

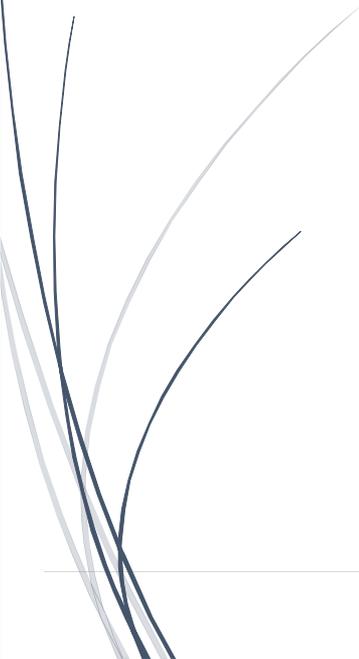


2015-2016

NANHI KALI

THIRD PARTY EVALUATION REPORT

March 2016



Malcolm Harper
Lalitha Iyer
Kameshwari Jandhyala

Acknowledgements

We feel privileged to have had the opportunity to study this unique programme and would like to thank Manoj Kumar and Rohini Mukherjee of Naandi Foundation and Sheetal Mehta of KC Mahindra Education Trust for inviting us for this task.

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Vijaya Usha Rani and M Padmavathamma stepped in to help us with the field work, data collection and compilation. We thank them for their quiet efficiency.

Malcolm Harper

Lalitha Iyer

Jandhyala Kameshwari

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Glossary

ANM	Auxiliary nurse midwife
ASC	Academic support centre
B ED	Bachelors of Education
B Tech	Bachelors of Technology
CA	Community activist who facilitates the ASC
DEO	District Education Officer
DLHS	District level household survey
ECL	Ensuring children learn
FGD	Focus group discussion
HS	High school
IT	Information technology
ITDA	Integrated tribal Development Agency
KCMET	KC Mahindra Education Trust
KGBV	Kasturba Gandhi Balika Vidyalaya, a residential upper primary school (classes 6-8) for out of school girls under a Government of India Scheme. Some states have extended it up to the secondary level
MIS	Management information system
NFHS	National family health survey
MPHW	Multipurpose health worker
MS	Middle school
NK	Nanhi Kali, meaning 'little bud' in Hindi
NKC	Nanhi Kali Coordinator
NKDS	Nanhi Kali donor servicing
NKP	Nanhi Kali programme
PS	Primary school
SC	Scheduled caste
SSC	Secondary school certificate
ST	Scheduled tribe
ST	Sanitary Towel
STRIPES	Support to rural India's public education system, another initiative of Naandi
TPE	Third Party Evaluation

Nanhi Kali Programme

Report of Third Party Evaluation

I. Introduction

The Nanhi Kali programme (NKP) was started by the KC Mahindra Education Trust (KCMET) in 1996 in Mumbai and then in Delhi. By 2005 the programme successfully reached around 3500 girls in partnership with several NGOs. At this stage KCMET decided that the programme should be systematized and scaled up to achieve greater impact and entered into a long term partnership with Naandi Foundation. As the programme has completed over 10 years, a Third Party Evaluation (TPE) by three external members was commissioned during 2015 to review and assess the programme

I.1. Terms of Reference (TOR)

The TORs included the following

- This evaluation exercise shall focus on Nanhi Kalis who were enrolled into the programme in the years 2006-2010.
- The evaluation exercise shall select project locations from urban (Hyderabad & Mumbai) and rural & tribal areas (Sheopur, Udaipur, Kanker, Araku, Mahaboobnagar) locations where the programme has been implemented at least for the last seven years.
- Based on field visits, direct individual interviews, Focus Group Discussions with stakeholders, review of files, data and records, the team of the three consultants to prepare a written report and present to the management team of Project Nanhi Kali their collective observations, views, analysis, suggestions and guidance on the programme.

A broad thematic guidance for evaluation provided by the Terms of Reference (TOR) was:

- A. To comment on stated outcomes of Project Nanhi Kali as indicated below:
 - Do we have over 100,000 Nanhi Kalis? Has every Nanhi Kali received the kit? Do the Academic Support Centres (ASCs) exist? What processes does Naandi follow to ensure the programme is run as planned given the scale of operations?
 - What is the range of attendance of Nanhi Kalis in Academic Support Centres?
 - Are Nanhi Kalis attending school?
 - What is the retention rate of Nanhi Kalis till Class 10?
- B. To evaluate impact of Project Nanhi Kali in areas where it is over seven years old:
 - Has the programme influenced quality of delivery of mainstream government education system in areas where it has been implemented?
 - Perception of various stakeholders, such as parents, community members & teachers about the

programme

- Is there any change in aspiration levels and self-confidence of Nanhi Kalis? Are Nanhi Kalis happy?

C. To test some hypotheses of Naandi about Project Nanhi Kali and suggest areas of improvement:

- Naandi believes support to girls post Class 10 goes a long way in helping them to be more economically and socially productive
- Academic support to girls at primary level has helped greatly to improve learning outcomes of the children
- The Nanhi Kali Kit(containing a school bag, sweater/rain coat, shoes, study materials) for primary school girls has been one of the key motivating factors for girls to continue going to school and Academic Support Centre. On the other hand, the Nanhi Kali Kit for middle and secondary schools has had mixed response
- Naandi believes that focus needs to be on high quality tutors, strong pedagogy and curriculum support rather than providing stationery and sanitary material
- Wherever Naandi has strong community involvement in the form of mothers and other Committees, it has had a positive bearing on quality of education at the government school

D. To capture various best practices in the form of case studies of individuals who are role models including mothers of Nanhi Kalis and community members

I.2 Evaluation process and Methodology

On 26th October 2015 the TPE received a detailed briefing at Naandi Headquarters in Hyderabad. In order to orient the TPE team to operations, field visits were organized in Hyderabad, Mahabubnagar and Mumbai. This was followed by a further briefing with the KCMET team at Mumbai. Subsequently, the TPE team developed the methodology for the evaluation process along the lines indicated in the TORS.

41 ASCs were randomly selected from locations across Udaipur, Sheopur, Mumbai, Kanker, Araku,, Mahabubnagar and Hyderabad where ASCs were operational from 2010 or earlier. (See Annexure 1 for list of ASCs visited). Field visits were completed during November and December of 2015. In each ASC, TPE members interacted with teachers / HM, parents of NKs, and NK Alumnae. The functioning of the ASC was also observed. We also sought 45 minutes to interact with the children and used a mix of the following activities:

Primary school	Middle and High School
Role play for classes 3/4/5 class	Debate on Pros and cons of ASC
Drawings for class 1& 2	Quiz
Academic assessment (reading, doing sums etc for classes 4 and 5)	Writing exercise on 'Why I like being a NK' or 'What I want to become'
'Magic box' (a ballot box on what NKs like or not about the kit)	On sanitary towels, use and challenges like disposal

In each project location, TPE members interacted with the Project manager, team leaders, NK coordinators, CAs (10 to 15) and Tutors (10 to 15) to understand the intricacies and challenges of

programme management and capture good practices and suggestions for improvements. In addition, the TPE team accessed data and analysis available with the head office on different aspects and looked for published data on relevant parameters to understand impact.

II. Growth of NKP 2005-2015

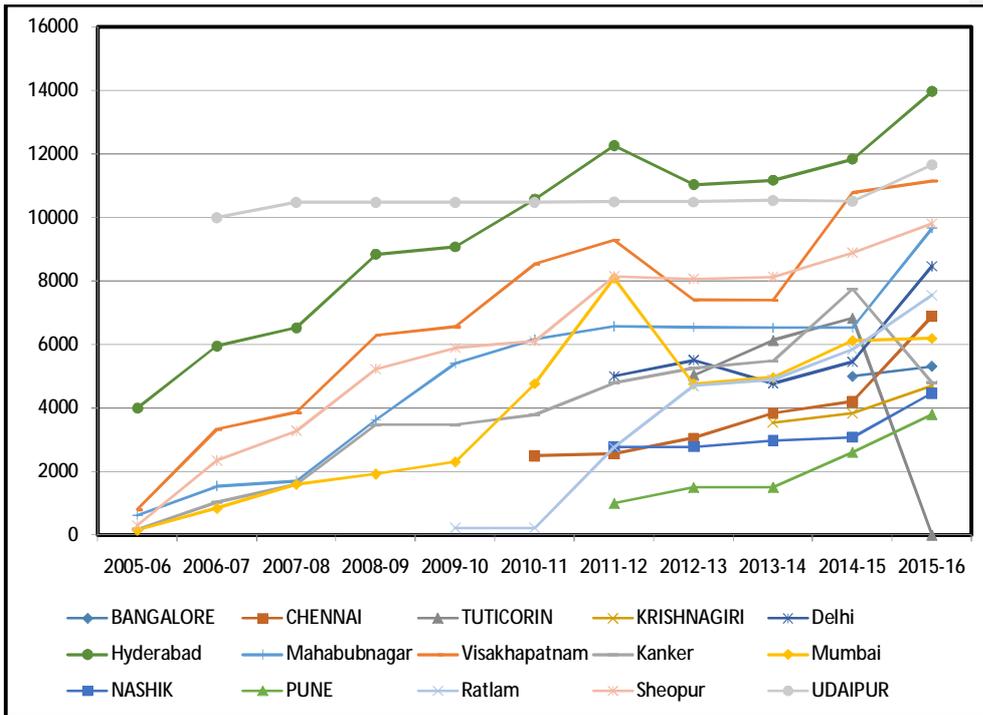
The KCMET-Naandi partnership has been very effective in taking NKP to scale. By 2015 NKP was reaching a total of 108473 girls across nine states.¹Naandi and KCMET have determined that the programme should be further scaled up, to reach a million girls by 2020. At one level this is an impressive target to set. This increase, however, would still only reach about one per cent of the approximately one hundred million girls in the age seven to seventeen cohort in India. This figure is of course likely to increase further as India's population increases, but nevertheless if this number is achieved it should make a measurable national impact. Women face discrimination everywhere in India, and a million role models may generate systemic change, and other and even more effective programmes may emerge as NK grows and evolves and is replicated and imitated. As Edmund Burke said, 'No man made a greater mistake than he who did nothing because he could only do a little', and the education and empowerment of even one young woman is a worthwhile achievement.

The numerical growth and territorial expansion of the programme under this partnership has been steady and remarkable. By 2007, within two years of Naandi's involvement, NK had expanded from Mumbai and Delhi to reach five new states, namely Andhra Pradesh, Chhattisgarh, Rajasthan, Karnataka, Madhya Pradesh, and had also expanded into Pune and Nashik in Maharashtra, in addition to the existing operations in Mumbai and Delhi. In 2008 a modest foray was made into Uttar Pradesh, which has since been discontinued, and in 2010 NK was also started in Haryana and Tamil Nadu. In the last five years, the programme has spread to several newer locations as shown by the graph below.

In all this the Naandi-KCMET partnership has demonstrated an effective method to work on enrolment and retention of girls both at the elementary and secondary levels. The approach can be replicated and the programme coverage can grow exponentially. There is an arithmetical progression in the numbers of girls reached in the first ten years when the programme runs continuously in a given location, and it may thereafter stabilize at a particular number. When new locations are added rapidly, the growth can appear to be exponential. *In our view the aspiration to reach one million girls is feasible and very much within reach, given the well-established operational systems which can propel such expansion.*

¹ Data provided in March 2016, Naandi

Growth of the Naandi NK Programme
(Source: Data Provided by Naandi, 2015)



II.1 Tracking NK Enrolment

The official number of NKs on 1st November 2015 varied depending on which NK department was providing the information. Total Enrolment of NKs in 2015 based on attendance data was reported to be 96,361 in August 2015, 102,619 in October 2015 and 108,473 in March 2016. The summary data of the NK programme over ten years places the number at 99298 (presumably in March 2015). The TPE team is inclined to accept the (lower) estimate derived from the attendance data, and based on observations in the field.

In the course of our field visits we observed possible reasons for this variation of approximately 4.8%. The central MIS uses a unique ID for each NK and a code number for each ASC. However, in the field we found variation both in the ASC code and the number of NKs in the selected ASC sample as given by the MIS. The CAs were not familiar with the 'new' ASC code number. Even when the ASC number issue was kept aside, the number of NKs did not exactly match the number indicated by the MIS in several

instances. We infer that there is a time lag in updating and processing the information from the field which explains the discrepancies.

Changes on the ground also arise from combining of ASCs, due to the fall in the number in a particular school or when primary school NKs move out of their village to middle school. There are also temporary or complete mergers of ASCs due to the non-availability of the CA or tutor. For example Lildi in Udaipur is classified as a middle school (MS) ASC in the list given by the head office with 13 students. On the ground it is a primary school ASC with 31 children; the tutor who till last year ran the MS ASC has been shifted to another larger school nearby and runs the MS ASC there. Som, another such example, has a complex of three schools and many ASCs in each school. However the ASC code number could not be tallied with the number in the ASC register. In such a situation, the TPE gave up the task of trying to match the code numbers and the reported number of NKs and instead visited the ASCs they found in the location chosen.

11.2 Growth trends and Choice of Locations

The criteria for selection of an NK are fairly well understood. The programme covers girls in government schools in selected locations and a special effort is made to include first generation learners, or children of single parents. There is less clarity on how the project office locations and within that villages are chosen.

Our field visits covered locations where NK was started prior to 2010. One common thread we saw across locations was that Naandi had an earlier programme, such as Ensuring Children learn (ECL), working in tandem with the school system in that same geography. In Kanker, Naandi had worked earlier with the state governments to improve enrolment and retention in tribal pockets. The Vidya programme of mobilizing village communities to improve access to education was also in operation. Elsewhere, the NK programme was introduced as a natural successor to the earlier ECL programme. We view this dovetailing and building further on on-going similar efforts as a good practice that can be continued.

When the programme began to attract general funding support after 2010, the preferences of donors became important too. Within the given location the choice of village and school are very much decided by the 'history' of the Naandi presence there. Primary schools chosen are very remote and small in Udaipur. In Kanker the villages are close to Kanker and well oriented to education. In Mumbai many are close to HPCL facilities. In Araku the organic and natural choice was Naandi's project area, where livelihoods based on the coffee plantations are being promoted.

Most of the NKP states have well over 5000 NKs, with the highest numbers in undivided Andhra Pradesh and Maharashtra. These two states are in some sense 'natural' homes for the programme, given that KCMET is based in Mumbai and Naandi's head office is in Hyderabad.

It is not immediately clear why the other states or the locations within them have been chosen. Gender disparities and low quality schools are everywhere in India, not only in the poorest states, and the reasons for NGO or other social enterprise locations are many and varied. They can, however, be roughly divided into four broad categories:

1. 'Natural' expansion, from the starting points outwards.
2. Convenience, building on existing operations and contacts.
3. Donor presence and pressure.

4. Having the greatest need and grappling with the most serious gender discrimination or lowest quality education.

It seems likely that the present NK locations are based on one or other of the first three of these reasons, or some combination of them.

There are a number of metrics on gender inequality and for six of the most obvious, nation-wide data is available, disaggregated to the state level. But there are major differences in performance between states; Table 1 shows the three states which perform worst by these metrics²:

Metric	Worst performing states
Male/female population ratio	Haryana, Punjab, Uttar Pradesh
Male/female births ratio	Haryana, Punjab, Uttar Pradesh
Female literacy	Jammu & Kashmir, Jharkhand, UP/AP (equal)
Girls' attendance in School	Rajasthan, Bihar, UP.
Number of girls bearing children when under 18	Jharkhand, AP, Bihar
Schools with no separate girls toilet	Rajasthan, UP, Jharkhand.

These figures do provide a crude indication of where the need is greatest,

Among the states where NK does operate, Andhra Pradesh performs badly on female literacy and under eighteen year olds' child bearing, but is not the worst performer on these or any of the other measures. Rajasthan is lowest on girls' school attendance, and on the provision of girls' toilets, although this latter measure does not tell us whether the schools have no toilets at all, regardless of gender. There is no evidence, however, that the existing locations have been chosen according to need and the severity of gender discrimination.

III. The context and ASCs

With RTE assuring access to primary schooling within one kilometer of a child's residence, all villages have a primary school. The school may have an overall strength of 40 to 50 children with 20 to 25 girls. In such schools currently all girls –from class 2 to 5–are covered as NKs. Invariably, in these primary schools there are very few teachers and the CAs are often pulled in to play the role of substitute teachers. In such locations availability of CA is a major challenge. It is clear that the ASC is much needed in such location since they offer the possibility of a good foundation in basic skills needed for the higher classes.

²http://www.censusindia.gov.in/vital_statistics/SRS_Report_2012/10_Chap_3_2012.pdf accessed 31.12.2015;

Puja Marwaha, The Indian girl child: the state and the pursuit of gender parity. Skilling India, 2015

http://www.epdc.org/sites/default/files/documents/India_OOSC_Profile.pdf accessed 31.12.2015;

Rawal, Vikas (2011), "Statistics on Elementary School Education in Rural India," *Review of Agrarian Studies*, vol. 1, no. 2, available at http://ras.org.in/statistics_on_elementary_school_education_in_rural_india;

S Goli, A Rammohan, D Singh, The Effect of Early Marriages and Early Childbearing on Women's Nutritional Status in India, *The Journal of Maternal Child Health*, August 2015.

In slightly larger villages where there is an upper primary school which often includes a primary section or a high school that also has primary and upper primary sections, it is possible to find 75 to 100 Nks across different classes. In several such cases the school may have three or more ASCs. Here it is also possible to find and retain better quality CAs.

The scenario as far as timings of the ASC is concerned is very mixed. In many locations with early morning ASCs we found that the centers are run irregularly. In the larger villages there seemed to be some pressure to maintain the punctuality. Further there were also some complaints from teachers that the morning ASC children tend to come late to school as they often go home after the ASC class and reach the school later in the morning.

The level of community engagement in NK seems to be a key determinant for punctuality and attendance. When parents keep track of the CAs and tutors, there is pressure on the CA and the rest of the NK team to maintain timings and conduct the ASC regularly.

A Middle School ASC (16010132) in a Primary school – Malvanfala (Udaipur)

Malvanfala is a small hamlet in Jhadol block (Udaipur Dt) with a primary school though it was listed as a middle school ASC. Earlier, the village had Nks in the primary school; they have graduated to a nearby middle school, which does not have NK coverage. The village elders were very keen to continue educational support for the Nks and approached the NKP team to set up a MS ASC in the village. The 19 girls enrolled as Nks return from school and then go to the ASC close by. They can return home safely within their own village.

We were informed that the Nks from the primary school were being enrolled for this academic year. The CA was from the village too and rather new. She has taken the responsibility for the PS girls and well as the MS girls. The records were being maintained for the MS girls and we found that attendance and punctuality were issues of some concern.

Source: Field notes November 2015

III.1 Coverage Issues Within Selected Schools

The approach now is to enroll all girls in a selected government school as NKs. Invariably there are problems in getting identification details for a few girls which results in their being left out. More importantly, in larger schools, girls join Middle or High School from smaller 'feeder' primary schools and cannot be enrolled midway. Similarly when an NK leaves a primary school to join a MS/HS where there is no ASC, they are at a disadvantage. If there is an ASC in their new school or their own village they are able to continue

III.2 Impact on School Systems

National indicators suggest significant improvements in availability and access to schooling across India and a reduction in the gender imbalance in education for girls and women. It is however difficult to attribute NKP's effect on school systems because there has been no rigorous planned evaluation to compare the impact outside the schools where NKP operates.

From our observations in nearly 41 schools, we see a 'co-existence' of Naandi and the class room routines in school. By design, the PS-ASCs focus on competencies that will help the child with academics and the correlation between this work and academic outcomes has not been clearly established in the last few years (after the wider spread of NKP).

The MS and HS ASCs function for part of the year covering a few subjects Further there does not seem to be any scope for directly supplementing class room work with 'tuition' in the ASC. The work in the ASCs ought to be to build NK capacity for self-directed and peer learning. In our observations we found scarcely any effort in secondary school classes to develop study skills and group based learning. NKP is yet to develop a clear pedagogic approach or learning materials for the MS/HS ASCs.

III.2.1 Relationship with the schools

In the field we saw that the Naandi field staff, the CAs/tutors and the Coordinators have forged good relations with the managements of the schools where NKP is being implemented. At the district level the Programme Officers seem to have an equally good equation with the District officials and Education department.

- We did not hear any complaints about the NK programme in any of the schools visited. Generally the CAs were appreciated for being punctual and regular themselves and trying to ensure that children come regularly to school. The relationship between NK staff and teachers seemed to be one of mutual respect and goodwill.
- HMs and teachers, however, felt that there should be more frequent and regular interactions. These would be mutually beneficial especially in identifying and tracking the performance of children who

were lagging behind. Since the ASCs timings are either before or after the school sessions, regular CA-teacher interaction becomes difficult.

- In a few schools teachers and HMs complained that the morning ASCs were delaying the children and they tend to come into school late. *In one school in Sheopur, the HM and teachers complained that during a visit by the District Education Officer (DEO) attendance was very low as children had gone home after the morning ASC and returned to school only around noon! The DEO then issued memos to the HM and teachers for the poor functioning of the school.*
- Teachers one met during the field visits were not very aware of the ASC pedagogy or methodology. This is not very surprising as NKP did not set out to orient or work with school teachers. Teachers felt the ASC classes should be more closely aligned with the school textbooks so that the ASC helps the child revise the day's lessons.
- In the residential schools in Araku for instance the situation was different. The HMs welcomed and appreciated the work of the CAs except in one case. In some cases the NK staff were seen as extra hands who could work as substitute teachers. *In Araku, for instance, in the Peddagaruvu Ashram residential school the HM is so pleased with the 3 CAs, he has given them free accommodation in the teacher's quarters. The CAs eat with the children and spend almost all their time in the school.*

Responses from teachers to the specific query on impact of ASC on learning levels are summarized in below. Overall NK attendance, attentiveness and sincerity of CAS have come in for a positive appreciation.

Table 2: Teachers views on impact		
	Impact of NK you notice on learning levels	How many NKs are academically far behind
Udaipur	Enthusiasm, helps girls stay on	Majority (50% to 90%) –except in one case
Sheopur	Interest levels improved, better attendance	Information not available with teachers
Araku	Improvement esp in MS/HS	Information not available with teachers
Mahabubnagar	Good	Above 50% in two cases
Mumbai	Children are doing well already. NK is added support. No remedial support	Very few (less than 5 NKs)
Hyderabad	Learning levels better especially in Maths, with Urdu materials	Information not available with teachers

The suggestions from the teachers and HMs are also summarized in the Table 3 below. The responses indicate overall satisfaction and an expectation that there can be closer collaboration.

Table 3: Teachers views on the ASC			
	Best thing about ASC	Worst thing about ASC	HM views specifically, if any
Udaipur	Extra class, motivation	nil	CAs can be substitute teachers , 1 HM not satisfied
Sheopur	Early morning classes	Children go back home and come late to school especially in the morning ASCs	Improve collaboration with school
Araku	Sincerity of CA	Many girls left out of NKP. Should include all girls in a school	One HM was emphatic that his residential school does not need NKP Happy with CAs, ASC particularly useful for classes 3-5 as it helps tribal girls to transit from home language to Telugu medium of instruction. NK material good, Remedial work needed in KGBV, Coordination with teachers to begin in June
Mahabubnagar	Extra class	Only few subjects covered , No guidance on options post Class X	Give more notebooks pencils etc , Increase coverage of all children , Cover Higher Secondary also, Train in self- defense
Mumbai	Extra class	nil	Focus on remedial education
Hyderabad			Need to include all girls. CAs should have subject expertise. Currently they can just manage to clear doubts at the HS level. Train CAs in the SCERT materials and pedagogy Material at primary level is good. Need greater rapport between NK -family- community- school Provide a lady counsellor esp to interact with parents of teen age girls

III.3 Some Issues in school selection and NK targeting:

During the course of the TPE we came across schools where the selection criteria for NKs came to the fore. In Sheopur, Hyderabad, Kanker and Mumbai we came across schools where NKs were going to private tuition classes paying over Rs.500 per month. This raises some question on the selection criteria used to identify either the individual NKs or the specific school that caters to a somewhat economically better social group.

Another issue that needs further analysis and review is whether girls in residential schools need to be covered under NKP. Overall 108 residential schools are supported under NKP. In some districts such as Visakhapatnam there are around 40 residential schools which are covered. Most residential schools are

KGBVs supported under the Central Scheme. In tribal areas under the ITDA as in Visakhapatnam district they are well provisioned residential learning institutions. During the field visits it was observed that infrastructure is better, the institutions have a full complement of teachers, classroom transactions happen, all the personal needs of children are met and the quality of the academic environment seems better than in a regular school. This was certainly true of the Ashram residential schools run by the ITDA in Araku/Paderu and the KGBVs supported by the central government that were visited by the TPE. There is a clear plan for providing focused academic inputs to prepare students for the Class X Board exam. We were informed that the results in class X of these residential schools has steadily improved and over the past couple of years 100% of girls successfully completed Class X.

In such a scenario what is the additional value that Naandi brings either through the kit or ASCs? In the residential schools we visited in Araku the tutor does not seem to conduct any regular ASC classes for class X for instance. In one ASC we were informed that NKs in class X are given the kit and in case they want any clarifications or help then they ask the tutor. This seems to be the pattern in the residential schools in Araku in general. One of the reasons given is that special preparatory classes are held for Class X students by the residential school itself and there is nothing further to be added to it by the tutor or equally likely that the tutor is not equipped herself to provide support. Another and more pertinent reason is that NKP does not have a clear strategy for the MS/HS ASC in place. The effect of this was evident in the HS ASCs we visited during the field visits. While here the tutor conducts the ASC at designated timings, the academic support and pedagogic approach is ad hoc and not surprisingly did not appear to be effective. This is a critical issue that needs further probing and analysis across all the NK residential schools as well as the HS ASCs.

As most of the girls in the tribal welfare hostels or those in KGBVs come from very marginalized sections, NK needs to weigh the relative merits of evolving a strong empowerment/life skill component to be a part of the ASC curriculum as well.

IV. The NK Kit

The NK kit is the most tangible aspect of the programme and we noticed the bag with the logo being well used by the girls. We have chosen to examine the kit as a whole, and its constituent parts, not as an essential part of the NK package, but as one component which may or may not be vital for the continued success of NK.

In most of the places we visited (in early December) the kits for 2015 had not reached the girls. In some places they had reached the local office but were awaiting verification and eventual handing over. The field staff was in the process of organizing local events to complete the handing over. We also observed that NKs, their parents and the community were quite patient and secure that the kit will reach them in good time. Although the stipulated 'deadline' for delivery of kit is August, this does not seem to have been achieved in recent years.

Table 4: Kit items				
Location	NK Kit items in 2015			Items also /already provided by Govt
	PS	MS/HS	HS	
Udaipur	Slate & Slate pen (for class I), Note book, pencil box, school bag, Socks, Shoes, Undergarments, belt & Sweater	Note book, Pens, School bag, socks, Shoes, Undergarments, Geometry box & Sweater	Note book, Pens, School bag, socks, Shoes, Undergarments, Geometry box & Sweater & sanitary pads (for Class VIII to X)	
Sheopur	Same as above	Same as above	Same as above	
Araku	Same as above	Same as above	Same as above	
Kanker	Same as above	Same as above	Same as above	
Mahabubnagar	Same as above	Same as above	Same as above	
Hyderabad	Same items except Raincoat instead of sweater	Same items except Raincoat instead of sweater	Same items except Raincoat instead of sweater	
Mumbai	Same items except Raincoat instead of sweater	Same items except Raincoat instead of sweater	Same items except Raincoat instead of sweater	

Source: NKDS, Naandi 2016

IV.1 Cost

The kit is the most expensive component of the NK programme, apart from the direct costs of the CAs and their training. For primary school girls the kit costs Rs 750 for each girl, which is 25% of the total cost of Rs.3000 per girl of the programme, and at the secondary level the kit costs increases to Rs 840, which is 20% of the total cost of Rs 4200 per girl. The higher cost is mainly because of the inclusion of sanitary towels.

The cost figures include a flat amount of fifty eight rupees for 'kit making and transportation', which presumably covers all the expenses which are involved in the whole kit supply chain. These include the selection, ordering, assembly, stocking and distribution of the various items; this is not dissimilar to the logistics of a nation-wide retail operation, albeit on a once-per-year basis. In the United States these costs are said to amount to around five per cent of the sales of major retailers, which translates to about 7% of the purchase costs, assuming average retail margins.³ In India, however, logistics costs are stated to be three to five times higher than in more developed economies, as a percentage of the cost of goods sold, because of low quality roads, delays and inefficient transport facilities, and also because of the relatively lower costs of domestic goods in India when compared with transport costs.⁴ This amounts to about 20% or one fifth of the costs of goods, even taking the lower values of the various estimates. The

³http://www.gmaonline.org/downloads/research-and-reports/GMA_2010_Logistics_Benchmark_Report.pdf.

⁴http://economictimes.indiatimes.com/articleshow/6757285.cms?utm_source=contentofinterest&utm_medium=ext&utm_campaign=cppst

Rs 58 cost incurred in the NK programme is between 11.5% and 7.3% of the cost of the items in the kit, which is remarkably low when compared with the figures quoted above, and is only marginally above the figure for the United States. It is all the more remarkable given that kits are not distributed continually but only once a year, so it is not possible to benefit from the economies of a continuous system.

If the figure of Rs 58 is approximately correct, this suggests that the kit logistics system is very inexpensive by Indian standards. Its effectiveness, however, is doubtful, given our observations about late deliveries. Some or all of the money spent on this could presumably be redirected to other aspects of the NK programme if kits were significantly modified or even stopped altogether.

IV.2 Suggestions on the kit

Many girls, and their parents and CA's, suggested changes to the kits. It was our impression that they welcomed the opportunity to mention these issues, and that they had not previously been asked to comment on the kits. Most of the suggestions for changes related to substitution of one item by another, rather than simply dropping items. Most respondents appeared to regard the kit as a given, where they could suggest that certain items might be replaced for other items; this is unsurprising, since nobody wants to reduce the value of what they perceive as a free good, and it is unlikely that any respondent who is now benefitting from the kits would perceive that more girls would benefit if the amount spent on each girl's kit was reduced.

One parent who was very enthusiastic about the kit and in particular the bag, said that she had given her daughter's bag to her brother. It is possible that some items from the kits are given, or even sold, to the families of non-NK girls in the community, but nobody mentioned such instances except in the context of incorrect sizes.

<i>Positive comments</i>	<i>Negative comments</i>
<ul style="list-style-type: none"> • <i>The bag itself, study items and books are most important</i> • <i>The pencils and notebooks are the best items</i> • <i>"Makes me feel proud and equal to other higher caste girls"</i> • <i>"Makes my children happy"</i> • <i>It motivates younger children to go to school regularly.</i> • <i>The sweaters are very comfortable and warm in cold weather.</i> <p><i>Source: Field notes November-December 2015</i></p>	<ul style="list-style-type: none"> • <i>Delay in supply</i> • <i>Shoe, dress sizes are incorrect</i> • <i>Some items are not useful</i> • <i>Some items are poor quality</i>

Dress and shoe sizes were said to be a big problem in all the areas we visited. Again, this is to be expected because of the complexity of the logistical process, and the difficulty is further exacerbated because children grow rapidly and their sizes change within six months.

One mother said "The clothes I received for my daughter in 8th class fit my other daughter who is in 3rd class", and in a government run boarding school in Araku the girls had stuffed cloth or paper into shoes which were too large in order to make them wearable. Some mothers said that they have to use items which are intended for one child for another in their family or elsewhere, and the girls at the KGBV school in Araku said that they exchange the shoes and clothing amongst themselves. Several mothers

said that they had raised the issue of shoe and dress sizes with the Naandi staff, but in spite of assurances there was no improvement.

There were few complaints about items other than dresses and shoes, apart from one mother who felt that the quality of the stationery had declined over the years; this was an isolated complaint.

We placed some emphasis on the kit during our interactions with NK stakeholders, because we had been asked to do so, and because tangible items of this kind are easier to comment on, and to change, than educational or 'social' inputs.

But, as one mother in Sheopur remarked "Books will tear, dresses will get worn-out; but education remains with the child"; it was encouraging that this seemed to be a generally shared view.

The suggestions on different categories of the complements were as follows:

Educational materials: prefer more pencils, notebooks, in particular lined notebooks, and need sports material.

Clothing: Uniform, underwear can be dropped, especially in states /locations where schools already provide them. Sweaters are important in colder places, but must be of the right sizes and bright colors, Raincoats are unnecessary in dry places.

Footwear: Shoes can be dropped, and chappals are preferable as they are easier to use, and the exact size is not so important.

Miscellaneous items : A tiffin box or water bottle would be more useful, in rural pockets (not Mumbai) and durable items such as bags, pencil cases, compasses and others need not be supplied every year.

It was remarkable, and creditable, that most girls, and their parents, prefer school-related 'consumption' items such as notebooks rather than longer-lasting higher-cost items such as dresses or shoes. This suggests that NK is viewed as an educational programme, rather than a government 'freebie'. If the kit items could be delivered on time, and in the correct sizes, the kit itself might be valued more highly, but this is no more than a conjecture.

The kit is more important at the primary than the secondary level; this is natural, since younger children, and their parents, are likely to respond more favorably to tangible items rather than to educational inputs, and they are not so aware of the importance of test and examination results.

IV.3 Token payments by Users

In a number of ASCs in Mahabubnagar District, the parents of NKs are asked to contribute a small sum, typically Rs 200, to a community fund. In Madakal Gadwal in Mahabubnagar this contribution appears to have been perceived by some parents as a fee for receiving the kit. A five person NK parents' committee manages the fund, and the money has been used to construct a village water tank, to buy raincoats and wrist watches for the children and for other community activities. Around Rs 13 lakhs has been collected in such funds in the district. What is interesting was the entitlement and sense of ownership this small payment seemed to generate. The comments on the shortcomings in the kit were quite vociferous.

If these funds are widespread, and are a valuable part of communities' commitment and 'ownership' of the NK programme, and if the kit, which consists of tangible items, with a clear market value, is an important incentive for the collection of such funds, this in itself is a positive feature of the kit.

The items in the kit are normally those which are bought by families, or by children themselves, and the experience of PEDN in Uganda may be relevant. This organisation, in collaboration with the Poverty Action Lab at MIT in the United States, conducted an experiment to test whether it might be possible to encourage children to save money to buy their own school equipment such as notebooks, pens and so on.⁵ In summary, it was found that children saved most willingly, and bought educational equipment most frequently, when they were told that it was good to save to buy such items, and when the sums they had saved were handed back to them at a time and place when such equipment was readily available. Children whose savings were handed back to them in the form of vouchers which could only be spent on school equipment were far less likely to save than those who were free to spend their money otherwise!

This initiative did not follow a period of free distribution of school equipment, as it might in the case of an NK exit, but the approach could be adopted by NK as a part of its full or partial exit.

IV.4 Sanitary Towels in HS

Sanitary towels (STs) are supplied as part of the kits to secondary school girls in classes' eight to ten, and are greatly appreciated; they are of course a vital aid to regular school attendance. Without them many girls would be absent or three to four days every month, and this can lead to them dropping out of school altogether.

- Late deliveries of STs are an issue as for the other items. Araku was the only location which we visited where STs had been delivered by early December. In other locations, no STs at all had been supplied.
- In some places the NKs receive a packet of STs every month, whereas elsewhere they may receive four months or even a whole year's supply at once. In these cases the NKs may feel obliged to share their ST supplies with their sisters or other family members, and the storage of a year's supply was also a problem for some girls in Hyderabad.
- Not all the girls were familiar with the use of STs, and in Sheopur and Hyderabad they had received some guidance from Naandi staff or a local health auxiliary.
- Some girls who had received STs suggested that girls in classes 6 and 7 should also be given STs if they needed them. When they were asked how they disposed of used STs, many girls admitted that they threw them away with other rubbish; they suggested that special ST disposal bins should be provided in their schools. Other girls, however, explained how they dug holes to bury used STs, and covered them with mud.
- We did not enquire as to whether girls who had been introduced to using STs in the NK programme were able to continue to use them after they had left school, but some NK

⁵The results are described in detail at http://www.leighlinden.com/Loose_Knots.pdf

'alumnae' in Sheopur volunteered the fact that they were still using them; they were buying them from the market or from the local anganwadi centre.

- Given that in 2011 only 12% of Indian women (Times of India, 23 January 2011) were said to use STs, this is in itself a major step forward. But, as with other features of the Nanhi Kali programme, Government and society at large are catching up; the state government in UP was reported (Times of India, 29 May 2015) to have decided to provide STs to all adolescent girls in the state. This proposal may never be properly implemented, but it does at least demonstrate that there is widespread awareness of what has until recently been considered as a 'taboo' subject. The NK programme has no doubt made some contribution to this awareness, even if not in UP.

Are Mass Produced Sanitary Towels the Answer?

Another question is about the choice of sanitary towels provided to NKs.

It is well known that most branded STs are made using chemical fibre and have harmful implications for the environment and user health. There are innovations from programs like Uger which works on breaking the silence, myths and taboos of menstrual hygiene. They offer women a healthy and eco-friendly option set of pads to manage the period safely. These pads can be made at home and may also provide a local business opportunity for NK alumnae, and they can be used in rural and urban settings alike. This could reduce the cost and complexity of providing STs in bulk to NKs.

IV.5 Kit supply chain issues

There are a number of issues with the present management of the kit supply chain, and these should be recognized and addressed regardless of the longer term future of the kit.

Late deliveries appear to be the most serious problem. In Sheopur, Araku and Hyderabad the kits had been delivered during October and November, four months after the start of the school year, and in Mahabubnagar none of the NKs had received their kits by early December.

This may in part be because the NK sessions themselves only start in August or September; the numbers of children can only be finalized once the ASC sessions have started, and the girls' individual dress and shoe sizes have to be measured and recorded. This information has to be collated and passed to the Naandi purchasing department; the items must then be ordered, delivered to Naandi, and assembled, packed and dispatched to each ASC. This is clearly a time-consuming and complex process, and it is hardly surprising that the kits are delivered three to four months after the start of the NK sessions.

Administrative procedures may cause even more delays. In one village in Mahabubnagar, a large number of kits, including sanitary napkins was being stored in the house of an NKC. The material had been received about 10 days earlier, the bar code on delay each kit had to be scanned before the kits could be distributed; only one scanner was available in the district; hence further delay.

IV.6 Should the kit be continued?

It can be argued that the kit as a whole is redundant, and should be discontinued.

The STRIPES report states clearly that the two-hour after-school instruction classes led by a trained community volunteer in a large cluster randomised trial significantly improved the composite maths and language scores in government primary schools in rural Andhra Pradesh. Both girls and boys in the intervention groups did better than their counterparts in control groups. In contrast, girls who received additional material support along with the after school instruction did not achieve better scores than girls who did receive supplementary instruction but not the additional material support.⁶

There are many 'practical' reasons why the discontinuation of the kits should be considered:

- The management of the kit procurement and distribution system, and resulting problems, can distract management and other stakeholders from NK's educational and social goals
- The kit is costly, and its discontinuation would in theory release sufficient funds to allow 20% more girls to benefit from the educational and social inputs of the NK.
- Some families, and children, and some NK staff, may regard the kit as the main benefit to be gained from the NKP, and may therefore undervalue the other more important inputs. We did not come across any examples of this attitude, except possibly among some NK coordinators, but it may be prevalent elsewhere.
- The dissatisfaction arising from late deliveries and incorrect sizes, which can never be wholly eliminated, particularly as the numbers of NK girls and more remote locations increase. This may discredit the NK programme as a whole.
- Similar items are frequently being provided by Government; there is increasing duplication, and the kit is similar to many government programmes, which supply clothing and school equipment rather than 'softer' and more difficult inputs such as friendly and effective learning and support. This may lead NK to be compared with such programmes, and thus to be devalued

The kits do however have many advantages, for the Nanhi Kali programme itself and for the children, which should not be ignored; these include

- Families of the poorest children genuinely cannot afford uniforms, bags and school material, and this may discourage them from attending school at all.
- Some items, such as the bag, provide an opportunity for 'branding' the programme as a whole, or for particular sponsors. 'Softer' educational inputs are not generally suitable for this.
- The kits provide sponsors with tangible evidence that their money is being well spent; longer term impacts are less immediate.
- The bags, uniforms and other items give the NK girls a sense of being 'special', and can enhance their self esteem

⁶ Lakshminarayana R, Eble A, Bhakta P, Frost C, Boone P, et al. (2013) The Support to Rural India's Public Education System (STRIPES) Trial: A Cluster Randomised Controlled Trial of Supplementary Teaching, Learning Material and Material Support. PLoS ONE 8(7): e65775. doi:10.1371/journal.pone.0065775, pg.10

- The kits encourage out of school girls, and their parents, to enroll in school, and they encourage regular attendance at school as well as the ASC sessions.

IV.7 Overall management responsibility:

The present scale of NK's kit operation is similar to that of a medium or even large scale multi-branch retail business. The kit contents, the numbers and scattered locations of the ASCs make the operations highly complex. It is therefore very necessary for supply chains to be professionally managed. This task is now shared between the heads of the commercial, finance and operations functions. This need not be a problem when the numbers were quite small, but as the numbers of NKs and total costs of the kits grow the supply chain will merit separate specialized direction.

IV.7.i Kit Supply Time-line

We understand that it takes some 174 days, or just under half a year, for the kits to be ordered, manufactured and delivered to the ASCs. Further delays may occur between the day the kits are delivered and the date of a kit distribution event; these events may have to be timed to fit the convenience of donors for whom they are an important occasion of recognition. This six month period is in addition to however many days are taken up earlier, in the process of listing the numbers of NKs enrolled at each location, measuring them for clothing and shoe sizes, collating the information and passing it to head office in Hyderabad.

This period is of 174 days the normal maximum, when all goes well, and it takes a further 60 days for the necessary documentation and acknowledgements of receipt to be collected and passed back to head office; this is not a problem for the NKs since the kits have by then been delivered to them, but the overall elapsed time occupied by the total cycle is nearly eight months; this seems *prima facie* to be too long, particularly since the girls are growing rapidly, and they need to wear the clothing and to use the school materials.

IV.7.ii Assembling of Kits

The various items in the kits are made by their various manufacturers, or supplied by stockists, to one of three different kit assemblers in Hyderabad. The items are then 'picked' and assembled into the individual kits, each of which is labeled and bar-coded for a particular NK, and packed in plastic bags of twelve kits.

The packaged, completed and labeled kits are then transported to one of fifteen different storage points which are located in the areas where there are concentrations of NKs. The kits are then collected by the NK staff and taken to the ASC schools or other convenient points, where they may have to await the kit distribution event, if one is to be held.

These locations may or may not be optimal, but as the NK expands and in places contracts the choice of storage points and transport routes and methods will change.

IV.7.iii Standardisation

The school bags, belts, pens and notebooks are custom made to order for NK. Pencils, slates and slate pens, sweaters, socks, shoes, underwear and raincoats are standard items, but clothing and shoes have to be of the correct sizes; the bags are also larger for classes IV and above. The bags are also branded with one or several of 21 different logos, for different locations where the NKs are supported by different donors.

It would clearly save time, and probably also reduce the cost, if as many as possible of the items could be ordered and if necessary manufactured in advance, based on estimates of the likely numbers required in each size, as a retailer would do for off-the-shelf supplies of clothing or shoes.

Apparently this was attempted some years ago, when numbers were smaller, but the results were unsatisfactory and some 20% of the items were of the wrong sizes. This experiment should probably be repeated.

V. Impact, Issues And Challenges

NKP started with the objective of creating an enabling education environment that would ensure that girls from poor and marginalized social groups would join and remain in schools and successfully complete secondary education. Ten years down the line what does NKP's report card say?

V.1 ASC Provisioning

With the exception of Udaipur, the ASCs are adequately staffed and in some locations like Hyderabad all CAs are women. In all the locations CA turnover is a major issue. New recruitment is high in all locations and around 70% in Udaipur. While expansion can be a factor behind the new recruitment, the high rate of new recruitment also indicates high attrition. There must be a deeper analysis of the causes for CA exit. One of the reasons cited by field staff is the low CA salary. Another reason could also be that many CAs are college students (we met several during the field visits), who move on once they have finished their graduation or post-graduation.

In the course of our interactions we found several surprises. For example, the CAs in Mumbai were very experienced and happy to be with Naandi. They seemed to value the freedom they have with a part time engagement in the neighborhood. In Udaipur, there were many who joined the government schools as teachers or even volunteers (with the prospect of a job eventually). In Araku we met young CAs who saw their time with NKP as good training and preparedness for a more permanent assignment. We met some former CAs and they were happy that thanks to the ASC experience they were able to do better as teachers in their new jobs –both in private and government schools.

Table 5: Community Activist (CA) Profile

Sl. No	Location	Total No of CAs	Continuing from 2014 or before	New Appointments in 2015	New CAs (%)
1	Bangalore	167	87	80	48%
2	Chennai	215	68	147	68%
3	Kanker	293	127	166	57%
4	Delhi	158	75	83	53%
5	Hyderabad	426	197	229	54%
6	Krishnagiri	118	64	54	46%
7	Mahaboobnagar	338	143	195	58%
8	Mumbai & Gavanpada	104	67	37	36%
9	Nashik & Chakkan	218	121	97	44%
10	Paderu & Araku	429	214	215	50%
11	Ratlam	205	94	111	54%
12	Sheopur	382	132	250	65%
13	Udaipur	388	117	271	70%
	Total	3441	1506	1935	56%

Women CAs are the norm in Hyderabad and Kanker. In Udaipur and Sheopur, it was observed that it was difficult to find women with the required qualification especially for MS and HS ASCs.

We observed that at the primary level CA's comfortably handle 25 to 30 children, working in groups. The MS and HS ASCs were smaller, with class or grade-wise groups. The Table 2 gives details of the spread of ASC in 6 /7 locations studied by the TPE. This profile can be viewed as fairly representative because it covers over 60% of enrolled NKs.

Table 6: Distribution of ASCs in Major Locations (March 2016)

Location	No of ASC					No of NKs				No . of CAs	CAs/ ASC	NK/ ASC
	PS	MS	HS	MIX	Total	PS	MS	HS	Grand Total			
UDAIPUR	152	146	86	91	475	5491	4073	2102	11666	388	0.82	24.56
SHEOPUR	149	101	81	70	401	5054	2463	2294	9811	382	0.95	24.47
ARAKU	341	0	98	0	439	7618	2271	1261	11150	429	0.98	25.40
KANKER	279	14		0	293	4671	114	3	4788	293	1.00	16.34
M'BUBNAGR	233		126	0	359	6280	2412	974	9666	338	0.94	26.92
HYDERABAD	256		170	0	426	8324	4138	1515	13977	426	1.00	32.81
MUMBAI	56	13	10	130	208	3257	2213	725	6195	104	0.5	29.78
TOTAL	1466	274	571	291	2601	40695	17684	8874	67253	2360	0.91	25.86

Table 6 indicates that the norm of one ASC per 25 NKs is maintained broadly speaking. The picture is more varied when we distinguish between Primary school and others (higher classes). Each location has its own features when the data is disaggregated. In Udaipur and Sheopur there are more NKs in higher classes because of the programme maturity. The Primary ASCs have 30 or more children on the average in these locations. The Kanker ratio is misleading because of the withdrawal from three blocks.

V.1.i Attendance and Related Issues

The ASCs we visited were all functioning in the school premises and CAs were entrusted with the keys of the room they used. Sessions were usually of 90 minute duration. Early morning ASCs invariably started a bit late and the evening ones closed a bit early. The attendance we noticed and the absenteeism noted in the registers is compared in Table 3 below. It appears as if there is much variability in Udaipur and Sheopur. In all locations CAs confirmed that NKC and CAs the visit homes of NKs who are absent or irregular in attendance to understand the problems faced by the NKs and to try and resolve them at the family/community level. This was much appreciated by the school staff.

Table 7: Attendance Noted during TPE Visits

Location	PS				MS/ HS			
	No. of ASCs	NKs enrolled	NKs absent during visit	NKs absent per record	No. of ASCs	NKs enrolled	NKs absent during visit	NKs absent per record
Udaipur	4	107	21	44	10	157	57	13
Sheopur	3	88	16	16	6	261	23	44
Mahabubnagar	1	31	0	0	3	309	27	69
Mumbai					3	110	44	41
Hyderabad	1	58	4	4	2	174	47	47

(In Araku the attendance was 100% since the schools were residential. ASCs have stopped in Kanker)

Both teachers and parents confirmed that NKs attend both school and ASC. Teachers felt that attentiveness in class may have improved as a result of NKs going to ASCs. However, in some schools teachers complained that the timings of the ASC affects the time when NKs reach school.

V.2 Effective targeting and facilitating participation in elementary and secondary schooling

How relevant are the ASCs in the government school system, nearly 15 years after the start of the programme? With growing reports and concern with the rapid privatization of school education, which is estimated to be around 30% with sharp regional and urban-rural variations, the question of who goes to a government school acquires great significance. The focus of NKP on government schools through ASCs is welcome; this ensures that vulnerable and poor girls have been reached through the programme. In the project areas the dependence on the government school including aided schools especially at the secondary level is very high.

State	Government plus private aided schools			Unaided private schools		
	Primary (classes 1-5)	Upper primary (classes 6-8)	Secondary (classes 9-10)	Primary (classes 1-5)	Upper primary (classes 6-8)	Secondary (classes 9-10)
AP	57.85	65.08	75.24	40.43	33.92	33.24
Chhattisgarh	74.69	80.46	79.76	24.87	19.38	19.33
Karnataka	60.9	69.34	70.73	39.02	30.62	28.43
Madhya Pradesh	63.26	69.16	65.61	35.28	30.19	33.42
Maharashtra	73.67	82.55**	81.06**	25.75	17.3	18.28
Rajasthan	48.88	50.49	46.27	49.05	49.04	52.4
Tamilnadu	60.15	74.53	73.48	39.74	25.42	23.61
Telangana	45.96	54.06	55.77	52.13	45.27	43.51
India			65.28			32.52
** In Maharashtra the share of private aided schools is significantly higher with 26.75% at primary level, 58.62% at upper primary level and 75.25% at the secondary level						
Source	Elementary Education in India: Progress towards UEE, Flash Statistics UDISE 2014-15, NUEPA					
	Secondary Education in India: Progress towards Universalisation, Flash Statistics, UDISE 2014-15, NUEPA					

It is important to note that in Rajasthan there are only government-managed or private schools. In all the other NK states there are private aided schools as well. At the primary level the enrolment share of private aided schools varies across the states with a high of 26.67% in Maharashtra to 0.86% in Madhya Pradesh, and at the upper primary level from a high of 58.62% in Maharashtra to 1.52% in Chhatisgarh. At the secondary level, enrolment in aided schools ranges from a low of 2.29% Chhatisgarh to a very high percentage of 75.25% in private aided schools. (See Annexure 2 for details). It is the government managed schools that are available in remote areas and for dispersed communities. Further, micro-level studies have shown that the government school is often the last resort of the poorest and socially vulnerable children, including girls.⁷

As per RTE rules, access to primary education should to be provided within 1 km of a child's residence, and access to upper primary schooling within a 3 km radius. At the secondary level the policy is to provide secondary schooling within a 5 km radius and higher secondary schooling within a 7-10 km

⁷Vimala Ramachandran and Aarti Saihjee, The New Segregation: Reflections on Gender and Equity in Primary Education, *Economic and Political Weekly* Vol. 37, No. 17 (Apr. 27 - May 3, 2002), pp. 1600-1613

radius of a student's residence. The issue of access needs to be seen within this context. Access to primary education is nearly universal as per the RTE norms. The major challenge is access to secondary education, with very wide interstate variations. The concern is whether parents would send their daughters to schools located in some cases at a distance of 10 or more kms from their homes and to bear the attendant costs of travel, books etc. It is in this context that ASCs acquire significance.

Going down to the level of the block it is important to note that the blocks visited under the TPE, have been identified by the Government as either Educationally Backward Blocks (EBBs) or Blocks which come under special focus districts such as Hyderabad which has a high concentration of Muslim population.⁸

V.3 Dropouts –from Schools and NKP

Table 9: % of Out of School Children (OSC) in 6-13 years age group by gender and location

State	% of children OSC	% Male OSC	% Female OSC	% OSC in rural areas	% OSC in Urban areas
AP (Undivided)	0.91	0.77	1.13	1.01	0.66
Chattisgarh	3.75	4.34	3.18	4.73	0.75
Karnataka	1.49	1.54	1.43	1.59	1.31
Madhya Pradesh	3.78	3.78	3.77	3.58	4.61
Maharashtra	0.81	0.72	0.93	0.98	0.59
Rajasthan	5.02	3.44	7.47	5.35	3.71
Tamil Nadu	0.66	0.7	0.62	0.57	0.79
India	2.97	2.77	3.23	3.13	2.54

Source: National Sample Survey of Estimation of Out of School Children in age 6-13 years, India, Social and Rural research Institute (SRI), 2014

Definitions of 'out of school children' and 'drop outs' has changed overtime. Currently the school system includes under the rubric 'out of school children', 1) dropouts who have discontinued their studies in the past or are absent for more than 45 days, 2) children who have enrolled but never attended school, 3) and those who have never enrolled. Under RTE if a child is absent for 45 days at a stretch she/he is considered as a drop out child. There are, however, variations of this norm across states. For instance in Karnataka if a child is continuously absent for 7 days she is considered a drop-out. NKP

considers a girl who is absent for 90 days as a drop out.

Overall in the country it has been observed that there is a decline in the percentages of out of school children in the 6-13 years age group. The National Sample Survey of estimation of Out of school children (2014) reports a steady decline from 6.9% in 2005, 4.3% in 2009 to 2.97% out of school children in 2014 i.e. 6 million children in the age group 6-14. Civil society organizations and other reports point to much higher numbers of children being out of school or dropping out of school. Including the issue of dropouts within the definition of out of school obfuscates the problem and prevents targeted attention to the problem. Naandi needs to factor in the ground information from its project areas both for targeting as well as in tracking school dropouts.

⁸ The Government has identified blocks as educationally backward blocks where rural female literacy is lower than the national average and the gender gap is higher than the national average. Further districts have been identified as special focus districts where there is a high concentration of SC, ST or Muslim population.

- *The critical drop out junctures*

Tracking drop outs or even identifying accurately the reasons for dropouts has not been an easy task. For the government the key junctures for tracking has been when children move from one level to another i.e. transition from primary to upper primary, from upper primary to secondary and so on.

Transition for girls in general and especially girls from SC and ST communities continues to be an area of concern especially the transition from upper primary to secondary and from secondary to higher secondary. While enrolment is no longer an issue moving onto the next higher level of education is not as easy for disadvantaged social groups. See Annexure 3 for details on transition.

At the elementary level the issue of dropout for academic reasons does not arise as no detention of children is allowed as per RTE rules. Class X and class XII are the key gateposts across the country when successful completion is determined by an external examination system. See Annexure 4 for details

State/Class	Class VIII	Class IX	Class X
AP	3.78	2.89	30.55
Chhattisgarh	9.57	15.52	32.67
Karnataka	4.94	4.88	53.34
Madhya Pradesh	20.09	24.17	30.6
Maharashtra		8.5	16.56
Rajasthan	8.86	7.62	20.6
Tamilnadu	10.36	5.02	19.88
Telangana	5.31	4.7	30.55
All India	6.88	6.45	28.84

Source: Secondary Education In India, Progress towards Universalization, State Report cards, UDISE 2014-15, NUEPA

As Table 10 shows it is at class X that the highest dropout takes place pointing to the poor preparedness of children resulting from the poor quality of education provided.

What is also evident is that the transition from elementary to secondary is equally problematic in states such as Chhattisgarh, Madhya Pradesh, Rajasthan and surprisingly Tamilnadu where drop out at class VIII is higher than the national average. At class X the all India average is at a high of 28.84%, with states such as AP, Chhattisgarh, Karnataka, MP and Telangana having rates above the already high national average.

Extract from the National Survey of estimation of out of school children, 2014

- A gender wise disaggregation reveals that 31.66 lakh males and 28.98 lakh females are estimated to be out of school. In proportion, 2.77% of the estimated male population (11.44 crore) and 3.23% of the estimated female population (8.97 crore) are out of school, i.e., a higher percentage of females (as compared to males) are out of school in the 6-13 years age group. This is similar to the findings of the last round of the survey where 3.92% male and 4.71% female children were estimated to be out of school among children aged 6-13 years.
- Among the two age groups, i.e. 6-10 years and 11-13 years, it is observed that the estimated percentage of out of school children is higher in the age group 11-13 years (3.28%) as compared to 6-10 years (2.77%). In the last round as well, compared to 5.25% children being out of school in the age group of 11-13 years, 3.69% of children aged 6-10 years were out of school.
- Religion wise analysis reveals that Muslims have the maximum proportion of out of school children in India (4.43%), followed by Hindus (2.73%), Christians (1.52%) and Others (1.26%).
- Disaggregation by Social Group shows that the maximum proportion of out of school children in India is within Scheduled Tribes (4.20%), followed by Scheduled Castes (3.24%), OBC (3.07%) and Others (1.87)
- Highlighting the gender dichotomy in India, a higher proportion of female children (3.23%) in the age group of 6-13 years are estimated to be out of school as compared to male children (2.77%). This is a trend similar to what has been observed in the last two rounds with 4.71% female and 3.92% male children out of school in 2009, and 7.92% female and 6.18% male children out of school in 2005.

Source: National Sample Survey of Estimation of Out of School Children in age 6-13 years, India, Social and Rural research Institute (SRI), 2014

V.3.1 Efforts to Reduce Drop Outs

Naandi has been carefully tracking NKs who have moved out of the programme including drop outs . Naandi estimates that over the past 5 years i.e.2010-2015 around 15.6% of the NKs have moved out of

Category	2010-11	2011-12	2012-13	2013-14	2014-15	Grand Total
Class X passed/failed	0.8	2.4	3.4	2.9	2.9	2.6
Program Dropout	11.9	13.1	15.7	9.3	8.3	11.4
Stopped Intervention	8.6	1.7	0.0	0.0	0.4	1.6
Grand Total	21.2	17.1	19.1	12.2	11.6	15.6

Source: NKDS, Naandi, 2016

the NK programme. A gradual decline in the dropout percentage is reported from a high of 21.2% in 2010-11 to 11.6% in 2014-15.

The broad reasons for moving out of NKP are 1) NKs who have reached and completed class X (either successfully or not), 2) dropping out of NKP (see Table 12 for details)and 3) the NK programme being closed down in some locations

During the period 2010-2015 there has been a gradual decline in the

dropout rate from 11.9% in 2010-11 to 8.3% in 2014-15. The reasons for arresting drop out are not immediately apparent. They could perhaps indicate a greater appreciation of NKP by target communities and hence better retention. Equally it could be that field staff have deepened their community level

engagement. The data for class X NKs successful completion or otherwise provides only a hazy picture. It would be more useful to present the data separately of those who successfully completed class X and those who failed and hence dropped out

It is not very clear how and if at all these findings feed back into improving or strengthening the strategy of providing academic support to NKs at the high school level. Our field level interactions suggest that such data has not been used strategically in informing or improving the academic support inputs.

Reason/level	Primary School	Middle School	High School(excluding class X completion/failure)
Joined another school	47.5	49.9	42.46
Discontinued	4.2	6.8	10.1
Early marriage	0.06	1.4	2.99
Passed away	0.44	0.27	0.16
Migration	26.7	28.58	34.3
Other	20.9	12.9	9.82

Source: NKDS, Naandi 2016

The reasons under the category 'program drop out' have been listed as a NK joining another school, discontinuation, early marriage, migration, illness or death. The 2 major reasons for dropping out of the programme are migration and joining another school. It is important to note that the percentage of girls who discontinued because of early marriage is very negligible at the primary and middle school level, suggesting that in the project locations marriage below legal age rather than child marriage may

be the challenge to overcome. During the field visits we got the impression that field staff are more concerned with the issue of early marriage (which as Table 12 shows is a negligible percentage) than migration which is far more serious issue. What this highlights is that field staff do not have a full appreciation of their own ground realities and data and how this can be used to evolve more effective strategies. A lot of time of programme staff at all levels is spent on data collection. For instance at the ASC level a considerable amount of the CAs time goes into data collection and reporting, time that could be better spent on academic issues.

The impressive database on declining dropout notwithstanding, there is one area of some serious concern i.e. tracking of dropout in class IX.

Data provided during the TPE indicates that over the past 5 years a total of 59 NKs dropped out at class IX. For instance Table 13 indicates that there has been only 1 drop out in Sheopur during 2010-2015.

Location	2010-11	2011-12	2012-13	2013-14	2014-15	Grand Total
Hyderabad	6	4		27		37
MAHBUBNAGAR		5	4			9
Sheopur	1					1
Visakhapatnam		12				12
Grand Total	7	21	4	27	0	59

Source: NKDS, Naandi 2016

This totally contradicts feedback we received from FGDs with alumnae during the field visits in Sheopur. The number reported is much more. Alumnae in 3 villages in Sheopur reported that around 15 friends dropped out at class IX. The reason for dropping out was that they had failed the class IX examinations conducted in the school. These 15 girls who dropped out due

to failure in class IX belong to cohorts who are currently in class X and XI.

It is imperative that Naandi examine and analyse this issue not only in Sheopur but in other project locations as well. This has serious implications and also raises questions on the quality of academic support provided to these NKs who have been receiving such support from the 3rd or 4th class. The assumption that underpins the ASC at the primary level is that basic concepts and learning competencies and levels would be put on a firm foundation so that as the NK progresses forward she will not face any serious academic hurdles. While we would not like to arrive at facile conclusions it is critical that this issue be more carefully examined and analysed.

The issue of failure in class IX leading to drop out and the implications it has for the nature of the academic support Naandi is providing or needs to provide was not raised by any of the programme staff or resource persons with whom we interacted in Sheopur. It is not clear how or where such issues get tracked or strategies evolved to deal with them. CAs and tutors seem quite oblivious of this situation. Clearly reporting on this issue seems patchy, and even less use is made of what reports are provided.

Ironically, the entire field staff is very concerned on how to reduce the numbers of drop outs. The concern seems to stem from a very personal concern as for the field staff the numbers of drop outs in their field areas is a measure of how successful or not they have been. This may have led to gross under reporting. What this also suggests is poor monitoring of reporting processes and mechanisms. In such a situation there is an urgent need to reexamine the whole reporting system on dropouts itself. It is also necessary to evolve mechanisms to have such issues raised and addressed at the cluster level meetings that each NKC holds.

V.4 Have ASCs Impacted Learning and Academic Performance

V.4.i Learning outcomes

The TPE is not in a position to comment on learning outcomes as testing learning levels was not part of the TPE. However, ASC observations, interaction with children and some written work done by children allows us to make some comments.

It is the primary ASC that allows for some comment on the impact of a learning environment which is very different from the impact a traditional classroom has on children. The ASC by design is intended to create a learning environment in which children can without fear or diffidence engage with learning. The few ASCs that we observed during the field visits showed that where the children were sitting in learning groups with a child team leader leading the learning process and the CA moving around enabling such a process, the children appeared relaxed, interacting easily with the CA and with each other. A lot of course depended on the space availability and the experience of the CA.

In one ASC, where the CA had recently joined and the classroom which was full of tables and chairs did not allow for group sitting or work, the NKs were quiet, very diffident and almost scared to get up from their places.

During the course of the ASC observations we tried different ways of engaging with NKS. The purpose was to assess how the NKS respond, their ability to express themselves, to write, and above all their willingness and readiness to engage with any kind of activity or challenge.

Our general observation was that children are very comfortable with oral maths, multiplications and writing to quite an extent. What needs to be noted is that most of the NKS did not hesitate to attempt the exercise. In the case of Araku we noticed that in the initial years NKS have a difficulty in transiting from their spoken tribal mother tongue to Telugu which is the medium of instruction. However as the NK progresses further her command of Telugu improves and is evident in her writing ability as well.

Children's activities used in the field

- Magic Box- Children given slips of paper and to write what they like or do not like about the NKP
- Writing exercise- Various topics were used: Why I like being a NK; What I want to be; My village; my school; Why girls education beyond class X is important;
- Drawing to indicate likes and dislikes
- Debate- Topics: Girls can play cricket, Housework is girls work,
- Role play- Topic: A class in session; pros and cons of girls education, I too want to be an NK

Village Vidyanagadi, Sheopur

--On subtraction, addition and multiplication tables- all 7 NKS in class 3 got the exercise correct. All children knew upto the 15th table.

--3 out of 5 NKS in class 1 wrote all the Hindi alphabet and numbers up to 50 correctly. Sheopur Field notes, December 2015

The most important stakeholders in this programme are the NKS themselves and the TPE team had the opportunity to find out their views both directly and less directly. In many locations, the girls were surprised by the invitation to write something about their own aspirations or desires. Many NKS said they liked such exercises and would like to have more such opportunities.

In some places they wrote about all their likes and dislikes and at other locations they just stayed with the elements of the NKP. In general they were reluctant to speak out, preferring to write. Very often the written responses were almost uniform indicating group thinking if not quick copying. There is a clear vote in favour of the kit from the girls and an indication, however hesitant, that they would enjoy more color and playfulness as part of the kit. (See Annexure 5 for further details).

Table 14: TPE Teams Observation On Children's Engagement In Co-Curricular Activities -A summary

Academic Quality	PS	MS/HS
Udaipur	Children enjoyed group work songs, activities and games. The drawings were very decorative almost 'mehindi' style.	Very shy, low participation -writing is average or poor. Leader's words quickly copied by all others
Sheopur	NKs liked the drawing and handling the crayons. Good in number work.	50% hesitate to write, those who write wrote well. Not used to expressing own views Except in one MS ASC at Bardhabujrgwhere the girls were very active and creative in the role play, girls in MS and HS ASCs generally shy and reticent
Araku (6)	Children active, expressive and like the teacher. Participative in class discussion. Poor spelling, letters not formed correctly, cannot name the items correctly. Language is an issue as children have to transit from their home language to Telugu which is the medium of instruction	Eager to participate. Middle school struggling with reading and writing. High school good with expression and with reading writing
KANKER	Quiet and shy	Active and participated in discussions, role plays. They wonder why NK is stopped. They wish it continues for other girls
Mahabubnagar	Good with oral -written work needs attention	Not articulate . Awareness levels moderate and writing is good
Mumbai	Children participative and active. Written work good	Written work is good

V.4.ii Completion of secondary education

An external and concrete measure that can be used to assess the effectiveness of ASCs is the performance of NKs in the class X examinations. Out of 13,247 Nanhi Kalis who had appeared for Class X Board exam till date i.e. during 2007-2015 across all locations 9,087 NanhiKalis (69%) passed the exam. That means around 31 % did not pass the examination. The failure rate among NKs has ranged from around 22% to a high of 47% in 2014-15, the year in which the highest number of NKs appeared for the Class X exam.

Table 15: NK Class X results 2008-2016

Year wise Class ten results (in number)				Year wise Class ten results (in Percent)			
Year	Did not qualify	Completed 10th	Grand Total	Year	Did not qualify	Completed 10th	Grand Total
2007-08	13	46	59	2007-08	22%	78%	100%
2008-09	54	173	227	2008-09	24%	76%	100%
2009-10	72	224	296	2009-10	24%	76%	100%
2010-11	144	280	424	2010-11	34%	66%	100%
2011-12	525	1254	1779	2011-12	30%	70%	100%
2012-13	769	1802	2571	2012-13	30%	70%	100%
2013-14	627	1759	2386	2013-14	26%	74%	100%
2014-15	1377	1543	2920	2014-15	47%	53%	100%
2015-16	579	2006	2585	2015-16	22%	78%	100%
Total	4160	9087	13247	Total	31%	69%	100%
Source:	NKDS, Naandi 2016						

Location	Table 16: Pass percentage of NKs in Class X Board exam location wise									
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Total
CHENNAI									100%	100%
Hyderabad	100%	65%	80%	60%	81%	71%	76%	68%	79%	74%
Kanker						47%	41%	57%	78%	58%
MAHBUBNAGAR		100%	100%	100%	77%	88%	96%	95%	96%	93%
Mumbai					100%	99%		100%	91%	97%
Ratlam							60%	23%	67%	34%
Sheopur		100%			47%	65%	82%	29%	52%	51%
UDAIPUR						9%	8%	32%	53%	35%
Visakhapatnam	77%	68%	68%	100%	63%	72%	88%	55%	97%	72%
APMSS (6 districts)		100%								100%
Grand Total	78%	76%	76%	66%	70%	70%	74%	53%	78%	69%

Source: NKDC, Naandi 2016

In Ratlam and Sheopur in Madhya Pradesh, Udaipur in Rajasthan, and Kanker in Chhatisgarh, class X achievement has been quite low. During interactions with Naandi staff this poor performance has been identified as an issue, though the follow up action to address this problem did not appear to be a matter of urgent concern.

Further as we observed in the field and acknowledged by Naandi, the academic support strategy for the middle and high school NKs is yet to be finalized. The process of developing the pedagogic approach is being considered. Some work for the middle school seems to have started. Currently, in the ASC for the high school tutors take the students through the class curriculum in a fairly unplanned manner. The ASCs start in August and cover the syllabus in six months, without synchronizing it with the school work.

In some cases tutors are not equipped to support the NKs in any way. The tutor with a post graduate degree in language for instance meets the requirement to be appointed as a tutor of the high school ASC but is no position to help with the high level of maths, science or English.

V.4.iii Class X NK achievement vs State Averages

As Table 17 below shows that during 2013-14, except Mahabubnagar, performance in class X is lower than the state average across the NKP districts. This suggests that the NKP has not yet had a transformative impact on the prevailing ecosystem for school education. Further it establishes the need to continue working in these districts at least till they catch up with the higher levels prevailing in the State. Given the NKP presence in these locations for over 10 years, the other important question to ask is 'what should be done differently in these districts to create measurable impact'.

State	District	NK Class X achievement 2013-14 (%)	Girls' Class X Achievement 2013-14 (%) (State average)**
AP			91.32
	Visakhapatnam	88	
Chhattisgarh			56.34
	Kanker	41	
Karnataka			87.89
	Bangalore	NA	
Madhya Pradesh			91.52
	Sheopur	82	
	Ratlam	60	
Maharashtra			91.52
	Mumbai	NA	
Rajasthan			71.21
	UDAIPUR	8	
Tamilnadu			93.14
	CHENNAI		
Telangana			89.75
	MAHBUBNAGAR	96	
	Hyderabad	76	
All India			81.84

** Secondary Education in India: progress towards Universalisation , Flash Statistics UDISE-2014-15, NUEPA

It is important for NKP to engage in such analysis and examine the Xth class results since the start of the NK programme in these locations. This is a sufficiently robust proxy variable to be tracked to assess whether the NK intervention has indeed made a positive difference and whether the situation would have been worse without it. Not only would such analysis have to be made in relation to the overall state averages but more usefully in the context of what is happening in the blocks in which NKP works.

When one looks at the results in Sheopur district for instance the cumulative figures for the 3 NKP blocks in themselves tell a story. See Table

Block	Block level result (Overall)			Result of Nanhi Kalis		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Sheopur	24%	51%	51%	67%	24%	32%
Vijayapur	37%	52%	57%	75%	19%	39%
Karahal	25%	23%	21%	61%	38%	46%
Source	NKDS, Naandi 2016					

If we look at Sheopur block where we visited 9 ASCs, except for 2012-13 when the NK class X results were much higher than the block average, in the subsequent 2 years the results were way below the

block average. Of the 3 blocks, in Karahal block the NK results for all the 3 years though higher than the block result, show a declining trend. What the determinants of the better performance in Karahal are not immediately clear. One of the possible reasons for lower results in the other blocks could be turnover of CAs/tutors.

A deeper analysis at the block level is required to get a more realistic picture of the performance of NKs and which in turn could inform the strategies on how to provide/strengthen the academic support inputs. Quite clearly such analysis would need to be done across the board so that any future planning for the development of the academic support programme at the high school level is built on concrete appreciation of the ground realities.

The results in class X raise some fundamental questions for NKP as a whole. As almost all of the NKs are provided academic support from about class 3 or 4 that is six to eight years or more of academic support why the results are not better? One argument could be that the strategy for the middle and high school level ASC is yet to take concrete shape to make any real difference. In such a situation then it is imperative that NKP expeditiously develop its academic support strategy for middle and high schools. Further such analysis and its implications for the effectiveness of the overall strategy needs to feed into the training of field staff both at the ASC level as at the supervisory level as much as the review and monitoring processes. We sensed a feeling of complacency among the NK teams that we met that all is well as the NKP provides support up to class X and consequently there would automatically be a positive impact. The ground level, however, gives cause for concern.

One of the strategies being considered to enable NKs who have failed Class X to complete is through enrolment in the Open School system or taking the exams again as a private candidate. The open school strategy is still at a very nascent stage. There is an assumption that structured academic support will be available to prepare for the Open Board exam. How NKP proposes to deal with this is not very clear given that its own NK ASC for the high school has yet to be effectively conceptualized and developed.

V.5 What are NK Alumnae Doing?

Learnt to live without fear

Jemiki, a tribal from Araku is currently doing her B Ed and also working as a CA. Her father died when she was doing her class X. Her mother struggled a lot supplementing her meagre pension with wage labour in order to educate her daughter. Now that she has regular income with her job as a CA, Jemiki wants to relieve her mother of some of her financial burdens. Jemiki feels she has learnt how to live without fear and all because of the NK programme. NKP is like a family that she feels is always there to provide support

Source: Field notes, December 2015

Unfulfilled and elusive aspirations

Rina Rathor, the CA for the primary ASC in Makrawada village, Sheopur was formerly a NK from the 2005 batch. Rina has 3 sisters and 2 brothers. Rina's eldest sister is married. Her second older sister, Rina and her younger sister were all Nanki Kalis. Her elder sister who was a NK went on to complete her graduation and is now employed.

The journey has been very different for Rina and her younger sister. Though Rina completed her class XII with 71% and was very keen to study further, she could not go on to college as parents said they could not afford to educate another girl at the collegiate level. So she became a CA. She is happy that she has some employment unlike her younger sister who also passed her class XII with 63% and is at home.

Rina is not openly critical that her parents plan to do whatever it takes to ensure that her 2 brothers who are in class XII study further but is very anguished that she may never get that opportunity. What she hopes is that Naandi will help her in exploring various options to fulfill her aspiration to pursue a college education.

Source: Field notes, November 2015

Tracking of NK alumnae started in a systematic manner from 2014. Naandi has since been updating its data base every 6 months. So far 10078 Alumnae have been tracked. Of these around 9087 i.e. 90% had completed class X. During this tracking process it was found that many NKs who had failed in class X had taken supplementary exams and completed class X.

Category	Chennai	Hyd	Kanker	Mnagar	Mumbai	Rattlam	Sheopur	Udaipur	Vizag	Apmssdts	Total
Completed 10th	1	3332	733	1456	154	15	655	403	2316	22	9087
Class X failed	0	183	2	26	1	3	224	209	30	0	678
Joined non-operational school	0	176	3	48	0	3	83	0	0	0	313
Total	1	3691	738	1530	155	21	962	612	2346	22	10078

Source: NKDS, Naandi 2016

As per the data provided by NKDS the status of these 10078 NK alumnae is as follows:

- Around 40.8 % (34% are at the intermediate level) are pursuing their education at various levels ranging from collegiate education, technical education and vocational courses
- A small percentage around 1.36% are pursuing professional or vocational courses; this is indeed a very big achievement
- A very small number i.e. 0.7% are employed mainly in the service sector and around 2.5% are self-employed
- NKDS reports that a further 858 NK alumnae have been traced during 2014-15, all of whom are pursuing their education.

Category	Total
Pursuing Intermediate	3427 (34%)
Pursuing Graduation	542 (5.4%)
Pursuing Post Graduation	6 (0.1%)
Pursuing Professional course (B.Tech, Nursing, Bed/ TTC, B.Pharm, Polytechnic, etc..)	70 (0.7%)
Pursuing Vocational course (Computer, Lab Technician, Tailoring, ANM, MPHW, etc.)	68 (0.7%)
In Profession (Engineer, Call Center, Shopping Mall, IT, Stenographer, Teacher, Tutor)	75 (0.7%)
Self-employed (Tailoring, Petty Business)	254 (2.5%)
Others*	5628 (55.8%)
Passed away	8 (0.1%)
Grand Total	10078 (100%)

*. The category 'Others' mostly belong to older Alumnae who have discontinued education or those who are currently not traceable

- *Reflections from alumnae*

During the field visits, we met alumnae in almost all the locations. Except for a few the majority were doing their intermediate or undergraduate courses. There were a few who were in professional engineering courses, one doing her MBA, and a few who were self-employed. These were all confident self-possessed young women, clear-headed and quite clear in articulating their aspirations and ambitions.

While they did not have clear memories of their time as NKs or in the ASCs, alumnae recalled that it felt good to be a NK, they enjoyed the fun atmosphere in the ASC especially at the primary level. Some recalled fondly the good time they had when going on excursions and felt there should have many more such trips.

All the alumnae aspired for collegiate education leading to employment. The jobs they aspired for are mainly what one hears generally from young people- to be a doctor, a teacher, to join the civil service, the police, to work in a bank, to work in the computer field etc.

Alumnae shared their views on how the current ASCs can be improved and their expectation of some inputs/support from Naandi after Class X. (See Annexure 6 for details)

V.6 Are Early Marriages A Thing Of The Past in NK Project Areas?

The Nanhi Kali Team was successful in curbing several child marriages in the district of Sheopur in Madhya Pradesh. Child marriage, which is one of the reasons behind NanhiKalis dropping out of their schools, has been a common phenomenon in the district of Sheopur. The Nanhi Kali team conducted a careful survey which helped them in identifying 16 NanhiKalis who were about to be married off on a holy day. The team discovered the venue where the mass child marriage event was scheduled. The list was submitted to the District Programme Officer of Women and Child Development Department, who issued a letter containing the names of the NanhiKalis, and demanded the authorities to take appropriate steps to put a stop to such activities. The story was published in all the local newspapers who took an active interest in covering the entire process. The Nanhi Kali team has been regularly following up through Home visits, parents' meetings, meetings at village level, and meetings with government departments to ensure curbing the social evil that is Child Marriage. (NK 2014, NK website)

- Changing environment for girls?

In almost all the locations visited there were many more mothers than fathers who participated in the FGDs. In all the locations we visited parents expressed a deep appreciation of the support received from Naandi.

What was heartening as well was that mothers in particular were quite vocal on the need to educate their girls. They all hoped that education would lead somewhere, to a secure and reasonable job. This it seems is their expectation from NKP and Naandi.

Across locations parents were keen that their daughters should complete High School SSC (10th class). Aspirations were for completing higher secondary, and going on to college. Jobs and financial self-reliance were also on their minds. Mothers hoped that their girls would be able to live happier 'better' lives than they had experienced themselves, with the education they are receiving.

Doing their bit

In Hasilpura village in Sheopur, the FGD with around 25 mothers was an engaging and lively discussion on what the community and parents could do to support their daughters education. This village has the first cohort of girls from the village studying in class X. And this is something that everyone present was very proud of. The credit for this the mothers gave to Naandi support.

An active and vocal member in the meeting was the Anganwadi worker, who was exhorting the group to avoid early marriages and to educate girls. We were informed that much has changed in the village and that over the past few years parents have been actively supporting the education of their girls.

The group proudly introduced two mothers who had bought solar lamps so that their daughters who are in high school can continue to study at night. Everyone agreed that as there is no electricity in their house the solar lantern is very useful. Many more women present that they too were considering buying solar lamps. This example was cited to highlight that parents are also willing to spend on ensuring that their girls have a conducive space at home for studying.

The twist in the tale, however, was the expectation that the girls would be able to study at home after completing all their household chores which are considerable. *One mother reported that her daughter studies upto 11pm. She gets up at 4.00am to study. All this while doing housework as well!*

It is here that one felt that the CA/tutor/NKC had a window to get the mothers/community to reflect on the whole issue of division of work at home, the burden of which is borne by girls leaving them very little time for themselves or their study.

One of the expectations of the NKP is that enabling girls to complete class X may have a positive impact

State	District	% of girls married below legal age of 18
AP		28.6
	Hyderabad	5.0
	Mahabubnagar	47.0
Chhattisgarh	Visakhapatnam	22.6
		21.3
Karnataka	Kanker	20.0
		22.4
Madhya Pradesh	Bangalore	14.4
		29.0
Maharashtra	Ratlam	25.9
	Sheopur	51.4
Rajasthan	Mumbai	17.6
		9.2
Tamilnadu	Udaipur	39.9
		35.9
India	Chennai	9.1
		6.6
India		22.1 (26.9 in rural areas and 11.0 in urban areas)
International Institute for Population Sciences (IIPS), (2010), District level Household level Facility (DLHS-3), 2007-08, Mumbai.		

in advancing the age of marriage up to at least the legal age of 18. In 2007-08 when the NK programme started, the percentages of girls married below legal age in Naandi's project locations was fairly high. As per DLHS 2007-8 girls' marriages below legal age in some of the districts where the NKP is being run, ranged from a high of 51.4% in Sheopur district in Madhya Pradesh to a low of 5.0 in Hyderabad district in undivided Andhra Pradesh. See Table 21 for details.

Census 2011 shows that there has been a significant decrease in the decade 2001-2010 from 29.43% to 19.80% as compared to the previous decade 1991-2000 where the decrease was from 32.38% to 29.43%. This positive downward trend masks the disparities between urban (12.50%) and rural areas (23.27%) and among disadvantaged social groups (SC at 24.65% and ST at 23.16%) where the percentages of marriages below legal age are higher than the national average at 19.0.

NFHS-4 data for a select number of states has been released. See Table 22 for details. In the NKP states there has been a significant drop in marriages below legal age.. Even in Madhya Pradesh the percentage has come down by nearly 23 points.

While the NKP cannot claim to have had a direct impact on advancing the age of marriage in its project areas, nevertheless, field level interactions indicate that the support under NKP up to class X has had a positive impact on enabling girls to reach up to class X. In almost all the FGDs, on the issue of marriage, most mothers said that child marriages are a thing of the past, and that the age of marriage has been advancing over the years closer to the legalage. The dominant view expressed was that the NK would be married after she gets an education that leads to a job, which certainly meant education beyond class X. There were, however, a sufficient number of women who also said that marriage after class X would be desirable. *The NKs and alumnae for instance reported that failure in class X exams or in the case of*

State	Urban	Rural	Total	2005-06 Total
Karnataka	17.9	27.0	23.2	41.2
Tamilnadu	13.0	18.3	15.7	21.5
Madhya Pradesh	16.6	35.8	30.0	53.0
Andhra Pradesh	26.3	35.5	32.7	
Telengana	15.7	35.0	25.7	

Source: http://rchiips.org/nfhs/factsheet_NFHS-4.shtml accessed on 21 January 2016

MP in class IX would certainly mean marriage for the girl. Parents they feel will not give the girls a second chance to take the exam and move forward. Alumnae reported that several of their friends who had failed were indeed married off. Data on this issue is not very clear. It needs to be more systematically collected and tracked.

However as the data from the recent NFHS-4 findings shows, marriage below legal age continues to be quite prevalent in the rural areas of 3 Naandi project states of MP, AP and Telengana where it is around 35%. See Table 22 above.

In such a scenario, the challenges before NKP is quite clear. The academic strategy and support for the high school needs to be strengthened as already mentioned to ensure that there are indeed no failures among NKS at the class X or earlier classes. And the proposed expansion of NKP as earlier mentioned in the report should focus on pockets that lag behind state and national trends both on educational as well as other social and gender indicators. Comparative data needs to be collected systematically from the various locations in order to assess the impact of NKP interventions.

A village decision against early marriage

During the field visit to village Ladpura in Sheopur, Madhya Pradesh, one was pleasantly surprised with what we were informed during the FGD with mothers. The President of the village education committee, a senior citizen and a respected community leader also participated.

We were informed that 12 girls from the village had passed class X and all were now studying in a nearby high school in class XI. This is the first batch of girls to go beyond class X

The mothers were clear that they will certainly educate their daughters till at least 12th class. . "Now we send our daughters to Bijpur High School which is some distance away to continue their education. This was not the case earlier. Girls may not get jobs after their education but at least they learn how to lead their lives."

Everyone was keen to inform us that child marriages and even early marriages had stopped in the village. The President of the Village Education Committee reported that the village had decided against child marriage and a resolution had been passed in the village a few years back. He and the women present were very proud of the fact that over the past 5 years there has been no child marriage in the village.

Source: Field notes, November 2015

Continuing education even after marriage

Devudamma is from Bagata tribal community from Dhumriguda in Araku, Visakhapatnam district. She was selected to be a Nanhi Kali when she was in class 6 i.e. at the age of 11 in 2005.

Devedumma is currently in college doing her 2nd year BA. Her journey to reach college is a heart-warming story. She finished her class X in 2009. At that time 15 NKs took the Xth class Board exam and 13 passed; she was one of them.

She had to drop out to support her family. For one year she worked as an agricultural labourer earning Rs. 80 a day. In 2011 she re-joined college to do her Intermediate, paying for it with the money she saved from her wages. Her dream to study further was again shattered.

Her parents got her married after she completed her Intermediate i.e. class XII. Devudamma has been lucky in that she has found an ally and champion in her husband, a mason, who himself failed to complete his undergraduate degree. Devudamma's husband actively supports and encourages her to complete her undergraduate degree. She aims to be a teacher and is confident that with her husband's support she will achieve this goal. Marriage need not always be a dead end!

Source: Field notes December 2015

VI. Community engagement

“Community Mobilisation & School Governance: Promoting and increasing community awareness and participation in schooling is an essential part of Nanhi Kali academic support. This creates a long-term demand for quality, which will help sustain the movement for quality education. In the urban context specific focus will be given to ensure parents and school teachers are drawn to this program. This is more so relevant as there is a general feeling that urban communities are skewed and scattered not necessarily around schools.” - NK website

Interactions with communities at large usually seem to take place when the NK programme is to start in a specific location. The NK team reports that on an average a monthly meeting is held with mothers of NKs. The focus is on exhorting mothers to ensure that the NKs are regular to school and the ASC classes. It was not clear how community participation in schooling in general was being promoted. The thrust of the community level interactions is more on ensuring that the ASC runs effectively and efficiently. During the field visits, it did not seem as if such meetings actually take place on a monthly basis. There does not seem to be any focus on enabling the community/parents to recognize and understand that they can be proactive in trying to improve the government school through participation in the school management committees or parent teacher associations to question or demand better facilities, teaching or improved learning outcomes from the school system

However, the interactions between the CAS/NKCs and mothers observed during the course of the field visits, appeared to be cordial and friendly suggesting that the Naandi field staff have forged good linkages with the NK mothers.

NKP with a commitment to advance girls' education, needs to enable gender sensitivity and understanding to develop within the communities that they work in. Unless some of the core gender imbalances within the household are addressed, the task of promoting girls' education will only be partially fulfilled. One recognizes that these are deeply entrenched societal biases and cannot be tackled easily or casually. A beginning, however, has to be made to initiate discussion and reflection at the family and community level in a sustained manner.

In all the older areas where the programme is over 10 years old, it is our view that dialogue and discussions with communities should be initiated on issues of 'ownership' of the NK processes in the future and the role that they see for themselves as parents/community and to identify the critical inputs/support required from NKP. Some discussion on a possible exit plan needs to be started.

- Strategy for creating community ownership

We were informed that in order to foster community ownership of the NK processes, in some villages Education Committees/village development committees along with separate mother's committees have been formed under the NK programme. See Table23 for details.

In Sheopur interactions with one such committee which had mainly male members indicated that the Committee sees its primary role in selection of NKs, ensuring regularity of attendance of NKs and CAS and overseeing the distribution of kits.

In Udaipur, the senior NKs were invariably from the local area and had a good local network. The focus was on rapport with NK parents rather than community leaders per se.

Sl No	District	Number of Education Committees/ Village Development Committees	No of Mothers' Committee
1	Vizag	79	
2	Ratlam	135	
3	Nasik	4	21
4	Sheopur	129	
5	Mahabubnagar	44	
6	Udaipur	246	
7	Hyderabad	42	94
8	Kanker	139	
9	Delhi		21
10	Bangalore	11	
11	Chennai	8	4
12	Krishnagiri	6	
13	Mumbai		68
14	Chakan		16

Source: NKDS, Naandi, Jan, 2016

In Kanker VECs have been promoted under another Naandi programme (Vidya) and the communities we met were very committed to education for all .They were engaged in mobilizing local resources through grain donations to support improvements in schools. These committees did not particularly emphasise girls' child education and were working on effective RTE implementation.

We were not able to understand what if any is the linkage between the Committees being formed under NKP and the School Management Committee (SMCs), which is a statutory committee to be formed in each school under RTE. This is an area of concern. Naandi field staff one met do not seem to

see the need for any such linkage nor is there any critical thinking on the redundancy of separate village development committees promoted by NKP.

One of the banes of community development work has been the tendency to set up separate and multiple community level structures. This is an area that needs some rethinking. As the NK programme has links with the government school system in that all NKs are girls enrolled in government schools, it may be better to work along with the SMC especially to address the academic and learning needs of the NKs. This could also serve as the forum where feedback from the ASCs can be given both to parents as well as teachers on a regular basis. The lack of such regular feedback and contact between the CA and the school has been commented on by several teachers we met.

The Community Development Fund:

In 2012 as part of the efforts to increase community ownership of the programme a community development fund with contributions from NK parents was mooted. While the purpose and use of such a fund did not seem to be clearly articulated, in some locations local Naandi staff took the initiative to start such a fund.

Some observations from Mahabubnagar

In order to foster and strengthen community ownership of the various NK process, in 2012 attempts were made in Mahabubnagar district to start a community development fund through contributions from NK parents.

Rs200 perNK family was collected and deposited in a separate account to be managed by a parent committee of five members. It is estimated that around Rs. 11 lakhs has been collected in Mahabubnagar district alone. In a few villages the money has been used for construction of a water tank, organizing events for children, giving of presents to winners in games etc.

We were given to understand that there is considerable disquiet among the communities on what to do with the development fund, what to use it for, etc. Committee members from 2 villages visited said that they look forward for inputs and support from Naandi on what to do with the money. One idea given was the starting of computer classes or/and English language classes where the community would take care of the space issue and they hoped that Naandi would meet the costs of a trained instructor.

There does not seem to be any sustained discussion on this fund or what to do with it in the future. The money was collected for one year. It was not done in subsequent years as there was no clarity on the whole issue. There does not seem to be any discussion in NKP on this issue either. Community members seem to expect discussions and to evolve a plan in the future. The community members in both villages felt that Naandi needs to plan on how this money can be effectively used. It would appear that the local community has not taken ownership of the fund nor has it been handed over to them by Naandi.

The question is whether the development of such a corpus could be the first step for a potential withdrawal of NKP from those villages. Clearly the conditions under which such withdrawal will be done need to be planned and thought through carefully as it has long term implications for the implementation of the NK programme.

Source: Field notes, December 2015

VII. Programme Vision, Governance and Management

- Governance and Vision

The NKP growth and spread had been possible because of the collaboration between KCMET and Naandi. The shared vision is ambitious and NKP now has a proven model that can be replicated in diverse geographies. NKP works alongside school systems, to support children in remote locations with crucial additional academic support. The collaboration between KCMET and Naandi is much more than a conventional donor-project holder relationship. The leadership at either end is equally passionate about the cause –ensuring girls' education.

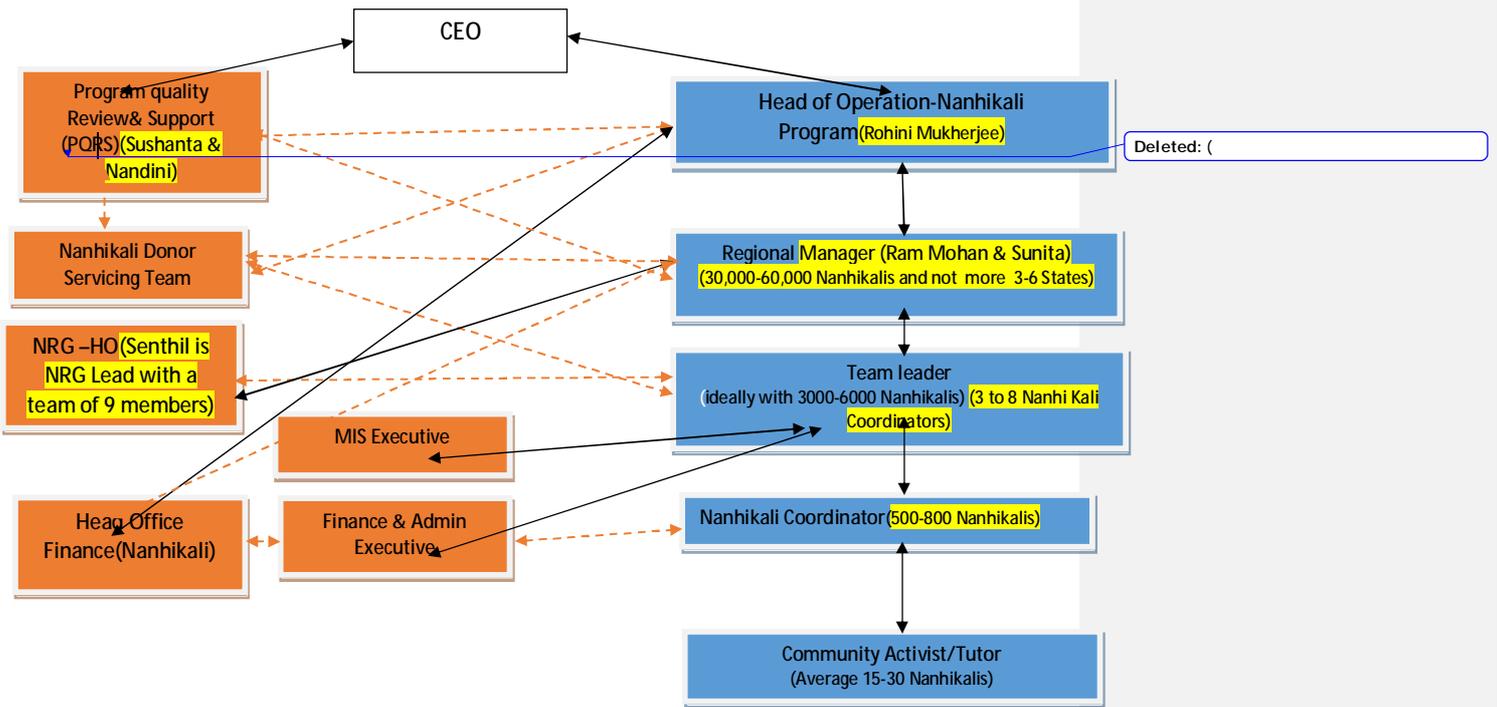
However, it is not clear how the governance structure operates in this situation. Who represents the interests and voices of the girl child needing support for education and her family or community? Are there educationists who can be invited to guide the directions and core processes of NKP? What is the right 'distance' between donors and the programme management? Given that the interventions are in the governments schools, how can the SSA /RMSA or the education departments in the state government be involved in envisioning this program or leveraging more substantially from this civil society investment in what is actually their core responsibility ?

In a programme of this scale and strategic importance, the voices representing best interests of key stakeholders have to be heard. It is presently unclear how this being achieved.

- Leadership

The top management team of the programme is in transition and in our view the dust is yet to settle . The person designated to head the programme has not let go of the responsibilities lingering from her earlier role and the programme appears to be running on its own momentum for the last six months .With the program poised for an exponential growth, the current management team is working on strengthening managerial systems and core operational processes so that they can take the 'load' of the next wave of growth. The real challenge before the team is to improve the quality of work in the ASCs , define measurable parameters for monitoring activities and outcomes and improve MIS and IT.

Organogram with names of key role holders and vacant slots as on 1 nov 2015

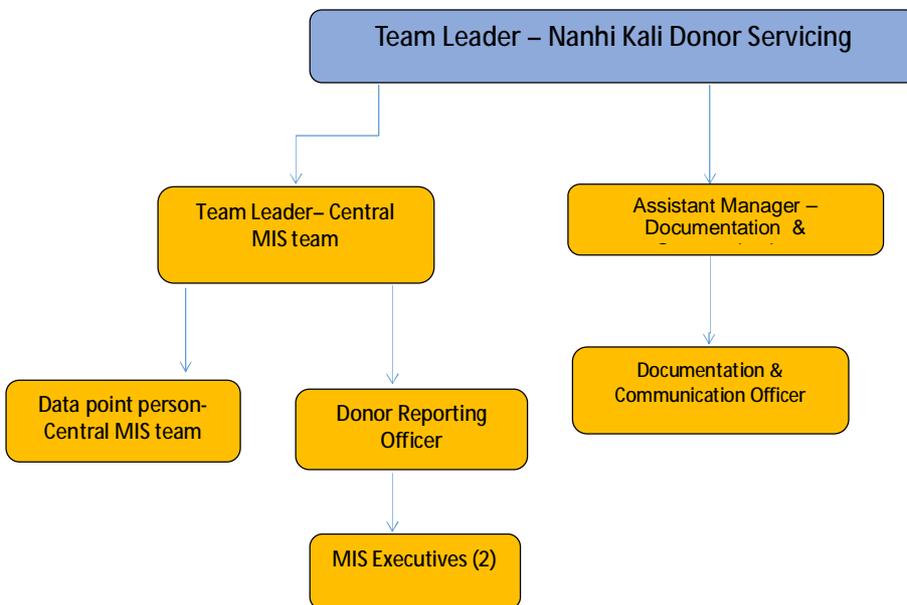


NB: Dotted line is functional relationship and direct line is formal reporting

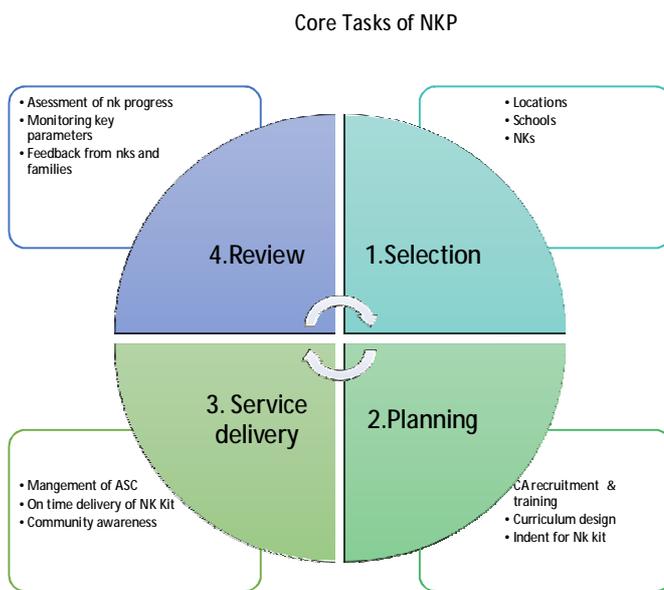
⁹Senthil is based at Chennai and NRG members based at Hyd, Mumbai, Delhi, Ratlam, Kanker & Bangalore. However for the coming academic year 2016 -17 we have changed the structure and the number of staff in the group. The proposed structure would have Dr Preetha as the lead supported by Senthil who would look at Kannada, Telugu and Tamil medium geographical areas and Noorjahan from Mumbai who would manage Hindi, Marathi and Urdu language areas.

There have been recent recruitments to fill the gaps in the teams, especially at the PO/PM levels and they appear to be taking over their responsibilities .

Organogram – Nanhi Kali Donor Servicing (NKDS)



- Key aspects of operations



VII.1 Operations Management

- Management of ASCs: Role of NK Coordinators (NKC)s

NKCs are in effect the frontline of the NKP being full time all seasons employees in the program. They are entrusted with managing the ASC operations and their role appears to have stabilized over the years and is now well understood. Almost all of them have B Ed degrees and come with experience in teaching. They play the crucial role of identifying villages, dialoguing with the communities and the schools and identifying NKs for enrolment. They work closely with CAs, often identifying them in their communities and regularly supervising their work. In the fortnightly review meetings they help CAs plan lessons, train them *in situ* and visit the ASCs at least once month. In each location we could interact with the NKCs and the table below summarizes their views on the internal enablers and challenges they face.

Location	No of NKC *	Joined in 2015	Vacant*	↓Internal Restraining Forces	↑Internal Enabling Forces
Udaipur	12	3	4	<ul style="list-style-type: none"> • Low CA motivation. discipline • Lack of qualified tutors especially at middle and high school level • Poor Lesson planning • ASC timing is short (90mins) • Not all girls in a Class are NKs • Kit is delayed • No TLM or resource materials • SSA 's Activity Based Learning vs Naandi TLM 	<ul style="list-style-type: none"> • Good attendance • Low dropouts • Age appropriate learning • Training of tutors/CAs • TLM & creative methods • Accurate data reporting • Home visits • CAs from the same village • Child empowerment activities • NK clubs, exposure trips • Health camps • Baseline line and Monthly evaluation
Sheopur	16	1	1		
Araku	16	8	0		
Kanker	8	2	0		
Mab'bnggr	9	0	5		
Mumbai	9	5	0		
Hyderabad	18	1	2		
*(As on 1 nov 2015)					

The fortnightly meetings of CAs with the NKCare a key element in the management of day-to-day operations. The meetings are partly devoted to review and planning and partly to knowledge and skill development based on the teaching needs emerging from the ASCs. Given the rapid reality that many CAs are new to their work, this meeting becomes the crucial channel for communication and training.

Some of the experienced NKCs have come together to function as a National Resource Group and to work on curriculum development and train new CAs in facilitation skills. This group has a very important role to play in improving the quality of work at the ASCs. The TPE was not able to assess the effectiveness of the National Resource Group or understand the challenges faced. This is an area that NKP needs to critically reflect on and recast if necessary.

NKCs we met have developed and are maintaining close relationships with community leaders and the school authorities, to facilitate smooth working of ASCs. Often they face pressure from school authorities to turn CAs and Tutors into quasi teachers standing in for absent teachers during school hours. The norm seems to be to help out in the interim and interact regularly with the education department to fill teacher vacancies quickly.

VIII. OVERALL OBSERVATIONS, SUGGESTIONS AND RECCOMENDATIONS

VIII.1 OVERALL OBSERVATIONS

✚ On relevance of NKP

- § Providing material incentives to enhance school participation is a commonly used strategy. NKP perhaps is the only programme of national scope offering academic support as part of the incentive package at the elementary and secondary level. It must be pointed out that the focus on the secondary level is equally pertinent in the current context when universalization of secondary education is a major challenge in the country. Poor learning levels of children studying in government schools has been widely commented upon. In this context NKP academic support is particularly critical for NKS as they all study in government schools
- § The NKP (ASC+Kit) remains highly relevant in its current form in the poorer and remote locations (such as Sheopur, Udaipur, Kanker).
- § The Academic Support Centres are relevant in all locations.
- § The Kit is less relevant in metro urban locations and in government residential schools.

✚ Efficiency

- § There is scope to improve the efficiency of the supply chain for the kit.
- § NKC are a vital element in ensuring efficiency at the ASC level. There are NKC vacancies with resulting overload on available NKCs. This adversely impacts efficiency

✚ Effectiveness

- § The criteria for selection of locations, schools and individual NKS need to be clarified so that the program benefits reach the girls who are most in need. Considerations such as proximity to other Naandi projects or donors' factory/office locations can improve efficiency without adding to effectiveness

✚ Impact

- § Project outcomes have not been adequately quantified to rigorously test impact. Control group data though available has not been compiled to assess impact. This in turn comes in the way of further innovation in programme design.

✚ Sustainability

- § The path to increase donor support is now well established and the financial sustainability through donor support seems assured as of now. NKP is nowhere near local sustainability and proposes to continue and grow with donor support. It is to be explored how users' stake in the project can be improved especially in locations like Mumbai and Hyderabad. A well-considered exit plan is one way to ensure sustainability.
- § Thanks to NKP and the many initiatives by local governments and national projects like SSA girls are being enrolled in Primary schools. NPK continues to be important because it is discovering ways to ensure that girls continue with schooling and convert the educational opportunity to move beyond the social and economic constraints they are now grappling with.

VIII.2 SUGGESTIONS AND RECOMMENDATIONS

- *Need Based Choice of NK Locations*

It could be reasonably argued that the programme could and perhaps should have been concentrated in one district, not even in one state, where the population of eligible girls would be well over the present attainment of one lakh students, in order to 'blanket' the population and catalyse significant change across the whole population. Alternatively, it might in retrospect be argued that the somewhat random choice of locations now provides a useful body of evidence as to what does and does not work in different types of community.

Irrespective of the merits or demerits of what has happened, however, we suggest that in the next phase of NK, where the aim is to reach one million girls, the choice of locations should be based on the need, as reflected in the available metrics on marriage age and other indicators, preferably disaggregated to a district, block or even more granular level (like village or Panchayat).

This may mean that NK has to enter less receptive areas, where both the education authorities and school head teachers and staff may be more defensive and less willing to allow NK to use their premises, or may be anxious to avoid competition with their own after-school tutorial classes. If NK is to become a genuinely national programme, however, these difficulties should be confronted and overcome.

- *The kit*

The kits are seen as an important and tangible symbol of the NK programme, and major changes should only be made after detailed examination of the various options, and in particular of their costs.

It is likely that many of the logistics costs would not be changed even if several items are dropped, because the costs are a function of the numbers of separate kits to be delivered, regardless of their content.

We recommend that the following possible changes should be considered,

- § Items in the kit be based on local needs and factor in the suggestions from the users
- § Procurement should be decentralized to appropriate regional areas, to reduce transport costs and time, and to facilitate local variations. (this possibility will be examined as part of the proposed Cranfield study as described below)
- § The kits should be discontinued for classes' six to nine, and should be continued only for the primary level, with some modifications.
- § The kits should be phased out altogether, and should be discontinued forthwith for new ASCs
- § The NKP be tested in some new areas with and without the kit.

- Ø Possible Detailed Study Of Kit Supply Chain

If the kits are to be continued, regardless of their exact content, and if the programme is to reach one million girls in the next few years, it is vital that the whole process from determining the correct items to be included, procuring them, making up the individual kits and then delivering them on time to the ASCs and the girls for whom they are intended, should be both effective and efficient.

The Cranfield University post-graduate programme in Logistics and Supply Chain Management has been ranked first out of all programmes in this field, outside the USA. The programme also includes an elective in 'humanitarian logistics', which attracts students who have a particular interest in not-for-profit operations. A practical results-oriented and closely supervised field project is an important part of this programme, and Cranfield plans to include a study of the NK kit supply chain system, along with specific recommendations for improvement, as one of the projects.

This study would start in mid-April, with desk-based research and the development of a detailed plan. The student would then work in India from May to early August, and would complete and submit her or his report and recommendations in early September.

It is to be hoped that the results of this proposed study will lead to substantial improvements in the kit supply chain as it now is, and, more important, will lay the foundations for its future efficient and effective expansion to many more ASCs.

- *Strengthening the ASCs*

- ∅ Choice of School Type is an issue to be addressed so that a balance between large and small schools is maintained.
 - It is a challenge to run an ASC for a Primary school in a remote location with less than 20 girls across levels (we found many such schools even in our small sample). These schools are short staffed and poorly monitored. In such a situation the presence of an ASC offers a ray of hope by extending academic support for the girls. It would be important to map the number of such locations across various NK states and treat them as special focus areas requiring close monitoring and on-site academic inputs from NKC/resource persons.
 - Operational efficiency and academic quality will improve if the focus is on larger schools which have classes 1-10. It can be ensured that all girls are covered in each grade and four or five ASCs can be located in the same space, offering opportunity for closely supporting school administration.

These are difficult choices to be made and it is suggested that Naandi debate the pros and cons of the above with its project teams to decide on a course of action

- ∅ We found that the pedagogy designed for PS ASCs was well understood and practiced, especially by the more experienced CAs. There is scope to improve on the tracking progress of individual NKs and supporting them to reach age-appropriate academic levels. Since this is an area of strength in Naandi we suggest that the methods be used rigorously in NK also.
- ∅ The pedagogy for MS and HS ASCs needs to be strengthened. We strongly recommend that the National Resource Group of Naandi works with NK resource persons to create appropriate pedagogy to strengthen ASCs especially at the Middle and High school levels
- ∅ We suggest Naandi consider inclusion of life skills, health education and career guidance through strategies such as summer camps, NK clubs and so on.
- ∅ Parents, teachers and alumnae have recommended the introduction of subjects like English, especially from the middle school level. These should be considered seriously. Alumnae made

several suggestions for improvement in current ASCs- Telugu language teaching for Urdu speaking NKs, better math teaching, English across the board, soft skills, extracurricular activities, etc.

- *Support after class X*

Ø In order to provide the NKs with a fighting chance of avoiding early marriage and breaking out of gender stereotypes, Naandi may consider introducing a vocational/ employment oriented skill development programme after class X/XII; career counselling and guidance, self defence, soft skills and employability. All these suggestions could be factored into the NK 2.0 version of the programme that Naandi has already piloted.

- *Exploring and developing an exit strategy*

It is suggested that Naandi debate and develop criteria for an exit strategy. This can be tested in some locations. For instance, in some urban locations in Mumbai and Hyderabad families seem not only committed to girls' education but also able to meet the costs of tuitions and so on. And in residential schools such as the KGBVs or Ashram schools of the ITDA the NK does not seem to bring as much additional value as it would in more needy locations. What is now required is a 'rationalization' to consolidate the work, based on criteria that are openly spelt out and at the sametime consider setting a timeframe for exit from older locations

- *MIS Accuracy and use of data*

Ø The field teams need orientation on the MIS system and its up-gradation. This is a top priority for managing programme expansion and kit supply efficiently in the coming years. We recommend the introduction of tablets at the field level so that data entry is faster and more accurate.

Ø A lot of data is collected laboriously. At the ASC level CAs spend their precious time on this task which could have been better used in the ASC. AS mentioned several times in the report we did not see the systematic and strategic use of this data for programme management. One of the issues is that project staff often do not know how to use the data. We suggest NK staff training should include sustained inputs on how to analyze field data and the implications this would have for programme implementation, review and monitoring.

- *Governance and management*

Ø Going forward, given the ambitious growth plans, we suggest the formation of an advisory group with representation from different stakeholders to guide the overall course. Currently there seems to be no channel available for stakeholders to voice their views on NKP. This should be remedied quickly.

Ø A team building effort at HO and Regional levels would be useful at this stage.

- teams will have to be oriented on new and ambitious goals, so that a common perspective and shared vision is developed

- Evolve mechanisms to improve internal coordination in order to manage the growth envisaged.

Structured assessment of impact

- Ø We strongly recommend a study to assess impact on all the major programme aspects - on schooling systems, on academic and general education for NKs and the attitude of communities towards education of the girl child.
- Ø The NKP should include regular and rigorous evaluation. This should include not only NKs own achievements and progress within the system, but also some comparison with 'untreated' control groups, of girls from similar backgrounds who are not NKs.
- Ø In the proposed expansion of NK being considered, it maybe useful to include a longitudinal study of NKs tracking them from class3 or4 when girls are inducted as NKs through secondary school and upto the age of 21. Such a longitudinal study would enable management to map and understand trends across the country.¹⁰

IX. To test some hypotheses of Naandi about Project Nanhi Kali and suggest areas of improvement

1. Support to girls post Class 10 goes a long way in helping them to be more economically and socially productive

NKs and NK alumnae have expressed a desire for such support beyond class X. Naandi has initiated experiments in Hyderabad and Kanker on NK 2.0 version. A model for a resource support centre for adolescent girls is under testing. The adolescent girls' survey may also offer inputs on what is really the need.

Many questions can be raised on this idea. For instance,

- If it is support to further education, will it be based on informed choice by the NKs and their families?
- If the goal is empowerment, are girls at fifteen or sixteen articulating their choices, and renegotiating the prevailing norms of patriarchy?
- If the service is on demand, will/should the user pay /contribute in some way, to feel greater ownership?
- If the NKP tackles economic and social issues, can it leverage available government and private programmes in each location?
- If the goal is self-sufficiency, can it link activities to mainstream/market based options ?

In our view KCMET-Naandi should then be offering customizable support –not entirely free. On a larger scale this would mean a menu from which the girls make a choice and technology platforms to support the front-end delivery of services. It should demonstrate a model that is quite different and effective,

¹⁰One such example is the Young Lives project in which India is one of 3 participant countries where a cohort of children are being tracked and studied over a 10 year period. CESS Hyderabad anchors the India study.

avoiding the pitfalls of many large scale programmes. One option is to identify and build a corps of ex-CAs /tutors who will manage these centers and make a living as franchisees of NKP with some back end support in the initial phase.

A 'senior' version of ASCs at Higher secondary level and colleges is a temptation to avoid at all costs; the aim must be to expand 'horizontally', to reach more girls at the primary and secondary level, not 'vertically', by offering more support to the same cohort of girls.

2. Academic support to girls at primary level has helped greatly to improve learning outcomes of the children

In the absence of control group data systematically gathered and compared it is not possible to conclude on this issue. What we have seen in the field indicates that the ASC support has helped the majority of the NKs merely to 'hang in there' rather than emerge as winners. We also observe many variations within locations and between locations.

Our observations seem to indicate that PS ASCs have been beneficial to the NKs, but there is no concrete evidence and control data to test this hypothesis.

We suggest that RECALL be used rigorously and RCTs on the lines of STRIPES be made a regular part of NKP at all locations.

3. NK Kit to primary school girls has been one of the key motivating factors for girls to continue going to school and ASC.

We found evidence to substantiate this view in interactions with various stake holders

We see the primary level kit as a valuable 'entry point' to meet and know the parents and regularly interact with them. This relationship becomes a key factor in pre-empting and reducing dropouts, especially at critical junctures like entry to 6th class and 8th class.

4. NK kit for middle and secondary schools has had mixed response

Items which have to be 'tailor made ' for each child are not so easy to organize. The time lag between measuring and actually reaching the item is so long that sizes are bound to change. Also girls between 10 and 14 are in the process of discovering their personal preferences and asserting their individuality. Uniforms, shoes seem dull and boring, especially in urban and more developed locations. They are still much needed in locations with acute poverty.

In all locations, school bags, notebooks, stationery, sanitary napkins and study guides were much appreciated. We found evidence to substantiate this view in interactions with stake holders, especially in places like Mumbai, Mahabubnagar and Hyderabad. MS-HS Kits are still much appreciated in Udaipur and Sheopur.

5. Focus needs to be on high quality tutors, strong pedagogy and curriculum support rather than providing stationery and sanitary material

In our view, the questions that needs careful consideration are:

- What is the dream and hope about the knowledge, skills, attitudes and beliefs of an NK who has been through 8-10 years of support?
- How would she stand out from her peers who are in schools, without Naandi support ?

These aspirations would then have to be used to shape the ASC processes; the goals of ASC have to be spelt out in a SMART format so that all key actors know what is being attempted. These goals will hopefully be more ambitious than completing and passing the Xth class or mandatory school attendance.

We found that this view is supported by data on the ground. The assumption that ASC is beneficial has to be constantly tested against ground reality and the Programme goals and not taken as a matter of faith.

6. Wherever Naandi has strong community involvement in the form of Mothers and other Committees, it has had a positive bearing on quality of education at the government school

This view cannot be substantiated in anyway in the present situation. The connect between the mothers and others committees with the government school is very weak and at best indirect. Further NKP itself does not work towards improvements in the quality of education in government schools. We found no evidence to support this hypothesis

Note: "testing" of any of these hypotheses requires properly framed research studies that were not part of the TPE. What is offered above is merely impressionistic.

Annexures

Annexure 1: List of ASCs visited as part of TPE			
Sl No	Location	ASC Code	School
1	Hyderabad	ASC6010230	GGHS HUSSAIN ALAM
2		ASC6010233	GHS TAPPACHABUTRA
3		ASC6010237	GOVT HS(G) FIRST LANCER
4	Sheopur	ASC15010180	G.P.S. NITANBAS
5		ASC15010222	G.P.S. SEHASRAM (GIRLS)
6		ASC15010235	GOV. PS. LADPURA
7		ASC15010256	GPS HANISLPUR
8		ASC15010268	HS MAKRAVDA
9		ASC15010270	GOVT. PS, MAKRAVDA
10		ASC15010289	G.P.S. BARDHA BUJURG
11		ASC15010295	P S VIDYA NAGADI
12		ASC15010330	G.P.S. SARSALLI
13		Mahabubnagar	ASC7010034
14	ASC7010041		ZPHS, UTKOOR
15	ASC7010094		PS ANANTHAPUR
16	ASC7010134		UPS Ausolonipalli
17	Mumbai	ASC1010007	AKURLI-2 MARATHI SCHOOL
18		ASC1010014	BARVENAGAR SCHOOL NO. 2
19		ASC1010057	Prabhadevi Hindi School
20	Udaipur	ASC16010460	MS LILDI -MADRI
21		ASC16010132	PS MALVANFALA-
22		ASC16010240	GPS SAGWAN PHALA-
23		ASC16010486	UPS Baidas-25th
24		ASC16010382	G PS DAND PHALA
25		ASC16010392	BAGHPURA
26		ASC16010037	G.U.P.S.TALAI-
27		ASC16010155	G PS KHOKHARI KALA
28		ASC16010213	PS Bhagatfala-
29		ASC16010390	GGUPS Magvas-
30		ASC16010128	PS Som-
31	Araku	ASC17010157	TWAGHS GUDA
32		ASC5010226	TWAGHS GANNELA
33		ASC5010227	KGBV Yendapallivalasa
34		ASC5010231	RCM Yendapallivalasa
35		ASC17010004	TWAGHS PEDAGARUVU
36		ASC17010072	KGBV HUKUMPET
37	Kanker	M.S. KURRI	M.S. KURRI
38		M.S. PUTTERWAHI	M.S. PUTTERWAHI
39		M S JEPRA	M S JEPRA
40		M.S. GOTITOLA	M.S. GOTITOLA
41		M.S. DANWARKHAR	M.S. DANWARKHAR

Annexure 2: Enrolment by school management type at elementary level (%) in NKP states

	State	Primary level (1-5)			Upper primary (6-8)		
		Govt management	Private aided	Unaided	Govt management	Private aided	Private unaided
1	AP	54.27	3.58	40.43	61.24	3.84	33.92
2	Chhattisgarh	73.38	1.31	24.87	78.94	1.52	19.38
3	Karnataka	51.67	9.23	39.02	53.29	16.05	30.62
4	Madhya Pradesh	62.40	0.86	35.28	68.42	0.74	30.19
5	Maharashtra	47.0	26.67	25.75	23.93	58.62	17.30
6	Rajasthan	42.99		49.05	50.49		49.04
7	Tamilnadu	42.99	17.16	39.74	48.21	26.32	25.42
8	Telangana	43.67	2.29	52.13	51.73	2.53	45.27
	India						

Source: Elementary Education in India: progress towards UEE, Flash Statistics UDISE-2014-15, NUEPA

Annexure 2a: Enrolment by school management type at secondary level (%) in NKP states

	State	Dept of Edu	Tribal / social welfare	Local Body	Private aided	Un-aided	Other govt mgt	GOI	Un-recog	Madrassa recog	Madrassa unrecog
1	AP	7.16	4.5	49.30	4.28	33.24		0.55	0.93		0.01
2	Chhattisgarh	49.78	27.04	0.65	2.29	19.33	0.07	0.77			0.06
3	Karnataka	36.4	2.31	0.36	31.66	28.43	0.04	0.77	0.03		
4	Madhya Pradesh	49.02	14.49	0.15	1.95	33.42	0.02	0.94		0.01	
5	Maharashtra	0.04	1.10	4.67	75.25	18.28		0.54	0.11		
6	Rajasthan	46.15	0.12			52.40		0.66		0.07	0.59
7	Tamilnadu	41.71	1.69	2.56	27.52	23.61	0.26	2.65	0.12		0.03
8	Telangana	8.55	4.64	39.92	2.69	43.51	0.13	0.41		0.13	
	All India	37.21	2.48	3.47	22.12	32.52	0.14	0.86	0.53	0.54	0.13

Source: Secondary Education in India: progress towards UEE, Flash Statistics UDISE-2014-15, NUEPA

Annexure 3: TRANSITION

SC/ST Transition from elementary to secondary and secondary to higher secondary

Transition from Elementary to Secondary level						
State	SC			ST		
	Boys	Girls	Total	Boys	Girls	Total
AP	95.43	95.54	95.49	91.28	95.59	93.34
Chhattisgarh	89.25	90.8	90.03	83.76	86.81	85.28
Karnataka	94.71	94.37	94.55	91.19	91.29	91.24
Madhya Pradesh	82.74	71.42	77.12	73.11	67.47	70.24
Maharashtra		99.76		98.63	94.69	96.83
Rajasthan	57.9	56.04	57.13	57.27	53.22	55.51
Tamilnadu	89.19	89.3	89.24	81.41	82.48	81.89
Telangana	92.5	93.12	92.81	89.21	89.87	89.53
Source	http://www.dise.in/Downloads/Publications/Documents/SecondaryFlash%20Statistics-2014-15.pdf accessed on Jan 15 2016					

Transition from Secondary to Higher Secondary level						
State	SC			ST		
	Boys	Girls	Total	Boys	Girls	Total
AP	81.5	80.74	81.12	91.17	87.32	89.29
Chhattisgarh	56.38	55.37	55.87	53.5	51.33	52.38
Karnataka	42.73	46.13	44.35	43.94	48.86	47.3
Madhya Pradesh	50.01	47.23	48.78	43.94	45.40	47.3
Maharashtra	76.28	77.79	76.98	71.87	70.53	71.27
Rajasthan	57.9	56.04	57.13	57.27	53.22	55.51
Tamilnadu	68.69	80.55	74.58	71.54	74.06	72.75
Telangana	72.66	75.73	74.2	75.98	79.63	77.67
Source	http://www.dise.in/Downloads/Publications/Documents/SecondaryFlash%20Statistics-2014-15.pdf accessed on Jan 15 2016					

Annexure 4: Drop out

Annual Average drop-out rate at elementary level									
State	Primary level					Upper primary level			
	2011-12	2012-13	2013-14			2013-14	2013-14	Boys	Girls
			Total	Boys	Girls				
AP	5.65	3.18	4.35	4.31	4.39	3.36	3.78	3.46	4.12
Chhattisgarh	3.14	4.14	1.42	1.45	1.38	5.42	3.8	4.09	3.51
Karnataka	2.61	2.97	2.32	2.42	2.21	5.05	2.51	2.31	2.73
Madhya Pradesh	6.25	6.11	10.14	9.91	10.4	8.53	11.7	9.88	13.57
Maharashtra	0.58	0.97	0.53	0.51	0.59	1.74	0.67		1.5
Rajasthan	5.51	7.97	8.39	7.76	9.12	4.42	6.03	4.49	7.95
Tamilnadu	1.55	4.06	0.46	0.53	0.39	1.24	4.52	4.38	4.7
Telangana			5.81	6.04	5.57		4.71	4.63	4.79
All India	5.52	4.67	4.34	4.53	4.14	3.13	3.77	3.09	4.49
Source	Elementary Education in India: progress towards UEE, Flash Statistics UDISE-2014-15, NUEPA								

Annual Average drop-out rate-Secondary level						
	Boys		Girls		Total	
	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14
AP	12.21	11.95	13.25	13.37	12.72	12.65
Chhattisgarh	14.82	24.1	14.89	22.72	14.86	23.41
Karnataka	40.7	28.49	39.07	26.57	39.92	27.57
Madhya Pradesh	11.16	25.21	16.39	27.91	13.63	26.47
Maharashtra	16.61	15.04	15.72	13.76	16.2	14.47
Rajasthan	13.06	17.85	14.49	20.06	13.65	18.72
Tamilnadu	14.26	16.13	5.86	7.99	10.2	12.2
Telangana		17.99		16.86		17.43
All India	14.54	17.93	14.54	17.79	15.54	17.86
Source	Secondary Education in India: progress towards Universalisation , Flash Statistics UDISE-2014-15, NUEPA					

Annual Average drop-out rate-Secondary level, 2013-14			
	Girls	SC girls	ST girls
AP	13.37	11.6	6.11
Chhattisgarh	22.72	24.57	26.55
Karnataka	26.57	27.03	26.56
Madhya Pradesh	27.91	36.08	34.35
Maharashtra	13.76	16.42	31.32
Rajasthan	20.06	25.95	22.48
Tamilnadu	7.99	11.59	14.2
Telangana	16.86	15.24	14.8
All India	17.79	18.32	26.96

Source: Secondary Education in India: progress towards Universalisation, State Report Cards, UDISE 2014-15 NUEPA

Annual Average drop-out rate-Secondary level 2013-14						
	Scheduled Caste			Scheduled Tribe		
	Boys	Girls	Total	Boys	Girls	Total
AP	11.44	11.6	11.52	8.1	6.11	7.14
Chhattisgarh	24.25	24.57	24.51	27.93	26.55	27.22
Karnataka	28.58	27.03	27.85	28.85	26.56	27.78
Madhya Pradesh	31.35	36.08	33.53	34.55	34.35	34.45
Maharashtra	18.22	16.42	17.39	21.31	31.32	32.32
Rajasthan	23.82	25.95	24.42	21.39	22.48	21.87
Tamilnadu	19.79	11.59	15.78	17.22	14.2	15.78
Telangana	16.78	15.24	16	16.28	14.8	27.2
All India	18.96	18.32	18.66	27.42	26.96	27.2

Source: Secondary Education In India, Progress towards Universalisation, State Report cards, UDISE 2014-15,NUEPA

Annexure 5 Feedback from interactions with NKs

Writing topic	What I want to be, why I want to be a Nanhi Kali			
	NKs of classes 6-10 who participated	Did not writing anything (10.8)	Wrote correctly (grammar, expression etc) 54.9%	Wrote with mistakes 37%
MP Sheopur (5 villages)	96	14	69	13
AP Araku (4 villages)	173	18	87	68
Telangana Mahabubnagar (2 villages)	44	1	11	32
Total	313	33	167	113

Source: Field notes, November-December 2015

Locations		Likes	Dislikes
Udaipur	PS	books ,pens and caps, lessons, kit, teachers , clearing doubts , TV , games sitting in a circle, singing	early morning classes in cold season, quarrels in school, home, nil ,wild animals, running
	MS	nil	Nil. Very shy and unwilling to say anything
	HS	nil	Sweater color (Black)
Sheopur	MS	Like the teacher, wish to study, become teachers ,doctors, police	nil
	HS	material/kit,NK teachers, learning good behavior ,respect for elders ,guests, wish to study,become something, become teacher,make parents proud.	50% not keen to write
Araku	HS	Like being NKs, like the kit-hope to complete studies and find a job- teacher doctor nurse police	Nil
Kanker	PS	NKP, friends, games, NK kit	Being woken up too early in the morning , NK dress
	HS	classes, dance, TV, Dhoni , NK kit	Teacher beating, school
Mahabubnagar	PS	games, study, school, ASC	
	HS	kit, classes	Child labour, Some girls are out of school
Mumbai	HS	extra classes, tuition, want to study and to find a job	Nil
Hyderabad	PS	Teachers are very friendly and create good learning environment. Teachers are more helpful in clearing doubts. We learn other topics like nature, GK, issues of girl child, Soft skills and how to maintain self discipline.	Nil

Annexure 6: suggestions from Alumnae

Alumnae suggestions on Improvements to be made in the current ASCs

- In Hyderabad they emphasized the need for Telugu classes as Muslim students find it very difficult to handle Telugu.
- Need focused inputs in math and English at the middle and high school level
- English language teaching was top priority with all the Alumnae. English teaching is of very poor quality in the government schools they go to.
- Introduce workbooks on the lines of those used at the primary level especially for the middle school level
- Generally provide more practice and study material at the middle and secondary level
- Overall need to be better equipped to enter high school in particular
- Provide STs to all girls who have reached menarche irrespective of which class they are in
- Need more inputs on personal hygiene/health, issues relating to girls, how to speak and interact confidently. Currently there is little focus on this
- Extracurricular activities should be promoted in all ASCs and for all levels.
- Need to get better equipped/ experienced tutors to handle the middle and high school ASCs.
- Intensive coaching needed before the Class X Board exam

Alumnae recommendations for post Class X support

The one overwhelming message from the alumnae one met is the need for some support/inputs from Naandi after they have graduated from the Nanhi Kali programme i.e. class X. Some of the ideas of the alumnae are very much in line with and can inform the designing of NK 2.0 version that is being considered by Naandi.

Ideas for the type of Post class X support required

- Financial support to pay college fees and to buy books. Information on possible sources of financial support
- Career counselling and guidance. Placement if possible (*MH, NB for 'Worktree'*)
- Spoken English lessons
- Basic Computer training
- Vocational skills/ training in the form of a well-structured course
- How to write a CV, How to face interviews
- Self-defence classes
- General information on laws etc.