

# Scoping Study for Starting Interventions in Karnataka for Room to Read

Final Report

**CENTRE FOR BUDGET AND POLICY STUDIES**

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## Table of Contents

<b>1.0 INTRODUCTION .....</b>	<b>0</b>
<b>2.0 REVIEW OF LITERATURE .....</b>	<b>5</b>
<b>3.0 THE PRESENT STUDY .....</b>	<b>7</b>
<b>4.0 INTERVENTIONS IN KARNATKA .....</b>	<b>10</b>
<b>5.0 FEEDBACK FROM SCHOOL AND DISTRICT VISISTS .....</b>	<b>19</b>
<b>6.0 RECOMMENDATIONS.....</b>	<b>22</b>
<b>7.0 REFERENCES .....</b>	<b>28</b>
<b>Attachment I .....</b>	<b>31</b>
Innovative Interventions in Karnataka.....	31
a. Government Programmes.....	31
b. Non-Governmental Interventions .....	38
c. Publications / Resources .....	51

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## Executive Summary

### Chapter 1- Introduction

The first chapter gives the educational background of Karnataka. Karnataka has a literacy rate of 75.36 % (Census 2011), with a total of 61,628 schools (UDISE 2014-15) enrolling 8.345 million students. Despite being one of the highest spenders on education, Karnataka's literacy rate is lower than that of its neighbouring states: Maharashtra, Tamil Nadu and Kerala. This thus points towards inefficiencies that do not allow the potential of the investments to be realised and thus emerges a need to pay greater attention to improve outcomes.

**Intrastate differences:** Karnataka has four administrative divisions (i.e. adjoining districts clubbed together to form a division) namely Bangalore, Belgaum, Mysore and Gulbarga. Amongst the four divisions, there are variations in different school related indicators namely number of schools, enrolment and teacher availability. Bangalore and Mysore are better performing divisions as compared to Belgaum and Gulbarga divisions. Among the four divisions, the Gulbarga Division in the north-east Karnataka is the most backward in terms of most development indicators. This division includes Bellary, Bidar, Gulbarga, Koppal, Yadgir and Raichur; all these districts have one of the lowest educational indicators.

**Social Group and Gender:** At the state level, 48% of girls are enrolled as compared to 52% of boys for primary classes (across all social groups). Karnataka's population includes 17.1 % Scheduled Castes (SC) and 7% Scheduled Tribes (ST), which is also reflected in the enrolment. However, among the SC and ST enrolled students, the share of boys is higher.

**Language:** Schools in Karnataka follow the three-language policy wherein the first language is the medium of instruction, English and any other language prevalent in the area. Government schools in the state also offer seven languages as medium of instructions in its schools, based on the district and the dominant language in that area. The seven languages include Kannada, English, Hindi, Urdu, Tamil, Telugu and Marathi.

**Learning achievements:** As per ASER 2014, 46.2 % of students in Class I and 23% in Class II in rural Karnataka could not read even letters wherein only 12% of students in Class I and 28.7% of students in class II could read words. Less than 5% of students in Class I could read a Standard I level text and about 6% of students in class II could read their grade-appropriate text. School-management wise analysis depicted that about 74% of students in government schools in classes II and III could read at least letters as compared to 85% of students in same classes in private schools. Similarly, 66% of students in government schools could read at least words as compared to 75% of students in private schools.

**Teacher training:** The total number of teachers in the state is around 0.3 million, out of which 58% are employed in the government schools. About 20% of all the teachers were employed at primary only schools. During 2013-14, 42.3% of teachers in primary only schools and overall 24% of all teachers employed were given training. During 2013-14, all teachers underwent a three-day training to develop skills for teaching English and progression of developing learners' writing skills, conducted by the British

Council (In-Service Teacher Training Activities and Progress 2013-14 and Annual Report 2013-14, SarvaShikshaAbhiyan Karnataka). The major focus of this training was on developing writing skills of the learner, including formation of English alphabets, size and spacing of letters, punctuation, sentence and paragraph writing and age-appropriate writing. During 2012-13 and 2013-14, teachers who teach the Nali-Kali classes (Kannada and Urdu medium) were given special training to orient them towards the new revised learning materials.

**Presence of libraries:** While the DISE 2011-12 data seems to suggest that 99% of elementary schools and 94% high schools in Karnataka have a library (2012, SSA, Karnataka), the capacity of these libraries (i.e., number and types of books, age appropriate reading material for all classes, and in the different languages supported by the state, etc.) and use is not known.

## **Chapter 2- Review of Literature**

This chapter reviews existing literature related to reading and the theories related to reading. Reading is closely linked with 'literacy', and cannot be understood in isolation, as it also interacts with and depends on knowledge of other components of the language system, such as writing, speaking and listening (Harris et al., 2006). The act of reading involves three critical elements: the reader, the text and the activity (Ruetzel, Smith and Fawson, 2005). In addition, reading is also determined by other factors such as the socio-cultural context within which it occurs, and the socio-economic strata of the reader, which includes factors such as ethnicity, neighbourhood, school culture, and instructional group (Ruetzel, Smith and Fawson, 2005).

Three broad theories of reading acquisition may perhaps give us an entry point into how classroom instruction for language and reading acquisition may be structured. The three approaches can be classified as the bottom-up approach, the top-down approach and the interactive (or transactive approach). While the first approach emphasises the role of decoding individual phonemes, letters and words and putting these together, in order to be able to construct larger meaning, the second approach emphasises learners' background knowledge of language and associated memories as important for language acquisition. The third approach emphasises an interaction between the first two approaches, and the ability of the learner to choose the right approach based on the text and context (Harris et al., 2006).

Irrespective of the approach and theory of reading acquisition utilised, research suggests that a critical factor in fostering reading achievement involves providing reading instruction at the reader's developmental level (i.e., that, which is not too difficult or too easy for a particular reader's development level) (Dubeck and Gove, 2015). It has been argued by scholars that it is important to build a foundation for reading and writing by approaching it through children's oral language skills, rather than simply teaching them to decode and encode scripts (Sarda et al., 2016).

## **Chapter 3- The Present Study**

This chapter presents a detailed desk review of the available approaches to early grade learning and reading by state and non-state actors in Karnataka. The report is based on a review of secondary sources, such as available policies and programmes for reading and learning, as well as data on learning in Karnataka, coupled with rounds of

interactions with a few key stakeholders both in the state and two districts – Chamarajnagar in South Karnataka and Gulbarga in North Karnataka. North Karnataka has the worst socio-economic and development indicators in the state and Chamrajnagar has the worst indicators in South Karnataka.

While the state consultations covered senior education department functionaries of the government, publishers of children's books in Kannada, and a few NGOs who are active in the space of early reading, the district level consultations covered key government officials from general administration and the Education department, and teachers. A total of six school visits, three in each of the districts, were undertaken with the twin objectives of having Focus Group Discussions with teachers and understanding the status of school/classroom libraries and their usage.

#### **Chapter 4- Interventions in Karnataka**

This chapter elaborates the State and Non-State interventions and programmes that target reading in early grades in Karnataka, including publication houses that facilitate reading. There are several government and non-government programmes that have been initiated in the state to aid early grade reading and literacy.

Government of Karnataka can be called a pioneer for having introduced several educational reforms, and for also having taken several proactive steps in introducing innovative programmes and campaigns to improve the status of elementary education. Among its various efforts have been campaigns such as 'Coolie Inda Shalege' (From Child Labour to School), Baa Marali Shalege (Come Back to School), Beedi Inda Shalege (From Street to School), Baa Bale Shalege (Calling the Girl Child Back to School) and Chinnara Angala, to bring drop outs and out-of-school children back to school. Coolie Inda Shalege Programme was a state level publicity campaign to eradicate child labour and bring children to school, and was launched as part of the Sarva Shiksha Abhiyan (SSA) programme in February-March 2003. Chinnara Angala is a summer bridge course programme to bring out-of-school children into schools. Children in 6–14 age-group are prepared through an intensive, condensed curriculum taught by a para-teacher (a local youth from the village), which would then allow them to enter a grade-appropriate class in the following academic year.

Karnataka was the one of the first states to introduce textbook free classrooms for classes I and II, first on an experimental and then universally in the entire state, through an activity-based strategy known as Nali-Kali that reorganized curriculum and concepts into small, manageable units. Later class III was also added to it. The programme uses a learning ladder approach with the help of Activity Cards -- once a card is completed, it indicates that the child has acquired the skill/competency mentioned on the card. Karnataka has also introduced English as a subject mainly in response to popular demand for teaching English at primary level. The purpose was to develop oral skills using stories, rhymes and songs however, evaluations suggest that teachers, in absence of appropriate training have abandoned the approach.

Karnataka has presence of a number of NGOs with notable work in the area of early education. Akshayam, Praspara Trust and Maya are organisations that have worked actively in the area of pre-school education. Akshara Trust works in both pre-primary and primary space. Kalikayatna and Promise Foundation have worked more

comprehensively on improving the quality by working with government schools and engaging with teachers for long periods. Hippocampus is another organisation active in providing some book based reading improvement programme in some parts of the state but the main focus is on remedial teaching. Other organisations such as Kalisu are present in very few schools in one district. Azim Premji Foundation (APF) is present in some districts and focuses on improving teachers' capacities and running a few schools for demonstration.

The state also has a government-owned Karnataka Textbook Society which acts as an umbrella body for all government approved school textbooks, preparation, printing and distribution activities. Pratham Books, a major not-for-profit children book publisher is headquartered in Karnataka. They publish affordable books which have unique Indian characters, settings and themes, story which are both fiction and non-fiction and also collaborate and co-publish to improve and create a larger body of quality content for children.

### **Chapter 5- School and District Visits**

In this chapter, details about the school and district visits are given along with major observations made, interviews / discussions held. Six primary schools were visited in two districts: Chamrajnagar and Gulbarga. This section presents the main observations and findings from those school visits, and also of the interactions held with teachers and officials from the Education department and general administration.

All schools had a library. However, with one exception, these libraries meant one or two almirahs or book shelves filled with all the books supplied so far from the department or donated by some other institution/individual. Almost all books available in all schools were only in Kannada though English is also taught from class I and Hindi from class VI (these were composite primary schools – from grade I to VII/VIII). The interactions with teachers made it clear that the use of library books had not been common. Library also includes a number of resource books for teachers and it appeared that those also remain largely unused.

One school in Gundalpet taluk in Chamrajnagar district was an exception to this general observation elsewhere. The school had a functional library where books were classified based on content (biography, travel, general knowledge, story, etc.) and neatly kept. A good number of books and magazines were also displayed in layers of ropes. Desks and benches were arranged in U shape and children from one grade come there every day for one school-period (about 45-50 minutes) and spend time reading. They also have a system of getting books issued and children manage that. The school also gets daily newspaper and that too is kept in the library. Randomly picked children in different could read texts in different languages with varied fluency and comprehension levels. The teachers in this school raised the issue of not receiving any book in English or Hindi as a constraint for teaching those languages. In addition to the presence of primary schools following different medium of instruction, some schools also face the challenge of multilingual classrooms: children in the same grade have different home languages. With respect to usage of electronic media, it was found that all schools visited had a television but they were non-functional everywhere. This indicates that the EDUSAT programmes for which the TVs were set were not happening. As many studies have

reported earlier, the use of seemingly very easily accessible technology is very limited at school levels.

A good number of NGOs are present in Chamrajnagar, Gulbarga and other districts working on particular aspects of school or schooling but usually they are small in scale. Both districts seemed to be interacting with NGOs and the teachers as well as district and state officials seemed were open to collaborating with Room to Read to strengthen early grade reading.

## **Chapter 6- Recommendations**

Major recommendations emerging from the above review and district visits have been explained in this chapter. The secondary review of literature and policies indicates that Karnataka is a progressive state in terms of its approach and support to educational initiatives. There are several learning and literacy programmes, as well as specific language acquisition and reading programmes that have been pioneered and supported by government and non-governmental interventions to support primary school literacy and learning have been founded and encouraged.

**Supportive Environment for Primary School Interventions and collaborations with Civil Society by the Government of Karnataka:** The government of Karnataka has both been sensitive and mindful of the difficulties of bridging the learning and language gap of children from marginalised communities, and recognises the need for special efforts required to develop language and learning. It has been willing and interested in collaborating with experts and civil society organisations both in developing specific learning material and resourcing school centres, as well as in adopting specific programmes developed by experts in the field. The government has had a history of providing opportunities to and incubating innovative programmes for learning and reading undertaken by serious civil society organisations with good track records, such as Akshara and Prajayatna.

**Presence of Karnataka Learning Partnership and Scope for Collaborations:** These collaborations have also a formal and institutionalised platform through the Karnataka Learning Partnership (KLP), which is a public platform where all stakeholders involved in public education can participate. The KLP, anchored by Akshara Foundation provides a forum for different NGOs and the government of Karnataka to come together.

**Continuing Challenge of Improving the Learning Environment and Outcomes:** While there has been significant impact in terms of developing resources through the various programmes that have been available in Karnataka, what has been significantly missing is sustained impact on learning. The various reading/learning material developed by the government and non-governmental organisations have not had a sustained impact on learning. A study by Gowda et al (2013) has shown that achievements in language and math seen in early grades do not persist as student move into higher grades. A CBPS study on Kalikayatna (2016) also showed that positive effects on language development seen in the early years are not sustained into later school years.

**Lack of linkages between Pre-school and school programmes:** There is a lack of linkages between pre-school and primary school programmes, in order to ensure the



continued impact of programmes. With respect to Nali Kali, despite adopting more progressive techniques to early grade literacy development, such as conceptualisation of primary school learning as a series of ladders to be transacted at the child's own pace, there is little flexibility in terms of how the material can be used. Presence of a rich library along with development of skills to use these libraries creatively to develop and strengthen reading skills and habits would help in strengthening the Nali-Kali approach in primary schools.

**A comprehensive school library programme in Karnataka is absent:** Although the government has been supplying books and materials, and also providing funds for books, the use of these books and library to be minimal. Thus, there is a need for a regular library programme, trained resource personnel with a good understanding of children's developmental needs to guide children's reading and language development capacities, and well-resourced libraries in all schools in Karnataka, with appropriate age/grade related material, in multiple languages.

**Regional Imbalances in distribution of literacy interventions:** A final observation has been that while some programmes such as Nali Kali have been universalised, most other interventions for literacy and language development are not evenly spread. Even government led programmes such as Chilli Pilli have not been seen to be available in all districts.

#### **Feasibility of Room to Read to Initiate Interventions in Karnataka**

Based on the review of literature, programmes, policies and field visits, we recommend Chamrajnagar, an educationally and economically backward district from South Karnataka and another one from the North-East Karnataka for the intervention. The final selection of areas could also be undertaken in consultation with GoK and other relevant stakeholders such as Hyderabad Karnataka Regional Development Board which is the nodal agency for the North-East Karnataka that enjoys special constitutional status. Once the districts are identified, it would be possible to map the presence of NGOs and examine the feasibility of partnerships in greater detail.

Room to Read (RtR) is a collaborative intervention with the State Government, specifically targeting rural areas. Karnataka follows a policy of having different medium of instruction depending on the concentration of population but does not have a policy or strategy for multilingual classrooms. RtR seems to have the potential for developing the library and reading programme in a manner that it fills the gaps and helps the state address this issue effectively. This is mainly because RtR works with the local community to develop and implement the intervention. RtR programme can consider providing materials and training that goes beyond the single medium of instruction, and also helps in developing reading skills in two additional languages that are taught in primary schools: English and Hindi. The state has a course in class library programme which is a part of the teacher education curriculum. A well-functioning effective library, which demands the teacher to be the central facilitator needs sustained and long-term handholding, could be provided by RtR. One of the most important features of RtR is the involvement of local communities and teachers in curriculum development. Therefore, the programme not only focuses on building competencies, but taps into the cultural/local knowledge of important stakeholders to develop the content and

curriculum. This is perfectly in line with the spirit of the educational policy in the state which holds decentralization dear.

Nali-Kali classes are supplied with activity cards, story-cards and other play materials; however there is hardly any opportunity to access other books and materials. Access to such materials can be helpful to teachers in organising more independent reading activities for class III students and address the issue of large class size of varying abilities. Currently, children in classes IV and V face sudden transition from a fully activity based classroom to a fully traditional classroom. Creative use of library can facilitate this transition and keep the activity-based nature of classroom alive by encouraging independent book based collaborative reading-writing-thinking activities. However, it is also important to train teachers in creative use of library so that it really contributes in enhancing the reading abilities.

A focus on English learning, and presence of books in Kannada and other local languages including Hindi and ideas for using those would help in addressing the issue of multiple home languages in the school. This is very important as schools largely have only Kannada books and materials and that too not are always age or context appropriate for young children in primary classes.

The review of early childhood learning and primary grade literacy programmes suggests that a positive environment exists for Room to Read (RtR) to enter Karnataka. There is good scope for new interventions as understood from the observations and insights gained from literature review, consultations and school visits. This makes the state conducive for RtR intervention. The literature review, analysis of status and field visit observations suggest the need for a model that mixes features of both models that is tailor made for Karnataka.

## 1.0 INTRODUCTION

### Education in Karnataka – A Background

Karnataka has a literacy rate of 75.36 % (Census 2011), with a total of 61,628 schools (UDISE 2014-15) enrolling 8.345 million students. Across the state, about 74 per cent of the schools are managed by the Government. Out of all the students enrolled across all districts, 52 per cent are enrolled in government schools. Eighty eight per cent of government schools are located in rural areas. In 2014-15, the enrolment in primary classes was 5.37 million (UDISE 2014-15), which constitutes about 4.05% of the total number of primary students in India (CBPS 2015). Net Enrolment Ratio for the primary is 94.44 (UDISE 2014-15) indicating that about 6 per cent of the primary age group students remain either un-enrolled, or are still continuing in the pre-primary, or have already entered upper-primary. Primary only schools constitute 43.66 per cent of all schools in the state. Out of all the primary only schools in the state, 83.4 per cent are managed by the Government. About 92 per cent of the primary only government-managed schools are in the rural areas.

**Table 1: Education Related Indicators for Karnataka: All Schools and Primary-only Schools (2014-15)**

	All Schools	Primary-Only Schools	Primary with Upper Primary Schools
Total Schools	61,628	26,909	30,115
Total Enrolment	83,45,748	10,28,764	52,13,925
Government Schools	45,654	22,447	21,989
Government Enrolment	43,60,499	6,95,926	31,81,479
Total Teachers	3,14,595	63,079	1,96,350
No. of Government Teachers	1,82,710	45,704	1,24,327
PTR (Overall)	26	16	28
PTR (Government)*	27	23	25
SCR	23	13	23
% of Teachers received In-Service Training (previous year)	24 <sup>^</sup>	42.3	40.7

**Source:** UDISE 2014-15; \* Calculated using the Government Enrolment and Government Teachers; <sup>^</sup> Average percentage calculated from UDISE State Report Card

The total number of teachers in the state is around 0.3 million, out of which 58% are employed in the government schools. About 20% of all the teachers were employed at primary only schools. The Pupil Teacher Ratio (PTR) for primary only schools is low at 16. In government schools, PTR for primary only schools is 23. The ideal Student-Classroom Ratio (SCR) is considered at 30 students per classroom and primary only schools have a SCR of 13. However, 16 per cent of the schools have SCR>30 (UDISE 2014-15) at primary level, 7.6% of primary only schools are single-classroom schools

and 16.6% of primary only schools have only one teacher indicating existence of either large class strength or multi-grade classroom. In such cases, teachers need to be well-equipped to handle the large class size or teach a multi-grade classroom.

Karnataka is one of the highest spenders in education among Indian states. However, its literacy rates are lower than three neighboring states: Maharashtra, Tamil Nadu and Kerala (CBPS 2015). This indicates towards some inefficiency that does not allow the full potential of investments to realise and also towards a need for paying greater attention to improve the outcomes.

**Table 2: Education-Related Indicators (District-wise)**

Districts	Literacy Rate	GER Total	GER Elementary	NER Elementary	Drop-Out Rate	PTR Elementary	School Infrastructure Index	Per Capita Education Expenditure (Rs)
Bagalkot	68.82	104.71	104.7	97.82	0.31	30.41	0.8	1,700
Ballari	67.43	92.2	107.5	83.78	3.69	32.33	0.78	229.1
Belagavi	73.48	94.45	105.5	93.31	4.43	27.38	0.82	3,004
Bangalore Rural	77.93	86.97	92.82	89.32	4.15	16	0.91	916.9
Bangalore Urban	87.67	108.3	123.3	100	0.3	25.6	0.88	795
Bidar	70.51	106.6	106.6	94.7	9.6	25.4	0.62	1,252
Chamarajanagar	61.43	99.47	103.35	84.85	0.59	23	0.84	1,597
Chikkaballapur	69.76	97.48	97.48	88.05	6.32	20	0.85	1,159
Chikkamagaluru	79.25	99.89	101	98.7	0.37	14.69	0.95	1,182.33
Chitradurga	64.74	102	101.5	85.5	2.6	22	0.76	1,672
D. Kannada	88.57	89.22	100.56	95.49	0.14	21	0.87	326.11
Davanagere	75.74	106.26	106.22	100	4.04	21.31	0.88	339
Dharwad	80	105.16	110.27	99.67	14.2	29	0.67	404.4
Gadag	75.12	103.2	103.1	94.14	1.71	34.57	0.87	1,056
Hasan	76	101.12	95.5	86	0.75	13.33	0.92	1,767
Haveri	77.4	97.54	99.4	88.82	0.29	27.19	0.88	1,419.10
Kalaburagi	64.85	119	119.54	96.42	6.65	24.4	0.78	468.40
Kodagu	82.61	101.09	100.77	89.92	6.30	12.98	0.9	1,636.70
Kolar	74.39	98.57	100	89.92	0.39	32.76	0.85	153.67
Koppal	68.09	106.65	105.13	96.08	6.28	33.56	0.59	495
Mandya	70.4	97.86	98.51	82.97	3.45	20	0.89	1,238
Mysuru	72.79	92.94	99.34	99.65	0.34	25.59	0.89	1,115
Raichur	59.56	80.48	114.82	87.13	5.11	28.17	0.8	467
Ramanagar	69.22	95.53	95.53	90.23	2	22.98	0.9	1,187
Shivamogga	80.45	93.03	99.56	94.15	0.31	24	0.91	310.95
Tumakuru	75.14	88.81	98.52	85.42	0.32	29	0.9	321
Udupi	86.24	100.89	100.89	96.48	0.24	22.39	0.83	1,338
Uttara Kannada	84.06	92.77	95.33	88.06	0.32	22.9	0.92	1,856
Vijayapura	67.15	87.64	103.15	94.78	7.81	29.20	0.48	2,127
Yadgir	51.83	92.43	101.83	93.21	0.35	38.52	0.45	1,453

**Source:** Compiled from Human Development – Performance of Districts, Taluks and Urban Local Bodies in Karnataka, 2014 – A Snapshot, Human Development Division, Planning, Programme Monitoring and Statistics Department, Govt. of Karnataka

**a. Intra-state differences:** Karnataka has four administrative divisions (i.e. adjoining districts clubbed together to form a division) namely Bangalore, Belgaum, Mysore and

Gulbarga. Analysis of school related indicators (number of schools, enrolment and teacher availability) indicate that there are variations within the four divisions as well as amongst districts within a division. Bangalore and Mysore are better performing divisions as compared to Belgaum and Gulbarga divisions. Among the four divisions, the Gulbarga Division in the north-east Karnataka is the most backward in terms of most development indicators and hence has been recently given the Constitutional Status of 371J as a backward region that requires special attention with respect to development. This division includes Bellary, Bidar, Gulbarga, Koppal, Yadgir and Raichur; all these districts have one of the lowest educational indicators, as evident by Table 2.

Table 2 clearly shows that there are wide variations between the districts. While some districts with relatively lower literacy rates and higher drop-out rates have lower PTR, others have poorer school infrastructure index. However, no definite pattern is visible and therefore it is difficult to trace a relationship between per capita expenditure, PTR or school infrastructure on one hand and drop-out rates and literacy rates on the other.

**b.Social Group and Gender Differences:** At the state level, 48% of girls are enrolled as compared to 52% of boys for primary classes (across all social groups). Karnataka's population includes 17.1 % Scheduled Castes (SC) and 7% Scheduled Tribes (ST), which is also reflected in the enrolment. However, among the SC and ST enrolled students, the share of boys is higher.

**c. Language Variations in the State:** Schools in Karnataka follow the three-language policy wherein the first language is the medium of instruction, English and any other language prevalent in the area.

Government schools in the state also offer seven languages as medium of instructions in its schools, based on the district and the dominant language in that area. The seven languages include Kannada, English, Hindi, Urdu, Tamil, Telugu and Marathi. Languages like Tamil, Telugu and Marathi are offered as medium of instruction in districts that share a border with other states speaking these languages.

Elementary enrolment is highest in Kannada medium schools as the number of these schools is the highest in the state (taking government, private aided and private unaided schools together), followed by enrolment in English medium schools. Amongst government schools, Urdu medium primary schools are the second highest in number after Kannada medium schools.

**d. Learning Achievements in the State:** National Council for Educational Research and Training (NCERT) conducts National Achievement Survey (NAS) for classes III, V and VIII to understand the current status of educational achievement in terms of concepts known, identify gaps and address them. This is also utilised for drafting policies and interventions. NAS Survey conducted for class III in 2012-13 (Cycle 3) indicated that in

Karnataka, class III students were able to answer 70% of the items (including listening comprehension, word recognition and reading comprehension) in the language section correctly, which is above the national average of 64%. About 70% of the students in class III in Karnataka were able to listen to a passage with understanding (national average being 65%), 88% were able to recognize words (national average being 86%) and 65% could read a passage with understanding (national average being 59%) (National Achievement Survey Cycle 3, Class III, Achievement Highlights, 2014, Educational Survey Division, NCERT). This trend indicates that students are able to undertake questions related to listening comprehension better than reading comprehension despite superior performance in word recognition. One of the probable reasons could be lack of reading practice. This could be due to absence of a literate environment at home and limited exposure to books and other written materials in schools.

As per ASER 2014, 46.2 % of students in Class I and 23% in Class II in rural Karnataka could not read even letters wherein only 12% of students in Class I and 28.7% of students in class II could read words. Less than 5% of students in Class I could read a Standard I level text and about 6% of students in class II could read their grade-appropriate text. School-management wise analysis depicted that about 74% of students in government schools in classes II and III could read at least letters as compared to 85% of students in same classes in private schools. Similarly, 66% of students in government schools could read at least words as compared to 75% of students in private schools. Similar trends are evident for class IV students in government and private schools who could read at least Class I level text and for students in class V who could read at least class II level text. These learning outcomes results indicate gaps in reading levels of students in rural Karnataka, especially in government schools, which could be bridged by dedicated interventions that develop reading skills.

Using the NAS data for class VIII for Cycle 3 (2014), Gramener(n.d.) tried to understand what influences the marks scored by the student for reading, mathematics and other subjects. As per their analysis, higher number of books owned by the student improves reading by 8.2%, using dictionaries and reading other books improves their language scores by 6.4%, library use contributes to 5.6% additional scores, reading books / magazines can enhance their scores by 7%. Although this analysis is not available for primary classes, it can be inferred that access to books, library, dictionaries and reading other literature (apart from textbooks) does contribute immensely to the language skills of the student.

**e. Teacher Training in Karnataka:** During 2013-14, 42.3% of teachers in primary only schools and overall 24% of all teachers employed were given training. Training plan for state government is dependent upon approvals from the Ministry of Human Resource Development (MHRD), Government of India, as these are funded by the Sarva Shikha

Abhiyan (SSA), a Centrally Sponsored Scheme. During 2013-14, all teachers underwent a three-day training to develop skills for teaching English and progression of developing learners' writing skills, conducted by the British Council (In-Service Teacher Training Activities and Progress 2013-14 and Annual Report 2013-14, SarvaShikshaAbhiyan Karnataka). Major focus of this training was on developing writing skills of the learner, including formation of English alphabets, size and spacing of letters, punctuation, sentence and paragraph writing and age-appropriate writing. During 2012-13, similar training was conducted by the British Council wherein the focus was building teaching competencies and enhancing language proficiency of all elementary school teachers (In-Service Teacher Training Activities and Progress 2012-13). It appears that there was not much emphasis on developing reading English texts/literature in these trainings.

During 2012-13 and 2013-14, teachers who teach the Nali-Kali classes (Kannada and Urdu medium) were given special training to orient them towards the new revised learning materials. Cluster level sharing, during both the years, included awareness about Right to Education Act 2009 and Karnataka Curriculum Framework, how to prepare School Development Plan, awareness about Children with Special Needs (CWSN), Out of School Children (OoSC), develop teaching-learning materials and clarifications regarding Continuous Comprehensive Evaluation (CCE). In the last two years, in-service teacher training has not been focusing on reading and developing languages skills through reading books (apart from textbooks). However, reading forms a significant section for those undergoing pre-service teacher education courses in Karnataka. A separate course-paper titled "Language and Literacy" is mandatory and focuses on how to develop a language-rich classroom, why reading for pleasure and reading other literature (apart from textbooks) is important to develop language skills and enhance literacy and how reading can be integrated with storytelling and drama. Through this course-paper, it is expected that teachers will promote a reading culture and practice in their classrooms. The same is also reflected in the syllabus developed by the state government where teachers are encouraged to create class libraries for facilitating language development. However, in the absence of any qualitative data on library usage, it is difficult to estimate to what extent this is practiced in the classroom.

f. While the DISE 2011-12 data seems to suggest that 99% of elementary schools and 94% high schools in Karnataka have a library (2012, SSA, Karnataka), the capacity of these libraries (i.e., number and types of books, age appropriate reading material for all classes, and in the different languages supported by the state, etc.) and use is not known. Further, the results on NAS as well as ASER studies suggest that perhaps even if libraries are available, they probably have not been effectively utilised, and have not strengthened reading outcomes.

## 2.0 REVIEW OF LITERATURE

Reading implies the ability to make meaning from any form of written text, and it is one of the prime means of communication (Harris et al., 2006). Reading is closely linked with 'literacy', and cannot be understood in isolation, as it also interacts with and depends on knowledge of other components of the language system, such as writing, speaking and listening (Harris et al., 2006). Snow and Sweet define reading "as the process of simultaneously extracting and constructing meaning." (in Ruetzel, Smith and Fawson, 2005). The act of reading involves three critical elements: the reader, the text and the activity (Ruetzel, Smith and Fawson, 2005). In addition, reading is also determined by other factors such as the socio-cultural context within which it occurs, and the socio-economic strata of the reader, which includes factors such as ethnicity, neighborhood, school culture, and instructional group (Ruetzel, Smith and Fawson, 2005).

Fostering literacy or language skills in learners (which includes skills of reading as well) requires attention to all of these above-mentioned factors. Further, it includes paying attention to the ways in which literacy skills develop along predictable patterns in alphabetic languages as several studies show (e.g., Adams, 1990; Goikoetxea, 2005; Hache'n, 2002; as cited in Dubeck and Gove, 2015). Dubeck and Gove (2015) have noted that "...developmental literacy research has identified specific early language and literacy skills associated with successful literacy acquisition (NICHD, 2000; Snow et al., 1998). The literacy skills that can be easily measured that contribute to reading achievement fall under three major domains: (a) phonological awareness, (b) print knowledge, and (c) orthographic knowledge." Further, these skills need to be developed in relation to developing learners' ability to decode the three sets of language information that proficient language users utilize - that is, of syntactic information, semantic information and graphophonic information, and the meaning that the interaction between the three produces (Harris et al., 2006).

While studies suggest that many individuals may acquire knowledge related to these various domains and skills independently, for a majority there is a need to provide instruction, and for others specific interventions may also be required in order for them to identify and utilise this vast information related to language learning (Dubeck and Gove, 2015). Taking these various factors into account, Harris et al. (2006, p.x-xi) have argued that "...a comprehensive and inclusive framework is necessary to conceptualising and planning classroom programs for reading in terms of the practices reading involves and the dynamic contexts in which reading occurs."

Three broad theories of reading acquisition may perhaps give us an entry point into how classroom instruction for language and reading acquisition may be structured. The three approaches can be classified as the bottom-up approach, the top-down approach and the interactive (or transactive approach). While the first approach emphasises the



role of decoding individual phonemes, letters and words and putting these together, in order to be able to construct larger meaning, the second approach emphasises learners' background knowledge of language and associated memories as important for language acquisition. The third approach emphasises an interaction between the first two approaches, and the ability of the learner to choose the right approach based on the text and context (Harris et al., 2006).

Irrespective of the approach and theory of reading acquisition utilised, research suggests that a critical factor in fostering reading achievement involves providing reading instruction at the reader's developmental level (i.e., that, which is not too difficult or too easy for a particular reader's development level) (Dubeck and Gove, 2015). Further, it is important to design reading instruction bearing in mind that the development of the three sub-skills of phonological awareness, print knowledge, and orthographic knowledge are contingent upon the context in which these skills are developed: that is a structured context, such as classroom cultivates these skills in a deliberate manner. Thus, it may require constant modifications in approach based on informal classroom assessments, and may have to include "...frequent opportunities to read and write a variety of text types both new to the child and self-selected" (Dubeck and Gove, 2015). Informal contexts, on the other hand such as market transactions (Olateju, 2010) or artistic endeavours (Marsick and Watkins, 2001) may naturally provide motivating contexts for literacy acquisition (as cited in Dubeck and Gove, 2015).

What this suggests, as Harris et al. (2006) note, is the need to pay attention not to questions about "which method affords adequate literacy", but about what literacies are offered by various programmes, and how these foster reading acquisition. This is particularly significant for a context like India, which is characterised by a pluralistic and multilingual society, wherein a large proportion of children grow up in a non-print environment, and yet have a repertoire of local knowledge and skills. Yet, this multiplication of knowledge and linguistic skills is hardly taken into account within classroom environments. In such contexts, it has been argued by scholars that it is important to build a foundation for reading and writing by approaching it through children's oral language skills, rather than simply teaching them to decode and encode scripts (Sarda et al., 2016).

### 3.0 THE PRESENT STUDY

Keeping the latter points in mind as a guiding framework for determining the need for early literacy and reading interventions while taking the state's administrative, educational and policy details into account, the report presents the findings of the feasibility study conducted by the Centre for Budget and Policy Studies (CBPS) on behalf of Room to Read (RtR). The specific terms of reference (ToR) provided by RtR were:

1. To provide an education profile of the state, looking at the status of enrolment, teacher availability, PTR in government schools; quality concerns including learning competencies; intra-state differences in enrolment, quality and participation; status with respect to gender and social groups; structure of the education system, etc.
2. To map the major policies and initiatives of the government, especially with respect to early grade reading/literacy interventions, including an analysis of the implementation of Right to Education in general, and the library component in particular (percentage of schools with libraries, functionality of libraries, availability of library period/time in school, availability of books in libraries etc)
3. To provide an understanding of the government's approach to early grade reading; and language, including a curriculum review
4. To analyse the language variations and prevalence of multi-lingual situations
5. To review the status of teacher training in relation to language/ reading
6. To review major education interventions undertaken by other NGOs and non-profits, specifically on early grade reading/ basic literacy/ library.
7. To review the availability of children's literature in local languages, looking at the major publishers and kinds of children's literature published
8. To examine the prevailing culture of reading at the family and community level and enabling reading environment at schools and in the community.
9. To identify good practices, if any with respect to early grade reading/ library in government or private schools?
10. To identify the government's openness to new ideas, ease of partnering with government, governance systems and bureaucracy, ownership at government level, key stakeholders at the government and non-government level and their relationships

Based on the above, the feasibility study had to make **recommendations** on:

- a. Feasibility and need of RtR's expansion to Karnataka
- b. Which of the models of RtR operation would work best?
- c. Should RtR be implementing directly or work through local NGO partners; who are the likely NGOs to partner with?
- d. What are the geographical areas that RtR should focus on/ what should be the criteria for selecting districts/blocks?
- e. How to identify good publishers/ children's literature?
- f. What needs to be done for government engagement at various levels?
- g. What would be the permissions and approvals required?
- h. What are the risks associated with expansion to Karnataka?

## ROOM TO READ

Room to Read (RtR) is one of the biggest literacy programmes in the world currently operative in ten countries of Africa and South East Asia. RtR focuses on creating a conducive reading environment and in turn the reading abilities of children enrolled in government school. The idea is to inculcate reading skills in children as early as possible and therefore, the intervention focuses on children enrolled with preprimary and primary classes. The girl child is one of the essential target population of the intervention. The intervention follows four core processes –

- 1) Building of resources – libraries, school infrastructure, local reading materials
- 2) Capacity Building – of the teachers, local community
- 3) Community involvement in the processes of intervention
- 4) Ongoing support and monitoring of the intervention – internal and external

The spirit of the intervention lies in quality education and involves the local community. RtR provides libraries, reading materials in local languages, computer labs and other infrastructural facilities in schools.

RtR has two kinds of programmes- Reading room and local language publishing. The reading room programme works with three stakeholders – children, head teachers and teachers, local community. In addition to the development of reading awareness, a big part of the programme is also geared towards building capacities of the local community and teachers. Local language publishing is centered on development of culturally and locally relevant reading materials for children. The programme strives to provide a platform for local publishing houses and local writers. It also adds to exiting local literature, and therefore, adding to both academic and popular culture of reading.

RtR was started in the year 2003 in India. In the past thirteen years, RtR has helped set up over 7300 libraries in government schools, trained teachers on literacy instruction in over 1000 schools, published over 175 titles of children's literature in local language and provided material, academic and life skills support to over 8000 girls. The intervention is currently operative across the eight states of Andhra Pradesh, Chhattisgarh, Delhi, Maharashtra, Madhya Pradesh, Rajasthan, Telangana and Uttarakhand.

There are two models of RtR that is followed in India: (i) a comprehensive literacy program in targeted schools, comprising of explicit reading instruction in grades 1 and 2 and school libraries for grades 1-5. The key outcome is

children developing both skills and habit of reading, (ii) a school library program in targeted schools, for grades 1-5 with the key outcome of developing children's reading habits; here it is assumed that children in early grades have basic reading skills and/or the government already has a strong program to develop reading skills. The above two models are implemented either directly by RtR or through partner NGOs. RtR also has a Technical Assistance model in which it works with governments and other organisations to build their capacity for implementing literacy/library programs for scaling up early reading interventions.

Two major evaluations have been conducted by RtR using external consultants for an unbiased analysis of impact of the intervention. In 2007, a rapid evaluation of the intervention was conducted across all six intervention counties in South Asia namely – Cambodia, India, Laos, Nepal, Sri Lanka and Vietnam. The results of the evaluation showed that exposure and access to reading improved in all intervention countries, the class room practices involved more activities using books, storytelling and discussions formed a big part of teaching learning processes, reading and in turn learning ability of the children improved and teachers developed strong library management skills specially in intervention areas where the direct model was operative.

A similar evaluation was carried out in 2015 which was a two year study across 6 countries - India, Laos, Nepal, South Africa, Sri Lanka, and Zambia. The outcome of the study showed that children exposed to RtR were more engaged in recreational reading, their attitude and reading skills had substantially improved. An interesting finding was the documentation of the differential impact of the programme on children with educated and non-educated parents/guardians. While children with non-educated children showed improvement in recreational reading the other group showed substantial improvement in reading abilities and learning outcomes. The inference drawn was that for children who did not have access to reading materials prior to the RtR intervention, the introduction of the library exposed these children to books which helped to improve their reading habits. By contrast, children whose parents were more educated may already have had strong reading habits, the introduction of the RtR library provided an opportunity for educated parents to work with their children on reading and thereby improve their reading skills further.

Addressing the guidelines set in the ToR, here we present a detailed desk review of the available approaches to early grade learning and reading by state and non-state actors in Karnataka. The report is based on a review of secondary sources, such as available policies and programmes for reading and learning, as well as data on learning in Karnataka, coupled with rounds of interactions with a few key stakeholders both in the state and two districts – Chamarajnagar in South Karnataka and Gulbarga in North Karnataka. North Karnataka has the worst socio-economic and development indicators in the state and Chamrajnagar has the worst indicators in South Karnataka.

While the state consultations covered senior education department functionaries of the government, publishers of children's books in Kannada, and a few NGOs who are active in the space of early reading, the district level consultations covered key government officials from general administration and the Education department, and teachers. A total of six school visits, three in each of the two districts, were undertaken with the twin objectives of having Focus Group Discussions with teachers and understanding the status of school/classroom libraries and their usage.

The report is organised in the following manner: the first three sections (including this one) provide a background to the study, and discuss education related indicators for Karnataka. Section 4 presents available programmes in Karnataka - both governmental and non-governmental or partnerships between the two. Section 5 discusses the availability of reading material for children in government primary schools in the state. And the final section presents the inferences and recommendations with respect to available scope for RtR in Karnataka, and the government's response and interest to this.

## 4.0 INTERVENTIONS IN KARNATKA

The Karnataka Government can be called a pioneer for having introduced several educational reforms, and for also having taken several proactive steps in introducing innovative programmes and campaigns to improve the status of elementary education. Among its various efforts have been campaigns such as 'Coolie IndaShalege' (From Child Labour to School), Baa MaraliShalege (Come Back to School), BeediIndaShalege (From Street to School), Baa Bale Shalege (Calling the Girl Child Back to School) and ChinnaraAngala, to bring drop outs and out-of-school children back to school. The Coolie IndaShalege Programme was a state level publicity campaign to eradicate child labour and bring children to school, and was launched as part of the SSA programme in February-March 2003.

ChinnaraAngala is a summer bridge course programme to bring out-of-school children into schools. Children in 6–14 age-group are prepared through an intensive, condensed curriculum taught by a para-teacher (a local youth from the village), which would then allow them to enter a grade-appropriate class in the following academic year. The duration of the intervention was initially proposed to be for 60 days. Later it was decided that it would continue till all children were enrolled into formal school. The ChinnaraAngala programme first started in 10 blocks with 3,100 children enrolled and 2,600 of these children were later mainstreamed into formal schools. During 2003 over 4,800 ChinnaraAngala centres were opened to be able to address concerns of school preparedness among the 407,000 out-of-school children. One lakh, twenty seven thousand children, including 50,000 child labourers, participated in this programme. The programme has been run with the support and active participation of a number of NGOs, including Akshara, MAYA, Mobility India, APSA, REDS and Rashthrohana Parishat. (Department of Public Instruction, Government of Karnataka, 2016).

While the programmes presented above have largely focused on addressing the problem of out-of-school children and on improving access to education for the most disadvantaged communities, the Government of Karnataka has also taken pioneering steps in changing the context of education itself. Karnataka has been one of the first states to adopt new approaches to learning and bringing about changes in the teaching-learning practices within government schools. We present a review of some of the innovative government, non-government and collaborative programmes and approaches adopted to primary school learning, with a particular focus on how this has contributed to the development of literacy, language acquisition and/or reading in primary school children in the attachment I. Attachment I has three sections: the first section discusses a number of government initiatives, the second one discusses the NGO run initiatives but most of these are located in government schools and the third section discusses the publications and other resource materials that are located in the state. This section uses three matrices based on these sections for the following analysis.

<b>Matrix 1: Government Programmes</b>		
<b>Name</b>	<b>Main features</b>	<b>Strengths and limitations</b>
<b>Early Childhood Care and Education (ECCE) Programme and Chili Pili</b>	<ul style="list-style-type: none"> <li>• ECCE Policy introduced in 2013</li> <li>• Emphasising on usage of home language /mother tongue as primary means of interaction with children simultaneously exposing them to other languages in a meaningful manner.</li> <li>• Implemented by Dept. of Women and Child Department through pre-school education at Anganwadi centers</li> <li>• Educational booklets called 'Chili Pili' designed by the Govt of Karnataka, with assistance from UNICEF for making pre-school education more attractive.</li> <li>• Chili Pili books consists of about 100 songs, stories, creative activities and games in the local language with attractive illustrations</li> <li>• Two hours in each day (i.e., for six days of the week) is dedicated to pre-school education.</li> <li>• Annual grant of Rs. 1,000 is provided per anganwadi centre to procure various pre-school material.</li> </ul>	<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>▪ Approach highlights the government's interest in and orientation towards early development of children's learning and linguistic abilities in a child friendly manner.</li> <li>▪ Special steps taken to develop activity books in local languages.</li> <li>▪ Willingness to partner with different non-governmental organisations to contribute to overall child development and learning.</li> </ul> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>▪ Material does not address children's early school readiness / learning and reading abilities comprehensively.</li> <li>▪ ECCE does not feed into the Nali Kali programme for primary school children offered by the Government of Karnataka, for better results.</li> <li>▪ Needs of students with special needs not taken into account.</li> </ul>
<b>Nali Kali</b>	<ul style="list-style-type: none"> <li>• First developed in 1995 with support from UNICEF in H.D. Kote block of Mysore District.</li> <li>• Adopts an activity-based strategy</li> <li>• Reorganisation of curriculum and concepts into small, manageable units with each unit forming a 'step'</li> <li>• Learning materials and activities are designed for each step, to be used at their own pace and progress</li> <li>• Programme uses Activity Cards -- once a card is completed, it indicates that the child has acquired the skill/competency mentioned on the card.</li> <li>• Display of Learning Ladder with all steps in the class</li> <li>• Fosters understanding of rules of games and independence in learning.</li> </ul>	<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>▪ Democratic approach to classroom learning</li> <li>▪ Strong significant effects on language test scores and leadership skills.</li> <li>▪ Model works well for lower class students.</li> </ul> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>▪ Insignificant effects on mathematics, communication and social skills.</li> <li>▪ Achievements in early grades do not persist in higher grades.</li> <li>▪ Teachers find that there is no flexibility in teaching.</li> <li>▪ The quality of learning is affected as many classes are clubbed together.</li> </ul>
<b>Keli Kali – Interactive</b>	<ul style="list-style-type: none"> <li>• Started in 2000-01 as a part of the dotEDU T4 project of the</li> </ul>	<p><b>Limitations:</b></p> <p>The main limitation is the lack of</p>

<p><b>Radio Programme</b></p>	<p>Education Development Centre</p> <ul style="list-style-type: none"> <li>• To supplement the existing teaching system</li> <li>• Found to be cost-effective tool to reach large number of government schools at low expenditure</li> <li>• Content designed after analysing requirements of targeted teachers and students</li> <li>• Teachers are provided with guides and reference materials and trained to operate a radio class. Teachers' handbook also published by DSERT to use radio lessons effectively</li> <li>• The program was extended to cover VI and VII standard children in 2005 – 06 and VIII standard from 2006 – 07.</li> <li>• As of 2009-10, 20 programs in English were produced for grade I to III funded by the Sarva Shiksha Abhiyan.</li> <li>• Keli Kali has been replaced by Chukki Chinna programmes developed by the Education Development Centre Inc India (EDC) for grades I-V, but are still active for grades VI-VIII.</li> </ul>	<p>access to radio programme in remote areas.</p> <p>Teacher absenteeism, crowded classrooms and lack of space have been identified as significant issues.</p> <p>The broadcast timings do not necessarily match with school time table and that also acts as a barrier.</p> <p>When it came to using Chukki chinna for Kannada language where teachers did not always felt the necessity of using additional support. The use was higher for Mathematics and English.</p>
<p><b>Introduction of English as a Compulsory Language in Government Schools</b></p>	<ul style="list-style-type: none"> <li>• Introduced in 2007-08 from grade 1 to 4</li> <li>• Five components in the syllabus – stories, rhymes and songs, total physical response (TPR) activities, dialogues and language games.</li> <li>• Stories were included as easy entry points to introduce other activities related to developing literacy.</li> <li>• Student Activity Book and Teacher Resource Book prepared for each grade</li> <li>• Classroom time of 40 minutes to be divided across these activities as follows: first 10-15 minutes for story narration, followed by 3-5 minutes for rhymes and songs, and last 10-15 minutes for TPR activities.</li> </ul>	<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>▪ Reflects State's response to new pedagogic practices based on external feedback and cultural changes.</li> <li>▪ Syllabus attempts to draw on the child's curiosity in language</li> <li>▪ Oral literacy seems to be fostered before writing practice is developed.</li> </ul> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>▪ Issues of implementation and practice</li> <li>▪ Story component abandoned by teachers as they felt less equipped to read, speak and teach advanced English.</li> <li>▪ The teachers demanded more support and training for making students comprehend stories</li> </ul>

Karnataka was the one of the first states to introduce textbook free classrooms for classes I and II, first on an experimental and then universally in the entire state. Later class III was also added to it. Instead, it adopted an activity-based strategy known as Nali-Kali that reorganized curriculum and concepts into small, manageable units. The programme uses a learning ladder approach with the help of Activity Cards -- once a card is completed, it indicates that the child has acquired the skill/competency mentioned on the card. The evaluations have suggested that it helped in making classroom more democratic and lead to strong significant effects on language test scores and leadership skills, especially for lower class students. However, the effects on mathematics, communication and social skills are insignificant. Teachers find it rigid, and clubbing of class III has made the management difficult.

Karnataka has also introduced English as a subject mainly in response to popular demand for teaching English at primary level. Although the purpose was to develop some oral skills using stories, rhymes and songs, the available evaluations shows that in reality teachers, in absence of appropriate training, have abandoned the approach. This is despite the fact that Student Activity Book and Teacher Resource Book prepared for each grade. This is an area that seems to call for immediate attention. The state also introduced radio programmes to support learning in early years but the use has been limited, and the match with Nali-Kali approach for those grades unclear.

Early year learning also depends on pre-primary years' experiences. Karnataka developed booklets called 'Chili Pili' consisting of 100 songs, stories, creative activities and games in the local language with attractive illustrations for making pre-school education more attractive, and have mandated two hours each day for pre-school education in anganwadis. But it does not necessarily address children's early school readiness / learning and reading abilities comprehensively, and also does not match with Nali-Kali in approach.

As stated earlier, Karnataka has presence of a number of NGOs with notable work in the area of early education. Akshayam, Praspara Trust and Maya are organisations that have worked actively in the area of pre-school education. Akshara Trust works in both pre-primary and primary space, and though it also started a library programme in selected taluks of selected districts, the take-off as low primarily because of the lack of engagement from teachers' side. Kalikayatna and Promise Foundation have worked more comprehensively on improving the quality by working with government schools and engaging with teachers for long periods. These have their own strengths and limitations and faced roadblocks in different forms (see Attachment I and Matrix I). Hippocampus is another organisation active in providing some book based reading improvement programme in some parts of the state but the main focus is on remedial teaching. Other organisations such as Kalisu is present in very few schools in one district. Azim Premji Foundation (APF) is present in some districts and focuses on improving teachers' capacities and running a few schools for demonstration.



<b>Matrix 2: NGO-run programmes</b>		
<b>Name</b>	<b>Main features</b>	<b>Strengths and limitations</b>
<b>Akshayam</b>	<ul style="list-style-type: none"> <li>Developed a Cognitively Oriented Programme for Preschool Children (COPPC) to provide cognitive stimulation to children in 1985.</li> <li>Based on the play house and nursery school, experience was initially given to 140 child care workers such as nursery teachers, anganwadi workers, Bal Sevikas, trainers, etc.</li> <li>Used by ICDS programme</li> </ul>	<p><b>Strengths:</b> The benefits of training have extended to over 60,000 anganwadi and balwadi workers and to over a lakh preschool children.</p>
<b>Praspara Trust</b>	<ul style="list-style-type: none"> <li>Run Balwadis for children between 3-6 years through community participation model to empower communities.</li> <li>Focus on preschool education and classes are conducted in community halls, community spaces or in teachers' homes.</li> </ul>	<p><b>Strengths:</b> The organization initiated bridge schools to rehabilitate 100 child labourers in Bangalore city. Paraspara Trust has succeeded in releasing 1830 child laborers since 1995.</p>
<b>Movement for Alternatives and Youth Awareness (MAYA)</b>	<ul style="list-style-type: none"> <li>Involved in the field of ECCE through the facilitation of community owned preschools in seven districts in Karnataka managed by the local community. They incorporate local knowledge and traditions for the teaching 0-6 year old children.</li> </ul>	
<b>Akshara Foundation</b>	<p><b>Pre-school programme:</b></p> <ul style="list-style-type: none"> <li>Preschool package developed to bring changes to teaching-learning material (TLMs), the environment, training of functionaries and preparation of community for management of the balwadis.</li> <li>Shishuvachan series developed to provide a rich reading environment for children to encourage reading. The readers contain simple stories with large fonts and illustrations in Kannada and Urdu.</li> </ul> <p><b>Primary Education:</b></p> <ul style="list-style-type: none"> <li>Accelerate Reading Programme / OduveNanu: The 'OduveNanu' ('I shall read) programme by Akshara is a remedial reading programme for grades 2 -7 using set of story cards based on moral stories with four pictures and text.</li> <li>Developed and implemented by Akshara in 2006 in all government</li> </ul>	<p><b>Pre-school Programme:</b></p> <p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>Development of a 70-point scale for assessing the quality of anganwadis and 56 point formative assessment protocol to track the progress of children</li> <li>'Prepare, Not Repair'-- Akshara has worked closely with the state government since 2009 in improving the status of anganwadi centres in Bangalore</li> </ul> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>Studies showed that <u>specific</u> school readiness skills, related to pre-reading, pre-writing, and pre-number concepts and skills were not being facilitated as envisaged through the TLMS designed by Akshara.</li> <li>Activity corners do not link with children's activities</li> <li>Need to strengthen the ECE curriculum</li> </ul>

	<p>primary schools in the Bangalore Urban District. Govt. of Karnataka has rolled it out in all government primary schools across the state in 2008.</p> <ul style="list-style-type: none"> <li>• In 2007, Akshara started the School Library Programme, with a 'hub and spoke' model. The hub school is the designated library room with age and language appropriate materials, managed by a librarian trained by Akshara. Library period is instituted for conducting activities and for letting children borrow books.</li> </ul>	<p><b>Primary education programme:</b></p> <p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>▪ Almost all students showed upward movement on reading scale (95%) and 64% of children converted from 'non-readers' to readers.</li> </ul> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>▪ There was no effect of the library programme on the language skills or performance in other subjects of students.</li> <li>▪ The classroom library programme (TCL) that was introduced in 2014 has not taken off as teachers have not shown much interest.</li> </ul>
<p><b>Prajayatna</b></p>	<ul style="list-style-type: none"> <li>• Kalikayatna - primary school learning programme started in 2005 - run in government schools in collaboration with Sarva Shiksha Abhiyan.</li> <li>• Addresses low learning and enrolment levels and high levels of absenteeism.</li> <li>• Kalikayatna focuses on integrated learning and is a capability-based approach. It chooses to look at 'how' children learn as opposed to 'what' they are learning.</li> <li>• No prescribed textbooks and gives teachers the freedom to refer to books, textbooks, and any other material available to them that can support learning, and help them inculcate a habit of reading in children.</li> </ul>	<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>▪ Study shows that Class 3 students have improved in reading and comprehension abilities and higher than those in Nali Kali programme.</li> <li>▪ Breaks away from conventional rote learning and promotes using concepts that they can apply to their surroundings.</li> </ul> <p><b>Limitations:</b></p> <ul style="list-style-type: none"> <li>▪ Difficulty in adopting this approach for higher class.</li> <li>▪ Performance of students has seen to be concentrated at the extremes</li> <li>▪ Initial gains in language seen in class 3 fades in the higher classes.</li> </ul>
<p><b>The Promise Foundation</b></p>	<ul style="list-style-type: none"> <li>• 3 level intervention for developing reading abilities -             <ul style="list-style-type: none"> <li>○ pre-reading (familiarising with texts, reading direction, pagination etc) using especially designed 'giant books',</li> <li>○ skills for decoding and comprehension (foster oracy, auditory listening skills, visual processing skills and thinking and meaning making skills),</li> </ul> </li> <li>• Kannada Kalika Kosha - implemented in Chamrajnagar in collaboration with National Institute</li> </ul>	<p><b>Strengths:</b></p> <p>Interventions are customized to target population and the level of family and community support that may be available to acquire principles of language learning formally.</p>

	of Advanced Studies through District Quality Education Programme as a supplementary Kannada language learning programme. Emphasised on activities like reading, writing, listening and speaking through various subjects.	
<b>Hippocampus</b>	<ul style="list-style-type: none"> <li>Started in 2004</li> <li>Grow By Reading component to improve reading abilities of children.</li> <li>Reading levels assessed through reading cards with simple text and pictures → children led to level-appropriate books → supported in improving reading at their pace.</li> <li>Library has colour-coded books based on level of difficulty.</li> <li>Programme available in English, Hindi, Kannada and Tamil.</li> </ul>	<p><b>Limitations:</b> Inadequate funds for salaries, difficulty in getting good trainers due to lack of resources to pay high, difficulties in establishing more than a single bookshelves in a corner of a classroom and issues with training trainers who themselves are not fluent in English and have to teach the language to the students.</p>
<b>Agastya Foundation</b>	<ul style="list-style-type: none"> <li>Use of Mobile labs that teach science concepts and lessons to children in rural remote areas.</li> <li>To encourage learning amongst children through science fairs, centres, mobile labs, libraries and activities outside of the classroom.</li> </ul>	<p><b>Strengths:</b> Use of science education as a tool to energize schools from the outside.</p> <p><b>Limitations:</b> Children need to understand basic concepts first.</p>
<b>Kalisu Foundation</b>	<ul style="list-style-type: none"> <li>Mysore based organisation working to improve reading habits and skills through provision of books, materials and training to teachers in adopted schools.</li> </ul>	<p><b>Strengths:</b> Focus on language skills, personality development, life-skills, arts and crafts that contribute to a child's overall development.</p>
<b>Azim Premji Foundation</b>	<ul style="list-style-type: none"> <li>Establishment of schools at several District Institutes for Educational Training (DIET) for demonstration.</li> <li>These schools provide free, quality education to the community, functioning similar to rural government schools in terms of costs and constraints.</li> <li>The key programmes that run in Karnataka are: Education Leadership and Development Policy (ELDP), Teacher Education, Namma Shale Plus, Child Friendly School Initiative and Institutional Capacity Development Project (ICD).</li> </ul>	<p><b>Strengths:</b> They work on capacity building of education functionaries, teachers, headmasters, etc. and on curriculum, assessment, education leadership and management, policy issues and advocacy at the state level.</p>

**Matrix 3: Publications and Other Resources**

Centre for Budget and Policy Studies, Bangalore

Name	Main features	Strengths and limitations
<b>Karnataka Textbook Society</b>	<ul style="list-style-type: none"> <li>• Founded in 2006 for all government approved school textbooks, preparation, printing and distribution</li> <li>• Textbooks prepared in 12 languages</li> <li>• Review by DIET, CTE, DSERT committee and finally by State Editorial Board appointed by the government.</li> </ul>	<p><b>Strengths:</b></p> <ul style="list-style-type: none"> <li>▪ Integrated knowledge</li> <li>▪ Curriculum beyond textbooks</li> <li>▪ Softening of subject boundaries</li> <li>▪ Connecting theory to practice</li> </ul>
<b>Pratham Books</b>	<ul style="list-style-type: none"> <li>• Established in 2004</li> <li>• Publish affordable books with Indian characters, settings, themes; publish fiction and non-fiction; collaborates and co-publishes to improve and create a larger body of quality content for children.</li> <li>• Implemented “Book Coupon Programme” in 2013-14 in Delhi and Yadgir district of Karnataka. Aim was to understand impact on reading habits and skills due to ownership of books.</li> </ul>	<p><b>Strengths:</b></p> <p>Pratham books have published and provided over 2000 books in 18 languages across 115,000 schools and libraries in 22 states of the country.</p>
<b>Navkarnataka</b>	<p>Navkarnataka Publishers have evolved from being a wing of the Soviet based Progress publishers to be on their own since 1990 and publish a range of books, including those for children. They also acts as a marketing agency for other publishers.</p>	<p><b>Limitations:</b></p> <p>They used to sell their children's books through exhibitions organized through schools in different cities but that option does not exist anymore, as schools are now more dependent on senior officials for permissions.</p>
<b>Sutradhar</b>	<ul style="list-style-type: none"> <li>• Started in 1995</li> <li>• Aims to make learning a more lively and meaningful experience for children by equipping teachers with relevant resources- materials, methods and knowledge.</li> <li>• Offers picture books, bilingual books and storybooks by Indian publishers for young children.</li> <li>• Karuna Kit – collection of 100 storybooks; can be used for value/life skills/language education; consists of thought-provoking themes for early grade learning.</li> <li>• Early learning kit for 3-6 year old children have flash cards with pictures of fruits and vegetables, 4-piece puzzles, Chennapatna stacking towers and other such tools to stimulate learning.</li> <li>• Also stocks indigenous games made by crafts persons across the country using waste and natural materials.</li> </ul>	<p><b>Strengths:</b></p> <p>The centre makes learning more lively and enriching using material that is created with a focus on the Indian context.</p> <p><b>Limitations:</b></p> <p>Sutradhar's resources are available only at their store for purchase, and are not freely available.</p>

The state has a government owned Karnataka Textbook Society which acts as an umbrella body for all government approved school textbooks, preparation, printing and distribution activities. There is an effort to make the textbooks more integrated by

softening of subject boundaries and connecting theory to practice/knowledge to life activities. Pratham Books, a major not-for-profit childrenbook publisher is headquartered in Karnataka. They publish affordable books which have unique Indian characters, settings and themes, story which are both fiction and non-fiction and also collaborate and co-publish to improve and create a larger body of quality content for children. The Table below shows that Pratham books sold about one and a half lakh Kannada books in the last financial year and the share of the first two grade reading levels higher than the next two grade levels.

<b>Reading Level</b>	<b>Total Sold Out quantity</b>
1	38,249
2	50,841
3	34,664
4	21,623
<b>Grand Total</b>	<b>1,45,377</b>

Source: Pratham Books

Pratham Books implemented a 'book coupon programme' in 2013-14 in two locations – A few poor urban neighbourhood in Delhi and selected rural areas in Yadgir district of Karnataka to enable children between 3-14 years to own the books of their own choice and then see the impact on reading habits and skill. Catalyst Management Services (CMS) Undertook and evaluation and found that this helped in improving the access to and interest in reading story books especially for those who did not have access to any other source. This also had a significant impact on sharing of books among themselves. A number of local for-profit publishers such as Navkrnataka publish some children's books but these are largely only black and white, text-heavy books and therefore not very suitable for young children. A number of international and Delhi based publishers are also publishing translations but most of these books are not produced very professionally and errors are also common.

Sutradhar, started in 1995, is a non-profit educational resource centre. The centre aims to make learning a more lively and meaningful experience for children by equipping teachers with relevant resources- materials, methods and knowledge. They have a range of innovative learning resources for children up to 8 years and they also organise teacher training and have a collection of books for the teachers. However, Sutradhar's resources are available only at their store for purchase, and are not freely available.

## 5.0 FEEDBACK FROM SCHOOL AND DISTRICT VISITS

As mentioned earlier, we visited six primary schools in two districts: Chamrajnagar and Gulbarga. This section presents the main observations and findings from those school visits, and also of the interactions held with teachers and officials from the Education department and general administration.

All schools had a library. However, with one exception, these libraries meant one or two almirahs or book shelves filled with all the books supplied so far from the department or donated by some other institution/individual. The books were mostly just stacked without any classification or labeling. In two schools, some were kept on a table in the classrooms but the books did not match the reading levels of children in respective classes. These were mostly biographies of various saints and 'great-men' (*mahapurush*) with no illustration. Almost all books available in all schools were only in Kannada though English is also taught from class I and Hindi from class VI (these were composite primary schools – from grade I to VII/VIII). The interactions with teachers made it clear that the use of library books had not been common. Library also includes a number of resource books for teachers and it appeared that those also remain largely unused.

While all schools in both the districts reported receiving books from the department, the district officials mentioned that the school receives an annual library grant and some general instructions to buy books themselves. The department supplies regular publications that include a resource magazine for teachers called *Shikshak Vimarsha*, another monthly called *tingalu teru* that provides various department related news and information to teachers, a children's magazine called *chinnara teru* and a quarterly wall paper for children, which has stories, puzzles, poems, etc. to suit different age-group children in the primary school. It is clear that the Government of Karnataka has taken various steps to provide relevant materials to the school but the use at school level is dependent on the teachers and the leadership.

One school in Gundalpet taluk in Chamrajnagar district was an exception to this general observation elsewhere. The school had a functional library where books were classified based on content (biography, travel, general knowledge, story, etc.) and neatly kept. A good number of books and magazines were also displayed in layers of ropes. Desks and benches were arranged in U shape and children from one grade come there every day for one school-period (about 45-50 minutes) and spend time reading. They also have a system of getting books issued and children manage that. Those who get the books issued have to share with others about the book once they have finished reading it in the morning assembly. The school also gets daily newspaper and that too is kept in the library. Children also present some news from the newspaper in the assembly. Children in the nali-kali classroom could share their favourite stories and in other classes were

forthcoming and participative in sharing the names of the books that they had borrowed from the library and enjoyed reading. Randomly picked children in different could read texts in different languages with varied fluency and comprehension levels.

The teachers in this school raised the issue of not receiving any book in English or Hindi as a constraint for teaching those languages. They also said that it would be helpful to get more books for early age groups as currently the library use is mostly limited to children from grades IV onwards. This means that the children in grades I to III where nali-kali system is being followed have no opportunity to access additional books or texts. Although the nali-kali materials include a number of story cards, opportunity to access additional materials could help widen their reading experiences, especially for those in grade III.

This particular school also follows a number of other good practices. Started in 1918, the school maintains a kitchen garden where teachers and children together grow vegetables and fruits that use for the midday meal. They also maintain other ornamental trees using devices that help them conserve water-use and it is a dry area and water scarcity is common. The room used for cooking midday meal was clean and the cooking was being undertaken in a very hygienic condition. The school has declared Wednesday as the day for colour dress allowing children to wash their uniforms after two days of use and also to break the monotony. This reveals that when a school does well in one area, it is likely to perform well in other respects as well. It is an issue of developing particular kind of school culture and ethos coupled with access to appropriate knowledge and skills that changes the quality of a school.

In addition to the presence of primary schools following different medium of instruction, some schools also face the challenge of multilingual classrooms: children in the same grade have different home languages. While this is a common truth for a city like Bangalore where a recent study on admissions to private schools by using the clause 12(I)C of the RTE Act showed that about 40 percent of applications did not know either Kannada or English, the two languages being used for filling online application forms (CBPS 2016), this is also a challenge for border areas and certain other parts of the state. For instance, Gulbarga, which shares borders with Andhra and Maharashtra, and has Telugu and Marathi speaking children in Kannada and Urdu medium schools, and in Chamrajanagar, a good number of Tamil speaking children join Kannada or Urdu medium schools. Kannada speaking children also join schools following other medium of instruction in areas where there is no school with Kannada medium. Chamrajanagar also has tribal population who speak different languages such as Soliga and Siddhi. Gulbarga too has Lambanis who do not speak Kannada. Teachers in such schools are not trained to handle such classrooms, and also do not have access to any material to help them teach effectively in such situations. The school remains monolingual whatever the medium of instruction it may follow and in that sense the policy does not recognize the existence of multi-lingual classrooms, which is a major reality in many rural and urban

areas, including those that receive migrant labourers. It has implications for any programme that works on reading habits and skills in early years.

All schools that were visited had a television but it was non-functional everywhere. This means none of the EDUSAT programmes for which these TV sets are expected to be used for are really happening. As many studies have reported earlier, the use of seemingly very easily accessible technology is very limited at school levels. The officials at district and taluk levels shared that radio programmes are being used much more effectively than TV but school visits suggested that there is a variation in its use across schools.

A good number of NGOs is present in Chamrajnagar, Gulbarga and other districts working on particular aspects of school or schooling but usually they are small in scale. For example, Mobile India is active in collaborating with the department on addressing the issues faced by physically challenged students. A number of NGOs are also active in tribal areas of Chamrajnagar on education and health related issues. APF is present in Gulbarga where they have developed a Resource Centre for teachers in at district level.

In general, both the districts seemed actively collaborating with NGOs. The teachers as well as taluk and district level officials in both the districts were open to having collaboration with Room to Read and having a programme that would strengthen the reading skills and habits. However, it should build upon what the state or district already has.



## 6.0 RECOMMENDATIONS

The secondary review of literature and policies shows Karnataka to be a progressive state in terms of its approach and support to educational initiatives. Karnataka has pioneered and supported several different learning and literacy programmes, as well as specific programmes to support language acquisition and reading. Both, government and non-government interventions have been founded in Karnataka to support primary school literacy and learning. Many of these programmes on reading / language acquisition have taken a transactive approach, emphasising the need to develop a rich literary environment, along with a natural approach to the development of reading skills through introduction of illustrated and printed texts, activities such as games and role plays and audio programmes. Overall, the review of early childhood learning and primary grade literacy programmes suggests that a positive environment already exists for Room to Read (RtR) to enter Karnataka. Further, observations and insights gained from the literature review, consultations and school visits also show that there is good scope for a new intervention such as that by RtR. Factors that support this evaluation are given below:

**i.Supportive Environment for Primary School Interventions and collaborations with Civil Society by the Government of Karnataka:** A review of literature has shown that there are several innovative programmes for primary school learning that have been started by the Government of Karnataka, as well as those that have been started by external agencies, and have been incubated by the government. Among these has been the *Chili Pilli*, early childhood education programme based on thematic activity cards; *Nali-Kali*, activity based learning programme based on a continuous curriculum spanning across the primary school grades and arranged as a series of 'learning ladders'; and the *Keli Kali*, radio learning programme to access remote areas with additional learning inputs and to make learning more interesting through the use of sound, music and drama.

Examining these various programmes makes it visible that the government of Karnataka has both been sensitive and mindful of the difficulties of bridging the learning and language gap of children from marginalised communities, and recognises the need for special efforts required to develop language and learning. Towards this end, it has been willing and interested in collaborating with experts and civil society organisations both in developing specific learning material and resourcing school centres, as well as in adopting specific programmes developed by experts in the field. Specifically, it has recognised the importance of providing a rich learning environment with books, toys, reading material, and other additional inputs.

The government has had a history of providing opportunities to and incubating innovative programmes for learning and reading undertaken by serious civil society

organisations with good track records, such as Akshara and Prajayatna. Thus, it has collaborated with various organisations in developing special material for the Chili Pili and Nali Kali programmes, and additionally made provisions for Akshara's school library programme, OduveNanu programme and Hippocampus' reading programme to be introduced within schools, and also up-scaled interventions on many counts.

The experiences of organisations such as Akshara, Prajayatna, Agastya Foundation and Hippocampus also demonstrate the government's willingness and interest in partnering with civil society organisations in two capacities: (a) as a resource provider; (b) as a partner in implementing innovative pedagogy and programmes. Partnership with Kalikayatna, which is an activity based learning programme focused on a conceptual learning approach and with remedial programmes such as OduveNanu and Kannada KalikaKoshato improve language learning shows its willingness to collaborate with NGOs for pedagogic reforms as well. Field visits as reported in the last section also reinforced this observation.

### **ii. Presence of Karnataka Learning Partnership and Scope for Collaborations:**

These collaborations have also a formal and institutionalised platform through the Karnataka Learning Partnership (KLP), which is a public platform where all stakeholders involved in public education can participate. The KLP, anchored by Akshara Foundation provides a forum for different NGOs and the government of Karnataka to come together.

### **iii. Continuing Challenge of Improving the Learning Environment and Outcomes :**

The review of literature also suggests that while there has been significant impact in terms of developing resources through the various programmes that have been available in Karnataka, what has been significantly missing is sustained impact on learning. Reading/learning material have been developed through various programmes - e.g., activity cards for Nali Kali, Akshara's pre-school Shishuvachan readers, story cards as part of OduveNanu and for the introduction of the compulsory English learning programme, Somu Series and Chili PiliCheela by Promise Foundation. However, many of these programmes have not been able to demonstrate sustained impact on learning. For example, a study by Gowda et al (2013) has shown that achievements in language and math seen in early grades do not persist as student move into higher grades. A CBPS study on Kalikayatna (2016) also showed that positive effects on language development seen in the early years are not sustained into later school years. Further, students' performances are also seen to be uneven, and concentrated at the extremes (i.e., the programme did not appear to have an impact on all students equally).

An important point to note here is that in many of these cases teachers lack the right kind of adequate training to implement these new pedagogic approaches. Studies on the Nali Kali (Sriptakash, 2010), Kalikayatna (CBPS, 2016) and the English language programme implemented by the state (Chakrakodi, 2011) have all shown that teachers

often dissociate the learning activity from the learning itself. Review of secondary data on educational status in Karnataka has also shown that only about 24% of all teachers have received training, and training in developing children's language and reading abilities (particularly through in-service training) has been poor. Thus too perhaps, despite the high number of schools with reportedly having libraries, learning outcomes in language continue to be poor.

Regular school teachers may also not have time within the regular classroom and syllabus to implement these additional activities, many of which require teachers to be able to give individual attention to students within a context of multi-grade classrooms. What this suggests is for a comprehensive programme to improve early grade literacy and reading, that focuses on teacher training, support and mentorship, which RtR is in a position to offer.

**iv. Lack of linkages between Pre-school and school programmes:** There is a lack of linkages built between pre-school and primary school programmes, in order to ensure the continued impact of programmes. Further, pre-school curriculum is need based rather than comprehensively focused on early childhood development and school readiness. With respect to Nali Kali, despite adopting more progressive techniques to early grade literacy development, such as conceptualisation of primary school learning as a series of ladders to be transacted at the child's own pace, the programme is limited by the little flexibility available in terms of how the material can be utilised. Presence of a rich library along with development of skills to use these libraries creatively to develop and strengthen reading skills and habits would help in strengthening the Nali-Kali approach in primary schools.

**v. A comprehensive school library programme in Karnataka is absent** - A crucial lacuna observed from the review of literature as well as field visits is the absence of a comprehensive school library programme in Karnataka, despite the availability of several other efforts for learning, literacy and language acquisition. Although the government has been supplying books and materials, and also providing funds for books, the use of these books and library for aiding to developing reading skills and habits appear to be minimal. Thus, there is a need for a regular library programme, trained resource personnel with a good understanding of children's developmental needs to guide children's reading and language development capacities, and well-resourced libraries in all schools in Karnataka, with appropriate age/grade related material, in multiple languages.

**vi. Regional Imbalances in distribution of literacy interventions** - A final observation has been that while some programmes such as Nali Kali have been universalised, most other interventions for literacy and language development are not evenly spread. Even government led programmes such as Chili Pili have not been seen to be available in all districts. Large players such as Akshara Foundation are limited in

their geographical coverage. A number of innovative NGO interventions mentioned earlier in the report have very limited presence in terms of area. There are several resource poor districts, which also lack the presence of many of these interventions.

### **6.1 Feasibility of Room to Read to Initiate Interventions in Karnataka**

In Karnataka, 83.4% of the primary schools and 74% of all the schools are managed by the government. Out of all the schools managed by the government, 88% are in the rural areas. A perusal of the educational indicators like enrolment, dropout rates, retention rates at primary level show high regional imbalances and intersectional disparities. A programme specifically targeted to such populations could lead to a possible improvement in such areas. North-east Karnataka especially remains more problematic and therefore more suitable for the RtR intervention. Chamrajnagar in the South is also an educationally and economically backward district where such an intervention could help in enhancing the quality of education.

The early primary classes in the state follow a “no-textbook” approach where Teaching-Learning Materials like flash cards are used in order to inculcate the necessary age appropriate competencies. The system emphasizes on differential learning pace of children and gives them the cushion to learn at their own pace. However, this system has often been criticized for being teacher-centric. With prevalence of teacher absenteeism, large number of students in the classrooms (with Teacher – Pupil Ratio sometimes going up to 1: 60) an approach which is highly teacher centric can be ineffective. This is evident from the fact that even though Karnataka performs better than the national average in achievement surveys, the students lag behind in reading comprehension when compared to their performance in listening comprehension. Since the time Nali-Kali approach was extended to include class III, the teachers have raised the issue of the classroom size being big, and the learning levels being too varied as challenges. Availability of additional age-grade appropriate books could be helpful in encouraging self-learning in such situations.

Room to Read is a collaborative intervention with the State Government, specifically targeting rural areas. Considering this, RtR could act as a complimentary programme in government schools, especially because it inculcates self-learning competencies. This would help restore a balance in an approach which is highly teacher dependent right now. But what needs to be noted here is that since the system focuses on no text book approach for early grades, inculcating reading habits using recreational reading could go a long way in improving learning competencies of children in the state.

Karnataka follows a policy of having different medium of instruction depending on the concentration of population but does not have a policy or strategy for multilingual classrooms. RtR seems to have the potential for developing the library and reading programme in a manner that it fills the gaps and helps the state address this issue effectively. This is mainly because RtR works with the local community to develop and

implement the intervention. RtR programme can consider providing materials and training that goes beyond the single medium of instruction, and also helps in developing reading skills in two additional languages that are taught in primary schools: English and Hindi. English though introduced in class I is not part of the Continuous and Comprehensive Evaluation so that the child does not feel pressured; the officials see this as reason for teachers not giving attention and consequently children not being able to learn it. But the reason could lay elsewhere, and absence of age-appropriate and interesting books as well as teachers' lack of orientation in teaching a foreign language at early age could be one of those. RtR programme could help fill that gap.

The state has a course in class library programme which is a part of the teacher education curriculum. But practices of maintaining classroom libraries that can be taught through a one-time course paper may not help in developing the needed teacher competencies to implement the library programme. A well-functioning effective library, which demands the teacher to be the central facilitator needs sustained and long-term handholding, which could be provided by RtR.

One of the most important features of RtR is the involvement of local communities and teachers in curriculum development. Therefore, the programme not only focuses on building competencies, but taps into the cultural/local knowledge of important stakeholders to develop the content and curriculum. This is perfectly in line with the spirit of the educational policy in the state which holds decentralization dearly. This makes the state conducive for RtR intervention.

## **6.2 The choice of particular RtR Model and areas in Karnataka**

The choice of a particular model can be finally decided in consultation with the Government of Karnataka (GoK). However, the literature review, analysis of status and field visit observations suggest the need for a model that mixes the features of both the models and is tailor made for Karnataka. Given that (i) the GoK supplies some books, wall papers and other resources regularly, (ii) some schools make use and some schools do not, (iii) presence of Nali-Kali approach that combined first three classes that are run using activity cards and other resource materials, and (iv) classes IV and V are traditional classroom, model II seems more appropriate. However, it is also important to train teachers in creative use of library so that it really contributes in enhancing the reading abilities.

Right now Nali-Kali classes are supplied with activity cards, story-cards and other play materials but there is hardly any opportunity to access other books and materials. Access to such materials can be helpful to teachers in organising more independent reading activities for class III students and address the issue of large class size of varying abilities.

Right now children in classes IV and V face sudden transition from a fully activity based classroom to a fully traditional classroom. Creative use of library can facilitate this

transition and keep the activity-based nature of classroom alive by encouraging independent book based collaborative reading-writing-thinking activities.

Also, a focus on English learning, and presence of books in Kannada and other local languages including Hindi and ideas for using those would help in addressing the issue of multiple home languages in the school. This is very important as schools largely have only Kannada books and materials and that too not are always age or context appropriate for young children in primary classes.

We recommend Chamrajnagar, an educationally and economically backward district from South Karnataka and another one from the North-East Karnataka for the intervention. The final selection of areas could also be undertaken in consultation with GoK and other relevant stakeholders such as Hyderabad Karnataka Regional Development Board which is the nodal agency for the North-East Karnataka that enjoys special constitutional status. Once the districts are identified, it would be possible to map the presence of NGOs and examine the feasibility of partnerships in greater detail.

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## Attachment I

### Innovative Interventions in Karnataka

This attachment presents an account of some of the innovative government, non-government and collaborative programmes and approaches adopted to primary school learning, with a particular focus on how this has contributed to the development of literacy, language acquisition and/or reading in primary school children. The account is based on materials accessed through websites, consultations and evaluations wherever available, and is divided into three sections of Government, NGO and publication related interventions.

#### a. Government Programmes

##### 1. ECCE Programme and 'Chilipili'

One of the earliest learning interventions made by the state to foster literacy and early language acquisition has been in the area of the pre-school education (PSE). India has a National Policy on Early Childhood Care and Education (2013), with a focus on care and early learning for every child (Ministry of Women and Child Development, MWCD, 2013). The policy stresses the importance of using home language / mother tongues as the primary means of interaction with the child, while also simultaneously exposing the child to other languages in a meaningful manner (Sarda et al., 2016). This policy builds upon the pre-school education programme that has been instituted in the country through the establishment of anganwadi centres under Integrated Child Development Scheme (ICDS) of the Ministry of Women and Child Development since 1975.

In Karnataka, the Department of Women and Child Development is responsible for implementing this through the Anganwadicentres. Pre-school education is enabled through special pre-school training for the anganwadi worker. A special set of pre-school education booklets or an 'activity bank' called 'Chilipili' has been developed for this purpose by the Government of Karnataka, with assistance from UNICEF (MWCD, 2015; NIEPA-UNESCO, 2003). The booklet consists of a collection of about 100 songs, stories, creative activities and games in the local language with attractive illustrations for the overall development of the child (NIEPA-UNESCO, 2003). The songs, stories and activities span across 42 themes that are taught using a specified weekly time-table. PSE is delivered in line with the syllabus presented in the Chili-Pili booklets, covering 44 weeks in the entire year. Two hours in each day (i.e., for six days of the week) is dedicated to pre-school education. An annual grant of Rs. 1000 is provided per anganwadicentre to procure various pre-school material in order to facilitate the pre-school education programme. The book helps the anganwadi worker undertake pre-school education through an integrated approach, and has been designed to make pre-school education more attractive to children (Department of Women and Child, Karnataka, WCD; MWCD, 2012). It has also been translated into Urdu and distributed to the concerned anganwadis (Ministry of Women and Child, 2015).

Further, the Government of Karnataka has also sought to strengthen the PSE component by entering into partnerships with various non-governmental organisations (NGOs). In Bengaluru Urban and Koppal districts, for example, capacity building programmes for anganwadi workers in PSE, and providing PSE kits was being undertaken with the help of Akshara Foundation. Vedanta Foundation has supported the PSE activity in Bengaluru Rural and Chickballapur districts in the past (CBPS 2015-16).

The approach towards the ECCE programme does provide a signal of the government's interest in and orientation towards early development of children's learning and linguistic abilities in a developmentally appropriate and child friendly manner. In keeping with the National Policy on Early Childhood Care and Education, the government has taken special steps to design an activity book in the local language, by partnering with the Department of State Education Research and Training (DSERT) and National Institute of Public Cooperation and Child Development (NIPCCD) and some other NGOs and resource persons (NIEPA-UNESCO, 2003). The latter point also reiterates the state's willingness to partner with various organisations and agencies in order to improve children's learning.

However, there have been certain issues that have been identified with the PSE programme. First, it has been noted that PSE and the Chilipili material do not address children's early school readiness / learning and reading abilities comprehensively (CBPS, 2015-16). Further, the programme has not been structured in a manner to feed into the Nali Kali programme for primary school children offered by the Government of Karnataka, for better results (CBPS, 2016). It also does not take into account the specific requirements of children with special needs (CBPS, 2016).

## **2. Nali Kali (Early Primary Classes)**

Nali Kali is a progressive approach adopted for primary school learning by the Government of Karnataka. This approach to learning was first developed in 1995 with support from UNICEF in H.D. Kote block of Mysore District. The model was adopted after a group of teachers visited the rural satellite schools run by Rishi Valley Rural Education in Madanapalle, Andhra Pradesh which had multi-grade classrooms. Nali Kali has been extended to the different parts of Karnataka since then and now all government schools in Karnataka have adopted the approach for grades I-III.

**i. Model:** A key component of the model is the reorganisation of the curriculum and concepts into small, manageable units with each unit forming a 'step' of the comprehensive learning ladder. The Nali Kali programme adopts an activity-based strategy to ensure students' retention as well as to bring in dropouts/ out-of-school children (SSA-Karnataka).

Learning materials and activities are designed for each step and children in classrooms learn these at their own pace and progress accordingly. They progress to the next level only once they have completely grasped the concepts and material at that particular level. The model has a provision for children who may have to remain absent for a number of days or weeks due to illness, temporary migration, seasonal agricultural

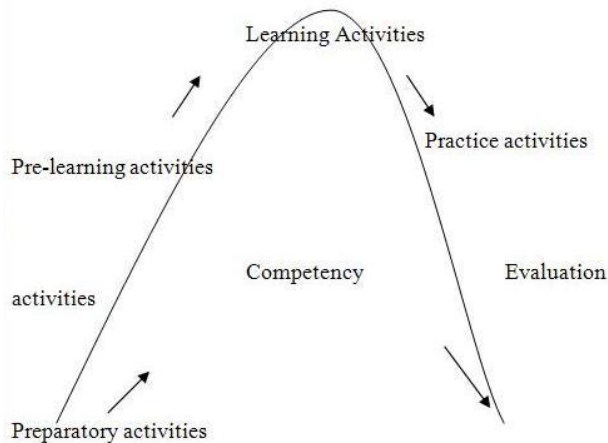
work whereby they can re-enter the ladder from where they last left off without the hassle or stress of catching up on major portions they missed out on.

**ii. Learning Material:** Rather than textbooks, activity cards are used which contain a wide range of activities, conversations, games, role plays, crafts, songs, puzzles, etc. Once a card is completed, it indicates that the child has acquired the skill/competency mentioned on the card. For example, the language curriculum for Class 1 students is split into 10 levels:

1. Ra Ga Sa Da A
2. JaVa Ma Ba Na
3. Pa YaUu Da Ta Ch
4. La ShaEeUuKa
5. AeAie E As Ta La
6. O Ao H Sha :
7. AaeRhuTraChha Au.
8. DhaTha Da Bha
9. ThaGhaFaJhaKha
10. Am Ah

These levels are broken down into very small units and in order to encourage children and give them confidence, they begin with the most frequently used letters of the alphabet. The cards are designed to encourage the student to believe they can make more words with such few letters. By the end of the first level, children are encouraged to read and write 15-18 words and a few 2-3 word phrases rather than full sentences. The number of words the child can make increases substantially as they move on to other levels. At the end of 10 levels, it is expected that children will have at least a repertoire of 540 words and can read and write 4-6 word sentences. At the end of the ten levels students would have also played over 151 language activities by the end of class I. Instruction at the grade 2 level is supported by a set of 50 reading books, numbered 1 to 50, each at a progressively higher level of difficulty (Azim Premji Foundation, 2004).

Each level also has a set of activities that are classified as: (i) Preparatory, (ii) Instructional, (iii) Reinforcement and usage, and (iv) Evaluation. If we take the example of level 1 activities for Class 1, the preparatory activities involve songs, stories, simple conversations, crafts etc. The instructional activities include picture trains, letter train, writing letters, picture words, etc. The reinforcement and usage activities include word games, letter strip, matching pictures to words, finding missing letters from pictures, picture sentences, etc. The evaluation activity called 'Aasha Atta' assesses reading and listening abilities of the children by asking them to associate sounds with the shape of the letter. DSERT has presented the following diagrammatic representation of the Nali-Kali programme:



The preparatory phase consists of activities that the teacher designs keeping in mind the overall view of the competency. The pre-learning activities form the starting point for the actual competencies to be developed, which is then followed by the actual learning activity. This is then reinforced through a period of practice.

These activities are available for each of the language areas of speaking, listening, writing and reading. It is described as a process of climbing up a hill and climbing down. Apart from language skills, the activities also foster understanding of rules of games and independence in learning. The reorganization of curriculum ensures that children learn at their own pace, comfortably, and since it is activity-based the students remain engaged. The evaluation approach is comprehensive and continuous. All classrooms have a learning ladder displayed which children, teachers, inspectors, and other visitors can refer to. Children are also able to indicate their own level in language and mathematics.

The approach has also facilitated a more democratic approach to classroom learning, wherein learning groups are arranged according to the activities taken up by the children as opposed to their socio-economic status (gender, caste) or age. Children in the classrooms are grouped into 5 groups according to their level of competence and pace of learning. The five groups range from a group that needs total assistance from the teacher; to a group that requires partial assistance from the teacher; groups that requires total assistance from peer group; to a group requiring partial assistance from peer group; and finally consists of children working on their own, without any assistance. Children learn at their own pace and moving from one competency to another is not dependent on the whole group's learning.

Efforts are also made to make classrooms more vibrant and attractive by displaying the children's work, charts, etc. (Department of State Education Research and Training, DSERT). The approach supports multi grade and multilevel teaching, and is thought to lessen the burden on the teacher.

Gowda et al (2013), based on a longitudinal study have noted that the program had strong significant effects on language test scores and leadership skills, but insignificant effects on mathematics, communication and social skills. Exploring the heterogeneity in the results, the researchers found that there are positive effects of the program on mathematics and languages, as well as on all non-cognitive skills, but that these are

concentrated in early grades; achievements in early grades do not persist as students move into higher grades. Moreover, there is some evidence to support the hypothesis that benefits are greater for students who start off in the lower quartiles of the distribution for language and mathematics test scores. The results suggest that the program helps students to master competencies expected at lower grades, but has no significant effect in ensuring achievement at standards expected of the current grade in which the student is enrolled.

There are certain issues with the Nali-Kali approach that hinder its goals of achieving improved learning. Teachers themselves report that the activity based model works well for lower grade students but for class 3 and above, it is not as effective as the concepts are harder to teach. There is not much flexibility in teaching, the cards have to be followed, and as a result teachers and students may not get a chance to fully express their creativity and ideas. Teaching quality has gone down in Nali Kali classes as students from many grades are clubbed together. There is also a shortage of staff which makes it difficult to manage the classes. Activity based learning requires individual attention for students, however classes are very crowded with around 50-60 students.

As a result, the goal of improving reading cannot be achieved. Most importantly, while the programme seems to be able to help weak students overcome initial learning disadvantages faced, it has had little impact on higher-performing students and that effects were found to disappear in later years of schooling. As the aim of the programme is to improve overall reading and literacy by encouraging it at an earlier age, if the effects disappear in later years then perhaps there has to be a restructuring/modification of the programme and its implementation. This could be explored for further research.

### **3. Radio Programmes (Keli Kali)**

Broadcast media, in the recent past, has been recognized as an effective tool for early grade teaching as well as for teacher training. More and more states are adopting broadcast media as a strategy to improve language (particularly English) and comprehension. It has been found that the use of radio in Jharkhand, using a story-telling programme, has strengthened aural comprehension amongst students. CLR in Pune uses the radio to promote strategies for English language instruction.

In Karnataka, an Interactive Radio Initiative, called 'Keli Kali' (Listen and Learn), which was a part of the dotEDU T4 project of the Education Development Centre was started on a pilot basis in 2000-2001 to sustain the interest in learning amongst children by focusing on quality improvement in teaching across primary schools. The pilot programme for class III was broadcast from Dharwad and Gulbarga stations of All India Radio. It was then introduced in 11 District Primary Education Programme (DPEP) districts for grade III and IV children. For the third phase in 2002-2003, the programme was introduced for grade III, IV covering nearly 50,000 primary schools and 70,00,000 children (DSERT; Ramachandran and Jandhalaya, 2007). The model differed for different states. In Karnataka it was adopted to supplement the existing teaching system so as to help teachers teach and students to learn the so-called –hard spots, as identified in the existing curriculum. With the existing infrastructure, it was felt that radio could be a cost effective tool to reach a large number of government schools with

low expenditure and comparatively larger reach. The content was designed after a detailed analysis of the requirements of the targeted students and teachers (Bakshi and Jha 2013).

It targets not only students but teachers as well with the objective to improve interaction between teachers and students (Ramachandran and Jandhalaya, 2007). Teachers are trained to conduct the radio classes and are provided with guides and reference material to operate a radio class (Bakshi and Jha 2013). A teachers' handbook has been published by DSERT to help them follow and use the radio lessons effectively in their teaching. The book contains information on the objectives and scope of the lesson, learning points, a timetable with the exact dates of the broadcast, and pre and post broadcast activities which can be used to motivate the children. The aim is to empower and enable teachers to use popular media and innovative teaching methods such as music, dramatization of lessons, use of sound effects, etc. (DSERT). These half hour radio sessions were meant to act as an aid to teachers to facilitate an effective learning process.

The use of innovative teaching methods also led to the popularity of the programme, which can be seen from the 13,000 postcards that were received from parents, students and the public after each session. Periodic audio video conferences were also designed as part of the programme to gauge the reach and impact of the programme (DSERT). The program was extended to cover VI and VII standard children in 2005 – 06 and VIII standard from 2006 – 07. As of 2009-10, 20 programs in English were produced for grade I to III funded by the SarvaShikshaAbhiyan. The Keli Kali programmes have been replaced by ChukkiChinna programmes developed by the Education Development Centre Inc India (EDC) for grades I-V, but are still active for grades VI-VIII.

The prime limitation of the programme, as noted by Ramachandran and Jandhalaya (2007) has been the difficulty in reaching classrooms in remote areas. Other challenges that constrain regular classroom teaching, such as crowded classrooms, lack of space, teacher absenteeism have also been noted as constraining factors for effectively operationalising the programme (Ramachandran and Jandhalaya, 2007). Bakshi and Jha (2013) did not find any significant difference between the schools that were using radio programmes and those who could not receive the broadcast because of the remote location in Karnataka. However, they also pointed out that implementation of the programme was very poor and therefore absence of impact may not be a reflection of the potential of radio programmes. The programme was not designed to take note of irregularity among students and many a times there was mismatch between the broadcast timings and the time table followed by schools.

#### **4.Introduction of English as a Compulsory Language in Government Schools:**

Due to the demand and emphasis laid on English, both by the global economy, as well as by parents, the Government of Karnataka has introduced English as a compulsory language from grade 1 to 4 in government schools since 2007-08 (Chakrakodi, 2011). (Earlier, English language learning was started only in grade 5). Following the government order, an expert committee was constituted to develop the curricula. The committee's approach to cultivating English language emphasised the need to expose children to a linguistically rich environment; to teach language in meaningful chunks, rather than bit by bit and letter by letter; to provide children with adequate time and

opportunity as it was recognised that language production takes time and requires a long period of absorption first; and to use stories (both involving narration and listening) as a natural way to teach and learn a new language (Chakrakodi, 2011).

Specifically, in relation to learning English, the committee identified the following sets of objectives to be achieved: (1) to provide exposure to the English language, so as to develop in the learner the interest required to acquire the target language; (2) to develop the ability to communicate, using the target language in an environment that requires its use; (3) to develop the basic language skills, listening, speaking, reading and writing, over four years; and (4) to facilitate the acquisition of a broad level of vocabulary (say 250–1000 items) over four years, as also a few language structures / functions (Chakrakodi, 2011).

The syllabus consisted of five main components: stories; rhymes and songs; Total Physical Response (TPR) activities; dialogues; and language games. The stories were drawn from several sources such as ballads, epics, panchatantra, fables, allegories, adventures and science fiction. Stories were included as easy entry points to introduce other activities related to developing literacy, as children are seen to be naturally interested in stories and can engage with them for a fairly long length of time. In addition, stories were also considered valuable as they aid language comprehension. Chakrakodi (2011) notes that these stories were mostly included in original form, and were not abridged or simplified. Further, he notes that teachers were expected to “tell the story as naturally as possible, without being too self-conscious or formal or different” (Karnataka Textbook Society 2007:11; as cited in Chakrakodi, 2011). Further, the Teacher’s Resource Book also identified techniques by which story narration could be made more interesting, such as through the use of puppetry, string pictures, miming, drawing diagrams on the blackboard, or involving students as characters in the story (Chakrakodi, 2011).

A Student Activity Book and a Teacher’s Resource Book were also prepared for this, for each grade. Classroom time of 40 minutes (one period) was to be divided across these activities as follows: first 10-15 minutes for story narration, followed by 3-5 minutes for rhymes and songs, and last 10-15 minutes for TPR activities. Dialogue practice and language games were conceived as activities to provide additional exposure to language, and were left as optional exercises, but had to be conducted at least once in 15 days (Chakrakodi, 2011).

The main focus in Grades 1 and 2 was on the development of listening and speaking skills. Thus, an innovative practice adopted in the curriculum was that of narration, with 50 stories given for Grades 1 and 2, 9 for grade 3 and 5 for grade 4. In Grades III and IV, an attempt to develop reading and writing skills along with oral proficiency was emphasised. Simple texts for reading and simple activities to develop writing skills were given for the latter two grades (Chakrakodi, 2011).

In summary, the introduction of English language in grades 1-4 is suggestive of the state's government's' attentiveness and responsive attitude towards introducing new curricular and pedagogic practices, based on external demands and cultural transformations. The above analysis of the English programme, mainly drawn from Chakrakodi seems to suggest a transactive approach to learning of English language



adopted by the state government. Rather than placing emphasis on encoding and decoding English language, Chakrakodi's analysis of English textbooks, curriculum and syllabus seems to suggest an attempt to naturally draw the child's interest and curiosity in the language, and support this through an exposure to new vocabulary, as well as through usage and practice in process of language games, role plays, etc. used in the classroom. Further, following developmental principles of learning, oral literacy seems to be fostered before writing practice is developed.

However, the approach has been less successful in practice or implementation. Chakrakodi (2011) has stated that the story segment in the syllabus was abandoned in many schools as the teachers found the story component to be difficult, and reported that their ability to read and speak in English did not match the level of the stories. In interviews teachers expressed the need for the stories to be simplified, and for difficult words to be deleted. In some schools teachers abandoned the Teachers' Resource Book, and went back to stories they were more familiar with, such as 'The thirsty crow', 'The greedy dog', etc. Many demanded more support and training to undertake this new approach to learning English. Seventy percent of them also reported that they had to use the mother tongue in order to help children comprehend the stories.

Even after a revision in 2009, while the Teachers' Resource Book was found to be easier, classroom practices themselves did not change much. Teachers continued to use the 'the old way', which continued to emphasise letters of alphabet, and memorisation of spellings. As Chakrakodi (2011) puts it, "contrary to the principles of the curriculum set for grade 1, teaching the alphabet – reading and writing the letters of alphabet – was a common practice in many schools", instead of achieving the objective of developing basic language skills orally before introducing literacy. Teachers felt that it was not possible to simply keep listening and speaking for a whole year, and asked that listening, speaking, reading and writing not be compartmentalised. Further, for better uptake, they also felt that it was important that teachers be involved in the process of curriculum development and also require an attitude change and belief that they could handle the new syllabus (Chakrakodi, 2011). These issues point to the need for interventions and programmes to involve teachers more systematically and fundamentally in the process of development and implementation of programmes, rather than merely using them as final field level implementers. It also suggests a need to strengthen teacher capacities more fundamentally as well. In other words, it points towards the need for greater teacher autonomy to decide as to the needs of children in particular schools; the need to build frame-capacities, i.e., that help them decide what is best suited and how to go about it, would help them more than pre-defining every detail and expect them to act accordingly.

## **b. Non-Governmental Interventions**

### **1. Akshara Foundation**

Akshara is an NGO working to improve pre-school and primary education in Karnataka, since 2000. Two motivating concerns that have guided their work are (i) the fragmented and inconsistent operation of pre-school education in Karnataka, and (ii) the lack of foundational skills in math and language in government primary schools. Akshara partners with the government, corporate sector and other voluntary organisations, in order to improve the status of education in Karnataka. In the 14 years of its operation,

Akshara has worked to improve the educational status of over 9 lakh children. Since its inception, Akshara has rolled out several programmes for reading, language development, math and pre-school education in Karnataka. In most cases, these programmes are limited to one or two districts of the state. These are explained in more detail below.

**i. Pre-school Education:**One of the earliest programmes started by Akshara Foundation in Karnataka, in 2003 was the balwadis programme. Akshara's interventions in pre-school education began with their initial experiments in setting up and running independent pre-school centres /balwadis, based on a model taken from Pratham ([www.pratham.org](http://www.pratham.org)) (Akshara Foundation, 2008).The balwadis were conceived with the objective of compensating for the lack of intensive parental engagement, safe tactile material and written text, exposure to expansive vocabulary and general all-round stimulation to properly develop their cognitive and other skills that would be available for children from poor/rural communities. A comprehensive preschool package was developed with a focus on 4-5 year old children that aimed at bringing changes to teaching-learning material (TLMs), the environment, training of functionaries and preparation of community for management of the balwadis. A volunteer was appointed to each balwadi, who would go to the centre to engage with children in a meaningful manner for 90 minutes every day.

The preschool curriculum aims at providing “experiences and activities that ... meet children’s needs and stimulate learning in all developmental areas: creative, physical, social, emotional and intellectual” (Akshara Foundation, 2008). The activity and play-based Montessori approach to learning is adopted, which is complemented by a thematic approach. The thematic approach seeks to gradually expand the child's knowledge base by extending the knowledge of what the child sees around him/her in the environment, but may not have comprehended fully. A week is devoted to each selected theme, such as parts of the body, facts about the child’s home or environment, neighbourhood or town, vegetables, vehicles, money, coins, festivals, flowers and fruits, music and musical instruments, animals and insects, trees and plants, rain and water, etc. The activities through which these themes are explored span across the five developmental domains. Activities such as drawing and colouring, sorting, arranging and stacking, introduction to books and reading and simple worksheets are used to develop their powers of observation and encourage the use of words to narrate and communicate. Language Development is fostered through reading, storytelling, action songs, picture talk and conversation. Children identify common objects they see around them or on charts and learn to express more difficult concepts like feelings and ideas through words (Akshara Foundation, 2008).

TLMs used for this purpose are low-cost, developmentally appropriate and safe for children. Similarly, volunteers at the balwadis are also trained to prepare low-cost TLMs with available material. In addition Akshara also supplies blackboards, charts, slates, chalk, crayons, paint boxes, activity books and workbooks for writing practice, and the Shishuvachan series of readers (a set of phonic readers that has been developed by Akshara).

The Shishuvachan series was developed in order to provide a rich reading environment for children to encourage reading. The readers contain simple stories with large fonts

and illustrations in Kannada and Urdu that help develop children's ability to understand the spoken word. Each page has two or three sentences that rhyme together and form a meaningful paragraph. The teacher / volunteer first tells the story and then encourages children to re-tell the story and start reading (Akshara Foundation, 2008).

Further, in villages in eight districts in North Karnataka, Akshara started balwadis or 'rural child centres', with a slight difference. The key difference was the establishment of libraries as part of all rural child centres to give school aged children opportunities for reading. Additionally, volunteers attached to these centres were also encouraged to take private tuitions after preschool hours. Thus, these centres were called as 'child centres' (as opposed to balwadis), as it offered a wide range of educational services (Akshara Foundation, 2008).

Akshara has further extended its work and experience with running balwadisto supporting and strengthening the Integrated Child Development Scheme (ICDS) in Karnataka. Undertaking a programme called 'Prepare, Not Repair', Akshara has worked closely with the state government since 2009 in improving the status of anganwadicentres in Bangalore. A total of 1931 anganwadicentres have been covered so far, with 333 centres additionally receiving intensive intervention. Again, as was the case with the balwadis, the 'Prepare Not Repair' programme with ICDS also focused on bringing about comprehensive changes to all aspects of pre-school education. in terms of pedagogic processes, for example, a constructivist approach was adopted. This was supported through the development of colourful and creative teaching-learning material, which included manipulative toys, recognising the importance of creating a joyful learning environment (CECED, 2013). Further, this has been coupled with additional training to anganwadi workers with respect to factors such as class arrangement and organisation, seating arrangements, planning of daily schedule, inclusion of activities for fine motor development, etc. An added feature of their intervention has also been the design of "activity corners", which are thematic corners linked to different developmental activities. The materials and structure of the programme also facilitated considerable free play involving fine motor activity and creativity.

A further significant achievement of the programme was the development of a 70-point scale for assessing the quality of anganwadis and 56 point formative assessment protocol to track the progress of children, which has been adopted by the ICDS system (CECED, 2013).

However, limitations have been identified with Akshara's pre-school programme. An evaluation conducted by the Centre for Early Childhood Education and Development (CECED), Ambedkar University (2013), showed that specific school readiness skills, related to pre-reading, pre-writing, and pre-number concepts and skills were not being facilitated as envisaged through the TLMs that had been designed by Akshara. Akshara's TLMs rather were found to have been designed more as a way of filling the gap in the ICDS pre-school kit, based on their curriculum, consisting of number and alphabet chart in English, conversation charts, plastic fruits, etc. Further, the activity corners that mapped on to developmental domains did not link up with children's activities such as blocks, storybook, beads, dolls or make-believe play, etc. Thus, it was pointed out that there was little evidence of other forms of play with the exception of play using

blocks/Lego, which could have influenced the development of other concepts and skills (CECED, 2013). Further, children's assessment data has also shown the need to strengthen the ECE curriculum through specific inputs that can improve children's acquisition of concepts related to numbers, shapes, size, phonics, etc which children find difficult.

**ii. Programmes for Primary School:** In addition to the pre-school programmes, Akshara also has several programmes for primary school children to support learning, and particularly language and reading acquisition. Many of these programmes have been the outcome of the public-private partnership between the Government of Karnataka and Akshara Foundation, and also through support of other private organisations and NGOs. The partnership, known as the Karnataka Learning Programme (KLP) has included remedial and learning support programmes in language and math. These are described below.

*a. Accelerate Reading Programme / OduveNanu:* The 'OduveNanu' ('I shall read) programme by Akshara is a remedial reading programme for grades 2 -7, which was developed and implemented by Akshara in 2006 in all government primary schools in the Bangalore Urban District. The Karnataka government has adopted the programme and rolled it out in all government primary schools across the state in 2008 (Akshara Foundation, 2015). It is a precursor to a library programme that was developed later (discussed below).

The programme aimed at teaching reading skills in Kannada and Urdu languages (the media of instruction in government primary schools in Karnataka). The Accelerated Reading Programme aims to reverse the conventional practice to teaching reading, which moves from alphabet, word, to sentence and paragraph. It aims to stimulate reading through imitation of reading, as seen naturally with children, at homes. The OduveNanu programme primarily consists of a set of story cards based on moral stories. Each card contains four pictures with text, with the aim of enabling students to become fluent with picture comprehension and reading (The New Indian Express, 2011). Instead of learning sequentially, children are engaged in a variety of activities, which are interconnected and allow for a child to learn to 'read' all on his own.

The learning materials are designed so that students can work at their own pace, and practice reading in and out of school. Children are encouraged to 'stumble' read and guess words. Teachers act as facilitators and simply ask questions to allow children to self-correct, in a non-punitive environment. The method is simple, and uses non-expensive learning material. An integrated approach is used wherein listening, reading, writing and speaking skills are combined, and facilitated through a series of colorfully illustrated story cards, that become progressively more complex. One card is used for each day, and skills are built progressively over 45 days.

Further, this approach is combined with the use of a 'kaagunitha' chart, which is a chart consisting of Kannada vowels and consonants. The first column consists of consonants and each row starting with the consonant shows how vowel signs are added to the consonant to make letters for each sound such as ka, kaa, ki, kee, ku, koo, kay, kai, ko, kow, etc. The teacher asks the children to listen carefully as she recites the sequence of sounds derived from consonants and then asks children to try the corresponding

sequence with other consonants. The teacher selects some simple words from the story. A word is said and the children are asked to identify the alphabets in the Kagunitha chart. Children are also given lots of sentence cards (about 20-30 sentence cards/20 children class) or papers with 3 line simple sentences without “gunithakshara” and “otthakshara”, to practice reading.

Language skills are further reinforced using role-plays, wherein children are asked to act out the story choosing characters of their liking. Finally, special input for 'zero level' children (i.e., those who can only identify only about 25% of the alphabets) is given. These children are provided readers that repeat specific letters to develop recognition of the letters.

Results reported by the KLP report (Akshara Foundation, 2006) show that 64% of the children from Bangalore Urban District, who were enrolled in the programmes were converted from 'non-readers' (i.e., those who were at Zero, Letter or Word level to readers. Only 2% of children have been reported to have remained at the Zero level, and over 95% of children showed movement up the reading scale. Close to 4355 teachers from the government primary school system in Bangalore have been trained in implementing the accelerated reading programme.

*b. School Library Programme:* In 2007, Akshara started the School Library Programme, with the aim of making every child in every government school a member of the school library. The school library model adopted by Akshara has been described as the 'hub and spoke' model by Borkum, He and Linden (2013), who conducted an evaluation study of the library programme. The 'hub' school consists of a designated library room which is well-stocked with age and language appropriate material supporting the school curriculum, and a designated librarian who has undergone training by Akshara. The material is divided along six difficulty levels, and the librarian is in charge of periodically evaluating children in order to assess their level of reading and direct them to the level-specific books, which children then choose from. A library period is also instituted within which librarians conduct activities such as storytelling, role-playing (where children act out a story from a book) and other educational games (such as identifying the sounds made by animals in a story book), and also provide opportunities for children to borrow books.

The spoke schools on the other hand are visited regularly by a mobile librarian who transports books from the hub library. Several hours are spent by the mobile librarian at the spoke schools, similarly assessing students abilities, issuing books at the specific level that students are at, and serving students by class (Borkum et al., 2013).

Akshara has arranged all government primary schools in Bangalore into a hub and spoke network, based on size, geographic location and the availability of a room to house a library. Each hub may have up to seven spoke schools attached to it (Borkum et al., 2013).

The evaluation study by Borkum et al. (2013) indicated that there was no effect of the library programme on the language skills or performance in other subjects of students. The authors thus hypothesize that in order to improve early grade reading, provision of

reading material alone may not be sufficient, as shown by other studies as well, and may need to be coupled with changes in pedagogical strategies itself.

Akshara further expanded the library programme in 2014, now focusing on establishing a classroom library (TCL). The TCL kit consists of a foldable bookcase which can hold up to 120 books, that are developmentally appropriate, multilingual (with books in English as well), and consist of different difficulty levels. These are largely from known publishers such as NBT, CBT, Pratham and Tulika. Teachers are trained in the usage of the kit, and children's progress is mapped onto histograms provided with the kit. The TCL has been set up in 2700 classrooms in Karnataka, and currently Akshara is also implementing these libraries through other NGOs, and through Rotary India Literacy Mission, across 1500 classrooms across India. The TCL programme is largely limited to two taluks – Hoskote in Bangalore Rural district and Koshtagi in Koppal district. Akshara uses these two blocks for piloting most of their new programmes. The consultation with the team suggested that as of now, the programme has not taken off well as teachers are not taking much interest.

## **2. Movement for Alternatives and Youth Awareness (MAYA)**

MAYA is a Karnataka based NGO that was started in 1989, to eradicate child labour and bring about reforms in elementary education. It currently focuses on livelihood and education. MAYA is involved in the field of ECCE through the facilitation of community owned preschools in seven districts in Karnataka. These preschools are managed by the local community, and incorporate local knowledge and traditions for the teaching of children under six years.

## **3. Prajayatna (The 'Kalikayatna' Programme):**

Prajayatna is a civil society organisation that was formed by a group of concerned citizens with support from MAYA to bring about elementary educational reforms in Karnataka. Prajayatna functions with the understanding that active participation of children, parents, elected officials, teachers, civil society groups, members of community-level collectives, and others can lead to critical changes in control and management of education at the local level, and lead to positive reforms. Advocacy is a key activity undertaken by Prajayatna, which is most visible in the form of their Citizen's Report - a periodic exercise that provides both statistical and qualitative information on education, so that people can develop an understanding of how the educational system works and determine their educational priorities.

A primary school learning programme, known as 'Kalikayatna' has also been developed by Prajayatna, and is run in collaboration with SarvaShikshaAbhiyan in 4 states. Its aim is to address issues of low learning levels, low levels of enrolment and high levels of absenteeism in the education system. The programme which began in 2005, in Hunsur Taluk, Mysore, currently operates in seven clusters in five districts which are Ramnagara, Chitradurga, Bellary, Bikapur and Yadgir. (Jha et al., 2016).

Kalikayatna focuses on integrated learning and is a capability-based approach. It chooses to look at 'how' children learn as opposed to 'what' they are learning. The programme does not adopt prescribed textbooks for classroom teaching; and instead gives teachers the freedom to refer to books, textbooks, and any other material available to them that can support learning, and help them inculcate a habit of reading in

children. The focus here is on learning concepts at an individual place. The syllabus itself is presented in the form of themes/concepts. Thus, rather than individual subjects, they have concepts based on their surroundings/environment and on the basis of these concepts, children learn to make sense of the world. Learning is practical as it takes place through discussions, sharing of knowledge and experiences, etc. (Jha et al., 2016).

The Kalikayatna approach divides the classroom time into three broad types of activities focused on the particular concept at hand for discussion, rather than dividing time as within conventional classrooms into different subjects. In the morning, children are engaged in a facilitator led whole-group activity, which provides a broad, conceptual introduction to a topic. Concepts are introduced in a discussion format and linked to other concepts learnt. After the whole group discussion, the teacher breaks up the class into smaller groups, to allow learners to discuss, reflect, re-evaluate and engage with the concept in greater depth, as they listen, work and share their ideas with peers. Towards the end of the day, students are engaged in individual practice, through tasks given to be completed individually. The teacher goes around the classroom to assist students. Students in this session may be given different tasks and the level of difficulty may depend on the child's perceived learning ability by the teacher. Thus, based on this approach, it can be said that there is no subject specific focus within the classroom time (Jha et al., 2016).

In terms of material teachers are asked not to limit themselves to teaching from textbooks. While no special material has been developed to facilitate teaching, teachers are encouraged to identify learning material best suited to the topic. Teachers pay personalized attention to students depending on situations. They note down their observations in an observation book. Children maintain a portfolio based on the evaluation done by the teachers. The teachers themselves go through training once a month at the cluster headquarters where they collectively discuss the learning pace of each child (Diwan, 2009; Jha et al., 2016).

A study conducted on Kalikayatnahas shown that Class 3 students have improved in reading and comprehension abilities. The reading abilities of class 3 students have been found to be higher than those who are benefitting from the Nali Kali programme. Students attempt passages even if they do not know about it; the programme gives them the confidence to do so (Jha et al., 2016).

The approach breaks away from conventional rote learning and gives children the chance to learn using concepts that they can apply to their surroundings. An integrated approach to learning is taken, wherein language learning is seen as part of all other forms of learning. However, the main limitation that has been identified by teachers of the programme has been the difficulty in adopting this approach for higher classes, such as class 5. Further, performance of students has seen to be concentrated at the extremes, which may suggest that the approach works best for student who may already be at higher levels. Further, initial gains in language seen in class 3, in a comparison of students from Nali Kali schools also seems to have faded in the higher classes (Jha et al, 2016).

#### 4. The Promise Foundation

The Promise Foundation was set up in 1987 to provide services in mental health, education and potential realization. It has several programmes, of which programmes on early childhood intervention for cognitive development form a key part (Akshara Foundation, 2008).

The Promise Foundation works in four states in South India with more than 300 schools and NGO partners. Further, the Promise Foundation also undertakes extensive research on development of reading, and has a three-level intervention for children to develop reading abilities. At the first level, pre-reading or early reading programmes focus on familiarising students with texts, introducing them to concepts such as the right side up for a book, reading direction and pagination practices, the linkages between sound and letter, etc. Specially designed "giant books" (e.g., 'Listen! Listen; 'Somu's Journey') are used for this purpose. The second level reading programme addresses skills for decoding and comprehension. The Somu series developed by the Promise Foundation consists of a teachers' manual to develop reading abilities in children. It consists of four parts which foster oracy, auditory listening skills, visual processing skills and thinking and meaning making skills ([http://www.thepromisefoundation.org/rpd\\_rk.htm](http://www.thepromisefoundation.org/rpd_rk.htm)).

Another specific programme that was implemented by the Promise Foundation, in collaboration with the National Institute of Advanced Studies, through the District Quality Education Programme in Chamrajnagar, was a supplementary Kannada language learning programme, known as Kannada KalikaKosha. The approach emphasised the importance of all activities such as reading, writing, listening and speaking for language acquisition, and provided opportunities for children to explore vocabulary through various subjects such as history, geography, math and science. The *Kannada KalikaKosha* Model has three components: a Bag of language cards called *Chili PiliCheela*, a Reading Wall called *NannaOduGode* and individual child portfolios called *NannacCheela*. *Chili PiliCheela* consists of 100 graded activity cards, which have text on one side and activities on the other. The texts range from poems, essays, short stories and dialogues to comics, lists and announcements. The activities range from art and craft activities to speaking and listening activities, apart from many writing and comprehension activities. The cards were developed through extensive workshops with writers and illustrators. The *Cheela* is designed for children with varying reading abilities to be able to choose material that they can enjoy. ([http://www.thepromisefoundation.org/rpd\\_rk.htm](http://www.thepromisefoundation.org/rpd_rk.htm))

As part of the second component, *NannaOduGode*, one wall in the classroom was dedicated to all the language activities. Specific cards from the *Chili PiliCheela* as well as children's written material were displayed here. Other material, such as new books acquired by the school, and stories of local events, history and folk tales written or collected by teachers was also displayed here. The wall functions as a simple class library that encourages children to read write and publish.

With respect to PSE, the Promise Foundation also has a two-level Stimulation Intervention Programme (SIP) for cognitive development of children in the three to six year age group. The SIP programme is delivered through two models - through a demonstration centre in a slum in Bangalore; and through SIP training programmes for anganwadi workers and other early childhood care professionals. The organisation



claims to achieve a balance between the two extreme approaches to early childhood education in India, with their SIP programmes: that is between an approach that seeks to extend the primary school curriculum downwards into pre-school through emphasis on activities such as reading and writing that 3-4 year olds are not developmentally prepared for; and on the other hand approaches that focus simply on song and craft without attention to literacy acquisition. The table below presents the various training activities undertaken by the Promise Foundation.

Training Focus	Target Group	Duration	Course Details
Early childhood education: Basic Training	Helpers in anganwadis and untrained pre-school teachers	2 days	This course gives the trainee a brief introduction to four areas of development – physical, cognitive, social-emotional and language. The trainee gains skills for conducting 10 to 15 activities in each of the developmental areas. On completion of this course the trainee should be able to run a 2 hour ECCE programme, with a clearly circumscribed range of age-appropriate stimulation activities.
Early childhood education: Level – 1 Training	Teachers who have completed our Basic Training or other courses in early childhood education	10 days	Trainees are introduced to basic concepts in child development with specific focus on the 3 to 6 year age group. The curriculum covers basics in time tabling, class management, health and nutrition and working to an annual calendar of stimulation activities. On completion of this course, a candidate should be able to conduct a 4 to 5 hour ECCE programme, meeting minimum levels of competence of a variety and range of stimulation themes.
Early childhood education: Level – 2 Training	Teachers who have completed up to our Level – 1 Training or other courses in early childhood education.  Educational status expected: High School / Pre-University completed	10 days	The course provides detailed inputs in child development focusing on the 3 to 6 year age group.  Skills for lesson planning, class management, ability grouping, assessment methods, record keeping, health, nutrition and communication skills.  Focus is brought to bear on skills for the dissemination of ECCE concepts to the community.  The successful candidate should be able to run a full day ECCE programme that is responsive to the individual care and stimulation needs of children
Assisted Learning and Remedial Teaching	Teachers working at the primary and middle school level	2 to 10 days	This is a training programme that focuses particularly on reading failure.  Trainees are equipped with skills for identifying children who manifest difficulties with reading. Specific skills to facilitate decoding and reading comprehension are addressed.
The Reading Facilitator's	Teachers, tutors and	6 to 12 days	<a href="#">The Reading Facilitator's course</a> draws from The Promise Foundation's decade long reading research

Course	volunteers working at the primary and middle school level		with pre-school and primary school children, as well as with children who underachieve or have dyslexia.
<i>Kannada KalikaKosha</i>	Teachers, tutors and volunteers working at the primary and middle school level, with in or out-of-school children.	6 to 12 days	<a href="#"><i>KalikaKosha</i></a> is a Kannada language learning methodology for children between the age of 5 and 12 years.

Source: The Promise Foundation

In summary, The Promise Foundation's approach appears to be more structured and designed along the lines of cognitive principles of child development. Language learning for the most part is considered to be a formal activity requiring formal skills of encoding and decoding, except within their experimental projects, such as the demonstration school in a Bangalore slum, or the Kannada KalikaKosha project in Chamrajnagar, wherein natural and creative activities to develop interest and familiarity with language and text seems to have been undertaken. Thus, interventions are customized to target population and the level of family and community support that may be available to acquire principles of language learning formally.

## 5. HIPPOCAMPUS

Hippocampus Learning Centres Pvt. Ltd is an education services company that delivers affordable pre-school and remedial programs for low-income children living in rural communities in India. Hippocampus Learning Centre's in rural Karnataka are being designed to cater to the after-school needs of young children. Libraries are run in government schools or community centres, but many of these libraries may be extremely minimal. The team selects a candidate or a dedicated individual from a village and trains her/him to set up and run the centre. They are mentored for over three years.

In 2004, the Hippocampus Reading Foundation (HRF) was formed with the aim of inspiring underprivileged children in urban areas to read for fun. One of the components of the Hippocampus Reading Foundation is an activity-based library program called Grow By Reading (GBR) which aims to improve reading abilities of children. The programme seeks to operate with low capital costs.

As part of the programme, children's reading levels are assessed, children are led to books suitable for their current level and supported in improving their reading comprehension and fluency at a comfortable pace. Reading cards with pictures and simple text to help assess a student's skills are made available. At the libraries, books are colour-coded based on the level of difficulty which help the librarian match the child with the right books in the spectrum. The number of words and the complexity of

language increases with each level. The programme is available in English, Hindi, Kannada and Tamil.

Profits from the Hippocampus learning centres fund the foundation along with individual and corporate donor contributions. Community-based partner organisations such as Rotary International may also partially fund these programmes. There are challenges faced by HRF, such as inadequate funds for salaries, difficulty in getting good trainers due to lack of resources to pay high, difficulties in establishing more than a single bookshelves in a corner of a classroom etc. They also have issues with training trainers who themselves are not fluent in English and have to teach the language to the students. As of 2010, SSA was collaborating with Hippocampus under the United Nation's Education for All initiative, in taking the library programmes to schools.

## **6. AGASTYA FOUNDATION**

Agastya Foundation's focus is on government school to ensure that education is more interesting for disadvantaged groups. Their main aim to steer children away from rote learning to help them express themselves creatively. They use science education as a tool to encourage learning amongst children through science fairs, centres, mobile labs, libraries and activities outside of the classroom.

The foundation has tapped into a resource pool of well-known scientists who planned the intervention and also encouraged retired science teachers and others interested in science to help with the programme at the local level. The foundation's work in Andhra Pradesh and Karnataka shed light on how science education can be used as a tool to energize schools from the outside. (Sharma, 2006).

Science education in government schools has been of very low standards and the teachers who teach the subjects themselves do not have a clear understanding of the concepts. Thus, such programmes encourage students and teachers to learn science in innovative ways. However, unless there is an understanding of the basic concepts of science within the classrooms, it becomes difficult to understand the more complex subject matter that is covered in the mobile labs, despite high quality of teaching there.

## **7. Akshayam:**

Akshayam is an educational consultancy has been working in the field of pre-school education for over 30 years. In 1985, they developed a Cognitively Oriented Programme for Preschool Children (COPPC) to provide cognitive stimulation to children. It also draws from the experiences of children in rural areas and children with special needs. It has been used in anganwadis under the Integrated Child Development Services (ICDS). The programme based on the play house and nursery school experience was initially given to 140 child care workers such as nursery teachers, anganwadi workers, BalSevikas, trainers, etc. The benefits of this training have since extended to 60,000 anganwadi and balwadi workers and to over a lakh preschool children.

## **8. Praspara Trust:**

The trust works extensively in the field of Early Childhood Education to prepare children for primary school and to prevent them from falling prey to child labour. They run Balwadis for children between three to six years. They try to empower the

communities to run the balwadis. They focus on preschool education and classes are conducted in community halls, community spaces or in teachers' homes.

### **9. Kalisu Foundation**

It is a Mysore based organisation that works with schools on improving their quality of education. Improving reading habits and skills is an important focus of the programme. They provide books, materials and training to teachers in the schools that they have adopted.

### **10. Azim Premji Foundation (APF)**

Azim Premji Foundation is a not-for profit organisation founded in 2001 that works towards improving the quality and equity of education in India along with related development areas such as child health, nutrition, governance and ecology. Using an integrated approach, it works towards making large scale and institutionalised educational change.

The Foundation works in collaboration with State Governments and engages with several stakeholders such as teachers, headmasters, teacher educators, block and cluster level education officials and policy makers at the state and national level. It sets up State and District Institutes in different states that work at the grass root level with the government education system. They work on capacity building of education functionaries, teachers, headmasters, etc. and on curriculum, assessment, education leadership and management, policy issues and advocacy at the state level. They also establish schools at several District Institutes for the purpose of demonstration. These schools provide free, quality education to the community, functioning similar to rural government schools in terms of costs and constraints. So far, the foundation has institutes in Karnataka, Rajasthan, Uttarakhand, Bihar, Chhattisgarh, Madhya Pradesh and Puducherry. The foundation conducts large scale educational research in many of the states to create new knowledge and support evidence-based policy making. The Foundation that currently works in 8 states with over 3,50,000 schools aims to expand to 50 District Institutes, 30 schools and over 4000 employees over the next few years. (Azim Premji Foundation).

In Karnataka region, the State institute is located in Bangalore and the District institutes are located in Yadgir and Mandya. The Key programmes that Azim Premji Foundation runs in Karnataka are as follows:

- **Education Leadership and Development Program (ELDP):** The program aims to enhance leadership and management abilities of educational functionaries that work closely with schools through a developmental approach. It does so by helping to build individual capacities of the functionaries to enable them to provide effective administrative and academic support to achieve the larger goal of universalization of quality education.
- **Teacher Education:** The Teacher Education program aims to evolve a comprehensive policy on Teacher Professional Development in response to the challenges arising from the provisions of the Right of Children to Free and Compulsory Education Act, 2009. (RTE ACT, 2009). The scheme proposed in the 12<sup>th</sup> five-year plan gives the state a

unique opportunity in terms of its ideas, focus and availability of resources. The resources make it possible to significantly re-think teacher professional development.

- **Namma Shale Plus:** The Namma Shale Plus is a unique community owned integrated education model that seeks to improve classroom performance of teachers, strengthen leadership qualities of Headmasters, encourage community participation in school management and development and bring about institutionalization of community based school management systems under the Panchayati Raj institutions. The pilot program started in 4 clusters that represented 4 different geographical region within Karnataka. Based on the pilot program, the program has been redesigned to focus on community participation and teacher-learning aspects. It is currently being implemented in 15 backward clusters of Gulbarga, Raichur and Yadgir covering 181 schools.
- **Child Friendly School initiative (CFSI):** The program seeks to facilitate the process of providing quality education on a sustained basis in a child friendly manner in partnership with all stakeholders by building capacity and accountability. The initiative covers all the government primary schools of Shorapur block in Yadgir district of North East Karnataka.
- **Institutional Capacity Development Project (ICD), Mandya:** The overarching goal is to demonstrate an approach to develop capacity of Government educational institutions at the district, block and school level to enhance the quality of education. The project has been implemented in Mandya district since April 2010 and it covers 27 institutions: 17 schools, 4 clusters, 2 block resource centers, 2 offices of the BEOs (Block Education Office) , 1 District Institute of Education and Training (DIET) and 1 office of the Deputy Director of Public Instruction (DDPI).(Azim Premji Foundation)

## c. Publications / Resources

### 1. Karnataka Textbook Society

The Karnataka Textbook Society was founded in 2006 as an umbrella body for all government approved school textbooks, preparation, printing and distribution activities. This was planned in accordance with recommendations made by Dr. K.P. Surendranath Committee to have an autonomous body. The Government of Karnataka developed a specific curricular policy based on guidelines of the National Curriculum Framework (NCF) 2005 and Karnataka Curriculum Framework (KCF) 2007.

The textbooks in their new format have features such as enrichment of curriculum beyond textbooks, integrated knowledge, knowledge developed by children, softening of subject boundaries and connecting theory to practice/knowledge to life activities. The textbooks are prepared in twelve languages and they undergo rigorous reviewing by DIET, CTE, DSERT committee and finally by the State Editorial Board appointed by the government.

The society is responsible for the printing and distribution of textbooks for nearly 100 lakh children of classes 1-10 based on state syllabi in Government, Aided and Unaided schools of Karnataka.

### 2. Pratham Books

Pratham Books was established in 2004 with the aim of improving reading abilities amongst children across the country and a mission of putting a book in every child's hand. They are a not-for-profit children book publishers. They launched the Read India Movement to bridge the gap between children and access to quality affordable books in all languages. Their belief that the key to literacy is reading development and thus they wish to expose children to different kinds of learning material to instill in them strong language and communication skills, listening and reading comprehension and substantial vocabularies.

They publish affordable books which have unique Indian characters, settings and themes, story which are both fiction and non-fiction and also collaborate and co-publish to improve and create a larger body of quality content for children. So far, they have published and provided over 2000 books in 18 languages across 115,000 schools and libraries in 22 states of the country. (<http://www.prathambooks.org/library-classroom>). The Table below shows that Pratham books sold about one and a half lakh Kannada books in the last financial year and the share of the first two grade reading levels higher than the next two grade levels.

<b>Books Sold in Kannada from April 2015 to March 2016</b>	
<b>Reading Level</b>	<b>Total Sold Out qty</b>
1	38249
2	50841
3	34664
4	21623
<b>Grand Total</b>	<b>145377</b>

Source: Pratham Books

Pratham Books implemented a 'book coupon programme' in 2013-14 in two locations – A few poor urban neighbourhood in Delhi and selected rural areas in Yadgir district of Karnataka. The main objective of the programme was to enable children between 3-14 years to own the books of their own choice and then see the impact on reading habits and skill. For this purpose they sold 50 rupees coupons for Rs.2, which could be exchanged for Pratham books and story cards at Book Melas set up by Pratham books. The Book Melas were held twice in one year. Catalyst Management Services (CMS) Undertook and evaluation and found that this helped in improving the access to and interest in reading story books especially for those who did not have access to any other source. This also had a significant impact on sharing of books among themselves.

### **3. Navkarnataka and other private (for-profit) publishers**

Navkarnataka Publishers have evolved from being a wing of the Soviet based Progress publishers to be on their own since 1990 and publish a range of books, including those for children. However, economics made it difficult for them to bring out colour books at affordable prices and hence in the beginning they produced only black and white books. Now they have started publishing colour books as well but these are largely informative books on various facts such as birds, animals, plants, etc. They used to sell their children's books through exhibitions organized through schools in different cities but that option does not exist anymore, as schools are now more dependent on senior officials for permissions. Navkarnataka also acts as a marketing agency for other publishers.

A number of other publishers publish translated children's books in Kannada. Vasana and Sapna books are prominent names. In addition, a number of international and Delhi based publishers are also publishing translations. Most of these books are not produced very professionally and errors are also common. Unlike Pratham Books, which is a non-profit and has access to funds that help them bring high-quality, multi-colour books at cheap prices, private, profit-making publishers find it difficult to keep the prices low if they improve the quality of book-production. Navkarnataka has not adopted the translation route but is currently working on developing a number of science books for upper primary stage children in collaboration with Bangalore Association for Science Education known for its high-quality work in the area of popularising science.

### **4. Sutradhar**

Sutradhar, started in 1995, is a non-profit educational resource centre. The centre aims to make learning a more lively and meaningful experience for children by equipping teachers with relevant resources- materials, methods and knowledge.

Sutradhar has a special focus on the first 8 years of a child's life. They wish to emphasize on early childhood care and development as they believe it is a neglected area. Since there are only a handful of resource agencies in the country that contribute to the interdisciplinary field which intersects child development, education, disability and health, they aim to collate these resources and promote them.

The centre offers a range of books for young children amongst which are picture books, bilingual books and storybooks by Indian publishers. Karuna Kit, which is a versatile collection of 100 storybooks and can be used for value/life skills/language education is

available consists of thought-provoking themes for early grade learning. Their early learning kit for 3-6 year old children have flash cards with pictures of fruits and vegetables, 4-piece puzzles, Chennapatna stacking towers, safe to use steel kitchen sets and other such tools which help to stimulate learning.

Sutradhar stocks indigenous games made by crafts persons across the country. These toys and games are made from waste and natural material like stones, wood, bamboo, coir, shells, etc. The idea behind these games is to build skills in the children. Their learningkits reinforces their aim of giving an Indian context to the child's learning experience.

They have a collection of books for the teachers ranging from books on early learning, education, value education to books on sexuality and gender education, social studies, special education, etc. Many of the books are developed by educationists and are not available in mainstream bookstores.

They also organize teacher development workshops foster interactive and creative ways of teaching and learning using their variety of resources. Workshops are designed either for educators or to respond to specific needs of organizations working in early childhood learning.

However, Sutradhar's resources are available only at their store for purchase, and are not freely available.