is unique in this country and puts the nation at a disadvantage in achieving genuine progress in making education truly equitable and available to all in line with SSA and SDG4 goals.

The IREAD model supports both the demand and supply side drivers for primary education. There is underlying trust between the community and IREAD members which has been built over years and is the fundamental tenet of this model. The duration of the annual interaction time is less important than a continued presence over multiple years and a singular focus on addressing the areas of weakness in the school system as identified together with the teachers. Current activities continue to be valid for emphasising education and there is scope for additional initiatives to be considered as well. In Lakhnu village, if the community and parents' involvement with the school is increased and the school system adequately equipped with infrastructure and teaching staff, children will likely attend school and learn.

Additional research is needed to understand the decision-making processes of people living close to or below the poverty line and their perceptions on the benefits of education. The importance of pre-school education is also recognised in the National Policy on Education update in 2020, and the expectation for more emphasis on integrated learning from pre-school onwards is explicit (Banerji, 2019). This is very encouraging and together with programs like the graded learning program (GLP) experimented with in UP, help remove disparities between children. The children will then be more likely to transition to next stage schools, like Lakhnu Junior School and eventually high school, with greater confidence. Technology can play an important role and a focused program targeted towards teaching children in congruence with the village economic cycle and constraints needs to be developed.

Flexibility in administrative policies, tuning of the educational curriculum to the village agricultural cycle will also be accretive to improving both attendance and actual learning. This will necessarily require a deliberative bureaucracy with a willingness to experiment, another area that needs to be better understood (Mangla, 2013).

Several key contributions towards the overall knowledge base of education in rural India can be drawn from this research. The role of an expatriate organisation, such as IREAD, has not been previously analysed in the field of rural education. Such an analysis revealed a new model of engagement with the local community and enhancing the educational opportunities for the children of the rural poor. The data collection methodology and analytical framework are also novel, based on longitudinal analysis over multiple years validated by semi-structured interviews. In Lakhnu village, if the community's and parents' involvement with the school is increased and the education system adequately equipped with infrastructure and teaching staff, children will likely attend school and improve their educational outcomes. This emergent theory is consistent with the IREAD charter and the organisation has an ability to influence all stakeholders to improve results for the children. The limitations of the IREAD model should also be acknowledged given the fact that it works within the existing local structures.

Scalability and impact are two commonly used metrics for gauging success of large scale interventions promoted by national or international agencies like the UN for poverty alleviation and education expansion projects. A problem is identified, a large-scale intervention designed and implemented whether it be for distribution of smoke free cook-stoves in India or malaria prevention in Africa. Not all have succeeded and impacts a few years post the closure of the projects have been marginal (Banerjee and Duflo, 2012). The IREAD methodology is at the other end of the spectrum. It is low-key, takes a patient approach and tries to change behaviour over a period of time. Lakhnu is a microcosm for the state of UP and the case study findings should be scalable across culturally and administratively consistent areas. Government schools in rural regions offer a unique opportunity to influence the social, cultural environment and prejudices that exist within India. Educated children

can influence their parents and institute change. As this case study has shown, there are reasons to feel optimistic.

For members of the Indian diaspora, the IREAD model is a simple targeted model that is congruent with the notion of “seva” or service with greater involvement and scope for attainment of personal satisfaction than arm’s length financial contributions to charities. The challenge for meeting the Sarva Shiksha Abhiyan and Sustainable Development Goal Number 4 targets are significant, particularly in rural India and all approaches from incremental to transformational should be explored. Small steps can take you a long way, if you point in the right direction and give it enough time.

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Appendix A: Sample Information Statements and Consent Forms

Teachers

A) PARTICIPANT INFORMATION STATEMENT:

HREC Number	HRE 2019-0599
Course Code:	301906
Project Title:	<i>Making a difference to primary education in rural India: A case study of a non-resident association.</i>
Chief Investigator:	<i>Professor Dora Marinova, Director, CUSP</i>
Student researcher:	<i>Sandeep Sharma</i>
Version Number:	<i>1</i>
Version Date:	<i>May 27, 2019, Updated Aug 14 2019</i>

Information Statement: My name is Sandeep Sharma and my wife is from this village. Our association India Rural Education and Development Inc. (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2008.

What is the Project About?

Our association India Rural Education and Development Inc. (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2008. My research thesis intends to use the IREAD activities as a means to analyse the conditions related to primary education and facilitate the uptake of primary education in Lakhnu.

The aim of the research is to understand how a community based collaborative relationship with non-residents Indians through the observations and activities of an

association like IREAD can be used to improve the uptake of primary education in rural India using Lakhnu as an example case study over the period 2011-2019. The knowledge should add to the overall understanding and be useful in improving learning outcomes for children.

To complement the above and further enhance the learnings, it is proposed to conduct semi-structured interviews with teachers who are central to the educational system.

Who is doing the Research?

- *The project is being conducted by Sandeep Sharma*
- *The results of this research project will be used by Sandeep Sharma to obtain a Doctor of Philosophy at Curtin University. There is no cash funding or grant provided by the University in the undertaking of this research.*
- *All travel and related costs are borne by me as this research is linked to ongoing activities that I undertake. I am not being paid for performing this project*

Why am I being asked to take part and what will I have to do?

- As a teacher having a direct impact on the education of children, your insights are valuable to understanding the key issues.
- Your insights collated through semi-structured interviews with the researcher will be recorded as field notes in a diary. The discussion is expected to take less than 2 hours on my visit to Lakhnu in late 2019 or early 2020 and cover areas that impact teaching and learning outcomes for the children. Example topics are: enrolment rates, attendance, availability of books and educational material, any policy issues that impact teaching and learning outcomes, infrastructural needs and any other pertinent issues.
- Any questions asked of the children will be done in your presence.
- This information will help the research in understanding the key issues that impact the children learning. Some solutions can then be considered and tried.
- The process is completely voluntary and the discussions will occur in the school or village. You can choose not to participate, or stop at any stage. There are no consequences of any sort in doing so.

- There will be no cost to you for taking part in this research and your participation in this research is not on payment basis.

Are there any benefits to being in the research project?

The aim of the research is to understand the issues that can help in improving learning for our children. There may not be any direct benefit to you but any success here will be for the benefit of the community and the children in the future.

Are there any risks from being in the research project?

There are no foreseeable risks from this research project.

Who will have access to my information?

The information collected in this research will be de-identifiable (anonymous) in all forms of publications. The only place where names may be recorded are in the research field notes (diary) which will be with the researcher in a locked cabinet. Participant's identification shall be also kept anonymous, unless agreed to be disclosed. All electronic data files will be password protected with the researcher and supervisor on the University server.

Privacy shall be ensured and the information provided will be only used for the study purpose and will be shared with research supervisors and, in the event of an audit or investigation, staff from the Curtin University Office of Research and Development only. According to the university policy, the diary and research notes will be available to the university for archival if needed for seven years and after that they will be destroyed.

The results of this research may be presented at conferences or published in professional journals. You will not be identified in any results that are published or presented.

Will you tell me the results of the research?

Yes. On successful conclusion of this research a copy of the thesis can be provided to you if requested.

Who can I contact about the research?

In case of your further interest on this research, please contact Professor Dora Marinova, Director, Curtin University Sustainability Policy (CUSP) Institute, Email: d.marinova@curtin.edu.au, Telephone: +61 8 9266 9033

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number 0599/2019). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email hrec@curtin.edu.au.

B) PARTICIPATION CONSENT FORM

Our association India Rural Education and Development Inc. (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2008.

I am currently conducting research into the reasons behind the poor participation and learning outcomes of children in the government schools for my Doctor of Philosophy degree at Curtin University. The title of my research is “Primary education uptake in rural North India: A case study approach of using a participatory access mechanism to understand issues of access to primary education and transition to secondary schooling”.

The aim of the research is to understand how a community based collaborative relationship with non-residents Indians through the observations and activities of an association like IREAD can be used to improve the uptake of primary education in rural India using Lakhnu as an example case study over the period 2011-2019. The knowledge should add to the overall understanding and be useful in improving learning outcomes for children.

To complement the above and further enhance the learnings, it is proposed to conduct semi-structured interviews with teachers who are central to the educational system.

Requirement for this Consent Form: Under the Curtin University rules, there needs to be complete transparency in carrying out research and no information should be noted without the provider’s agreement.

Participation:

Participation in this study is voluntary and through semi-structured interviews that take place during my visit to the school and village. You can choose not to participate, or stop at any stage. There are no consequences of any sort in doing so.

Your insights collated through semi-structured interviews with the researcher will be recorded as field notes in a diary. Each session is expected to take less than 2 hours on my visit to Lakhnu in late 2019 or early 2020 and cover areas that impact teaching and learning outcomes for the children. Example topics are: attendance, availability of books and educational material, school staffing, infrastructural needs and any other pertinent issues.

Consent:

Any information provided is recorded as field notes in my diary. I have not taped any of our discussions at any stage. Information provided is used for my research and analysis and not used for any other purpose.

Confidentiality:

The only record of our discussions is in my field notes. Participant's identification shall be also kept anonymous, unless agreed to be disclosed. Privacy shall be ensured and the information shared will be only used for the study purpose and will be shared with research supervisors only. According to the university policy, the diary and research notes will be available to the university for archival if needed for seven years and after that they will be destroyed.

The results of this research may be presented at conferences or published in professional journals. You will not be identified in any results that are published or presented.

Risks and Discomforts:

There are no risks involved in participating in this study.

Further information:

For further correspondence or information about the study, please feel free to contact on email: sandeep.sharma2@student.curtin.edu.au. Alternatively, you can contact my supervisor Prof. Dora Marinova on +61 8 9266 9033 or via email at d.marinova@curtin.edu.au.

Your participation is greatly appreciated. Thank you for your support and contribution by sharing your valuable expertise in this research.

Signature _____

Date _____

Researcher

I _____ consent to participate in PhD research conducted by Sandeep Sharma. I have understood the nature of this project and wish to participate.

Signature _____

Date _____

Participant

Government Officials

A) PARTICIPANT INFORMATION STATEMENT:

HREC Number	2019-0599
Course Code:	301906
Project Title:	<i>Making a difference to primary education in rural India: A case study of a non-resident association.</i>
Chief Investigator:	<i>Professor Dora Marinova, Director, CUSP</i>
Student researcher:	<i>Sandeep Sharma</i>
Version Number:	<i>1</i>
Version Date:	<i>May 27, 2019, Updated Aug 14 2019</i>

Information Statement: My name is Sandeep Sharma. My wife's family is local to the area and belongs to Lakhnu village (Hathras District). Our association India Rural Education and Development (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2008 with the encouragement of the then District Magistrate (DM) Shri Ajay Agarwal.

What is the Project About?

My research thesis aims to use the India Rural Education and Development (IREAD) activities as a means to analyse the conditions related to primary education and facilitate the uptake of primary education in Lakhnu.

The aim of the research is to understand how a community based collaborative relationship with non-residents Indians through the observations and activities of an association like IREAD can be used to improve the uptake of primary education in rural India using Lakhnu as an example case study over the period 2011-2019. The

knowledge should add to the overall understanding and be useful in improving learning outcomes for children.

To complement the above and further enhance the learnings, it is proposed to conduct semi-structured interviews with government officers who are central to the educational system.

Who is doing the Research?

- *The project is being conducted by Sandeep Sharma*
- *The results of this research project will be used by Sandeep Sharma to obtain a Doctor of Philosophy at Curtin University. There is no cash funding or grant provided by the University in the undertaking of this research.*
- *All travel and related costs are borne by me as this research is linked to ongoing activities that I undertake. I am not being paid for performing this project*

Why am I being asked to take part and what will I have to do?

- As a Government official connected with education in Hathras District, your insights are valuable to understanding the key issues.
- Your insights collated through semi-structured interviews with the researcher will be recorded as field notes in a diary. Each session is expected to take 15 minutes on my visit to your office in late 2019 or early 2020 and cover areas that impact teaching and learning outcomes for the children. Example topics are: policy positions, enrolment rates, attendance, infrastructural needs and any other pertinent issues.
- This information will help the research in understanding the key issues that impact the children learning.
- The process is completely voluntary and the discussions will occur in your office. You can choose not to participate, or stop at any stage.
- There will be no cost to you for taking part in this research and your participation in this research is not on payment basis.

Are there any benefits to being in the research project?

The aim of the research is to understand the issues that can help in improving learning for our children. There may not be any direct benefit to you but any success here will be for the benefit of the community and the children in the future.

Are there any risks from being in the research project?

There are no foreseeable risks from this research project.

Who will have access to my information?

The information collected in this research will be de-identifiable (anonymous) in all forms of publications. The only place where names may be recorded are in the research field notes (diary) which will be with the researcher in a locked cabinet. Participant's identification shall be also kept anonymous, unless agreed to be disclosed. All electronic data files will be password protected with the researcher and supervisor on the University server.

Privacy shall be ensured and the information provided will be only used for the study purpose and will be shared with research supervisors and, in the event of an audit or investigation, staff from the Curtin University Office of Research and Development only. According to the university policy, the diary and research notes will be available to the university for archival if needed for seven years and after that they will be destroyed.

The results of this research may be presented at conferences or published in professional journals. You will not be identified in any results that are published or presented.

Will you tell me the results of the research?

Yes. On successful conclusion of this research a copy of the thesis can be provided to you requested.

Who can I contact about the research?

In case of your further interest on this research, please contact Professor Dora Marinova, Director, Curtin University Sustainability Policy (CUSP) Institute, Email: d.marinova@curtin.edu.au, Telephone: +61 8 9266 9033.

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number 2019-0599). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email hrec@curtin.edu.au.

B) PARTICIPATION CONSENT FORM

Our association India Rural Education and Development Inc. (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2007.

I am currently conducting research into the reasons behind the poor participation and learning outcomes of children in the government schools for my Doctor of Philosophy degree at Curtin University. The title of my research is “Primary education uptake in rural North India: A case study approach of using a participatory access mechanism to understand issues of access to primary education and transition to secondary schooling”.

The aim of the research is to understand how a community based collaborative relationship with non-residents Indians through the observations and activities of an association like IREAD can be used to improve the uptake of primary education in rural India using Lakhnu as an example case study over the period 2011-2019. The knowledge should add to the overall understanding and be useful in improving learning outcomes for children.

To complement the above and further enhance the learnings, it is proposed to conduct semi-structured interviews with government officials who are central to the educational system.

Requirement for this Consent Form: Under the Curtin University rules, there needs to be complete transparency in carrying out research and no information should be noted without the provider’s agreement.

Participation:

Participation in this study is voluntary. Your insights collated through semi-structured interviews with the researcher will be recorded as field notes in a diary. Each session is expected to take less than 15 minutes on my visit to Hathras in late 2019 or early 2020 and cover areas that impact teaching and learning outcomes for the children.

Example topics are: policy positions, enrolment rates, attendance, infrastructural needs and any other pertinent issues. You can choose not to participate, or stop at any stage.

Consent:

Any information provided is recorded as field notes in my diary. I have not taped any of our discussions at any stage. Information provided is used for my research and analysis and not used for any other purpose.

Confidentiality:

The only record of our discussions is in my field notes. Participant's identification shall be also kept anonymous, unless agreed to be disclosed. Privacy shall be ensured and the information shared will be only used for the study purpose and will be shared with research supervisors only. According to the university policy, the diary and research notes will be available to the university for archival if needed for seven years and after that they will be destroyed.

The results of this research may be presented at conferences or published in professional journals. You will not be identified in any results that are published or presented.

Risks and Discomforts:

There are no risks involved in participating in this study.

Further information:

For further correspondence or information about the study, please feel free to contact on email: sandeep.sharma2@student.curtin.edu.au. Alternatively, you can contact my supervisor Prof. Dora Marinova on +61 8 9266 9033 or via email at d.marinova@curtin.edu.au.

Your participation is greatly appreciated. Thank you for your support and contribution by sharing your valuable expertise in this research.

Signature _____

Date _____

Researcher

I _____ consent to participate in PhD research
conducted by Sandeep Sharma. I have understood the nature of this project and wish
to participate.

Signature _____

Date _____

Participant

Name:

Designation:

Parents and Community Members

These forms translated in Hindi were used to provide information and seek consent from the parents and the community members.

A) PARTICIPANT INFORMATION STATEMENT

HREC Number	HRE 2019-0599
Course Code:	301906
Project Title:	<i>Making a difference to primary education in rural India: A case study of a non-resident association.</i>
Chief Investigator:	<i>Professor Dora Marinova, Director, CUSP</i>
Student researcher:	<i>Sandeep Sharma</i>
Version Number:	<i>1</i>
Version Date:	<i>May 27, 2019, Updated Aug 14 2019</i>

Information Statement: My name is Sandeep Sharma and my wife is from this village. Our association India Rural Education and Development Inc. (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2008.

I am currently conducting research into the reasons behind the poor participation and learning outcomes of children in the government schools using Lakhnu as an example case study for my Doctor of Philosophy degree at Curtin University. The knowledge should add to the overall understanding and be useful in improving learning outcomes for children.

Why am I being asked to take part and what will I have to do?

- As parents, guardians and community members, your insights are valuable to understanding the key issues.
- Any questions asked of the children will be in your presence or of their teacher.
- Your insights collated through semi-structured interviews with the researcher will be recorded as field notes in a diary. Each session is expected to take less than 1 hour on my visit to Lakhnu in late 2019 or early 2020 and cover areas that impact teaching and learning outcomes for the children. Example topics are: attendance, availability of books and educational material, school staffing, infrastructural needs and any other pertinent issues.
- This information will help the research in understanding the key issues that impact the children learning.
- The process is completely voluntary and the discussions will occur in the school or village. You can choose not to participate, or stop at any stage. There are no consequences of any sort in doing so.
- There will be no cost to you for taking part in this research and your participation in this research is not on payment basis.

Are there any benefits to being in the research project?

The aim of the research is to understand the issues that can help in improving learning for our children. There may not be any direct benefit to you but any success here will be for the benefit of the community and the children in the future.

Are there any risks from being in the research project?

There are no foreseeable risks from this research project.

Who will have access to my information?

The information collected in this research will be de-identifiable (anonymous) in all forms of publications. The only place where names may be recorded are in the research field notes (diary) which will be with the researcher in a locked cabinet. Participant's identification shall be also kept anonymous, unless agreed to be disclosed. All

electronic data files will be password protected with the researcher and supervisor on the University server.

Privacy shall be ensured and the information provided will be only used for the study purpose and will be shared with research supervisors and, in the event of an audit or investigation, staff from the Curtin University Office of Research and Development only. According to the university policy, the diary and research notes will be available to the university for archival if needed for seven years and after that they will be destroyed.

The results of this research may be presented at conferences or published in professional journals. You will not be identified in any results that are published or presented.

Will you tell me the results of the research?

Yes. On successful conclusion of this research a copy of the thesis can be provided to you if requested.

Who can I contact about the research?

In case of your further interest on this research, please contact Professor Dora Marinova, Director, Curtin University Sustainability Policy (CUSP) Institute, Email: d.marinova@curtin.edu.au, Telephone: +61 8 9266 9033

Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number 0599/2019). Should you wish to discuss the study with someone not directly involved, in particular, any matters concerning the conduct of the study or your rights as a participant, or you wish to make a confidential complaint, you may contact the Ethics Officer on (08) 9266 9223 or the Manager, Research Integrity on (08) 9266 7093 or email hrec@curtin.edu.au.

This can be also be done independently by contacting the Lakhnu School teachers who will be able to act on your behalf.

B) PARTICIPATION CONSENT FORM

Our association India Rural Education and Development Inc. (IREAD) has been engaged in supporting educational and development activities in the Lakhnu Junior High and Primary Schools since 2008.

I am currently conducting research into the reasons behind the poor participation and learning outcomes of children in the government schools using Lakhnu as an example case study for my Doctor of Philosophy degree at Curtin University. The knowledge should add to the overall understanding and be useful in improving learning outcomes for children.

Requirement for this Consent Form: Under the Curtin University rules, there needs to be complete transparency in carrying out research and no information should be noted without the provider's agreement.

Participation:

Participation in this study is voluntary and through semi-structured interviews that take place during my visits to the school and village. Each session is expected to take less than 1 hour on my visit to Lakhnu in late 2019 or early 2020 and cover areas that impact teaching and learning outcomes for the children.

You can choose not to participate, or stop at any stage. There are no consequences of any sort in doing so.

Consent:

Any information provided is recorded as field notes in my diary. I have not taped any of our discussions at any stage. Parents may also verbally authorize the school teachers to sign on their behalf should they choose to do so.

Confidentiality:

The only record of our discussions is in my field notes. Participant's identification shall be also kept anonymous, unless agreed to be disclosed. Privacy shall be ensured and the information shared will be only used for the study purpose and will be shared

with research supervisors only. According to the university policy, the diary and research notes will be available to the university for archival if needed for seven years and after that they will be destroyed.

The results of this research may be presented at conferences or published in professional journals. You will not be identified in any results that are published or presented

Risks and Discomforts:

There are no risks involved in participating in this study.

Further information: For further correspondence or information about the study, please feel free to contact on email: sandeep.sharma2@student.curtin.edu.au. Alternatively, you can contact my supervisor Prof. Dora Marinova on +61 8 9266 9033 or via email at d.marinova@curtin.edu.au.

Your participation is greatly appreciated. Thank you for your support and contribution by sharing your valuable expertise in this research.

Signature _____

Date _____

Researcher

I _____ consent to participate in PhD research conducted by Sandeep Sharma. I have understood the nature of this project and wish to participate. I will authorize the school teachers to sign on my behalf.

Signature _____

Date _____

Participant

Name: