

Parivaar Education Society



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Parivaar Seva Kutirs in Madhya Pradesh : Impact Report

Seva Kutirs : Impact Assessment over last One Year

We have produced below a brief report on the educational and also nutritional improvements in our 100 Seva Kutirs, which we have seen in the last 1 year.

Education Background:

Children between ages 4 and 14 years attend our Kutirs. This is a highly heterogeneous group of learners and we need to equip our teachers well to enable them to teach this group effectively. Our teachers also need well-defined structures and continuous handholding and so the major focus of our education team right now is to build and implement such structures .

Approach

With children in age group 4-14 and huge learning disparity that accounts to issues of multi-grade and multi-levels within the learning community. Hence the teaching learning engagement cannot be organized by age or by the existent grades they are in. Thus we have defined learning outcomes by learning levels and assess children accordingly.

The Pedagogy and teaching engagement for the same content has to be different for each learning level. Example Alphabets introduced to age 3-7 will be a play-way engagement as compared to a age group 10 which will be through creating need for the learner.

Teachers and training:

Grooming of teachers has been the major focus in this initial phase. All teachers have been carefully selected from the villages itself. Majority of these teachers are youth who have done their graduation /passed class 12 / pursuing graduation. These selected teachers undergo trainings held at regular intervals of 2 to 3 months. Also, there is a continuous on-site guidance process which is undertaken by the education coordinators who visit the Kutirs regularly and help and guide the teachers.

- Community visits- to increase the strength of the Kutir by motivating parents and also to increase strength of the government school.
- Assessing the teachers improvement- Regular assessment is held to track the advancement in teachers.

Activities conducted apart from academics:

- Yoga
- Meditation
- Festival celebrations
- Art and craft
- Sports : Athletics and Sports

We hold baseline assessment around 1 month after the starting of the Kutirs. And then subsequent assessments are held 6 months after the baseline assessment. **We have produced below the results of these assessments for the 100 Seva Kutirs.**

Total No. of Children in these 100 Seva Kutirs : 8100

Level wise distribution of these 8100 children:

| | English | Maths | Hindi |
|----------------|---------|-------|-------|
| Level 1 | 3645 | 3052 | 3837 |
| Level 2 | 2834 | 3095 | 2658 |
| Level 3 | 1621 | 1953 | 1605 |

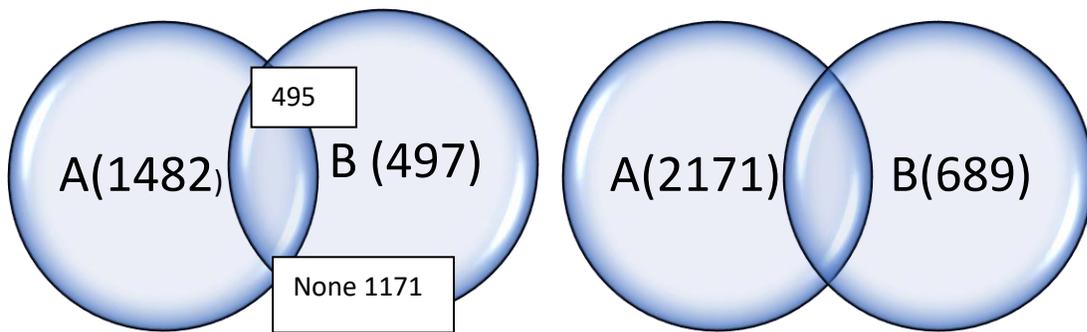
Analysis : Baseline and Assessment

Level 1 English : (n-3645)

Skill A: Able to identify alphabets A,a

Skill B: Able to identify objects –Cat,Apple,Gun

| | Baseline | Assesement |
|----------------------------------|----------|------------|
| Children who knew skill A | 1977 | 2956 |
| Children who knew skill B | 992 | 1474 |
| Children who knew both | 495 | 785 |
| Children who did not know either | 1171 | 0 |



- In the assesement all children in the category knew either skill A or B. Children who knew both the skills increased by 290 during the period.

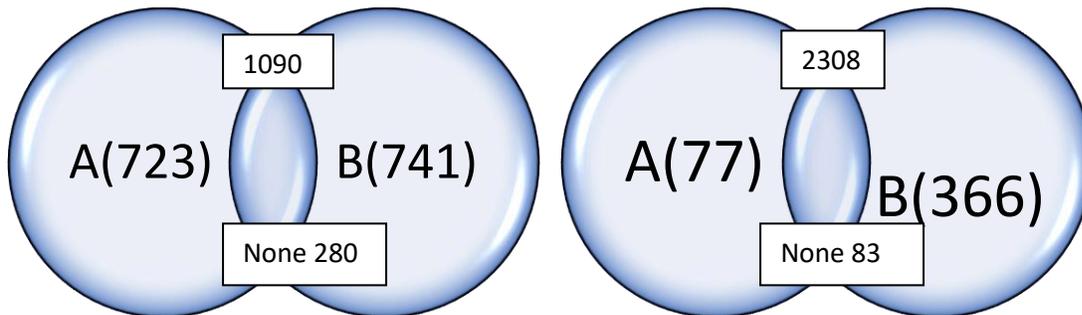
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Level 2: English None 0

Skill A: Able to recognize words like BOX,SUN,BAT

Skill B: Able to recite the names of fruits, vegetables, week

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 1813 | 2385 |
| Children who knew skill B | 1831 | 2674 |
| Children who knew both | 1090 | 2308 |
| Children who did not know either | 280 | 83 |



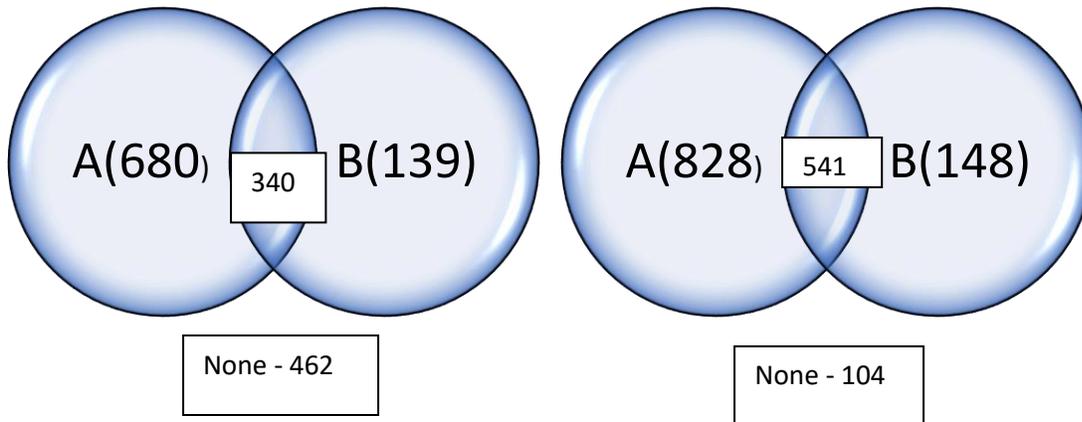
- In the assesement, number of children who did not know either of the skills reduced by 197. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 1218 during the period.

Level 3: English (n-1621)

Skill A: Able to recognize words like BOXING,SUNNY,CYCLE

Skill B: Able to make sentence and paragraph

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 1020 | 1369 |
| Children who knew skill B | 479 | 689 |
| Children who knew both | 340 | 541 |
| Children who did not know either | 462 | 104 |



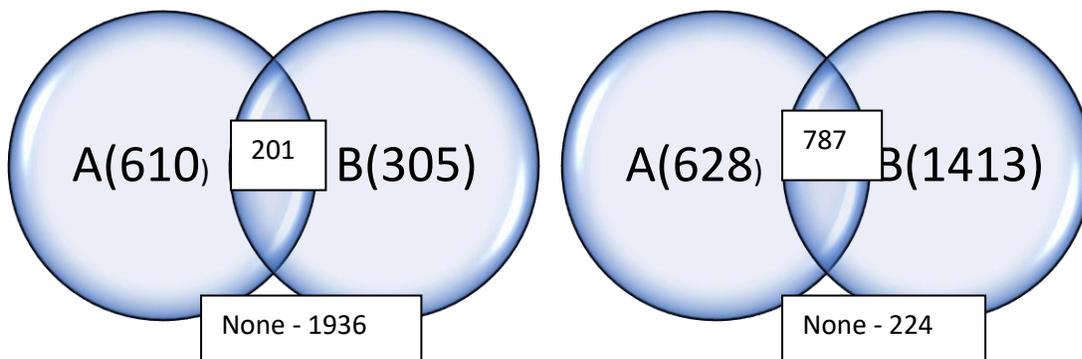
- In the assessment number of children who did not know either of the skills reduced by 358. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 201 during the period.

Level 1: Maths (n-3052)

Skill A: Able to read numbers 1,2,3,4,5,6

Skill B: Able to count objects[1-10]

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 811 | 1415 |
| Children who knew skill B | 506 | 2200 |
| Children who knew both | 201 | 787 |
| Children who did not know either | 1936 | 224 |



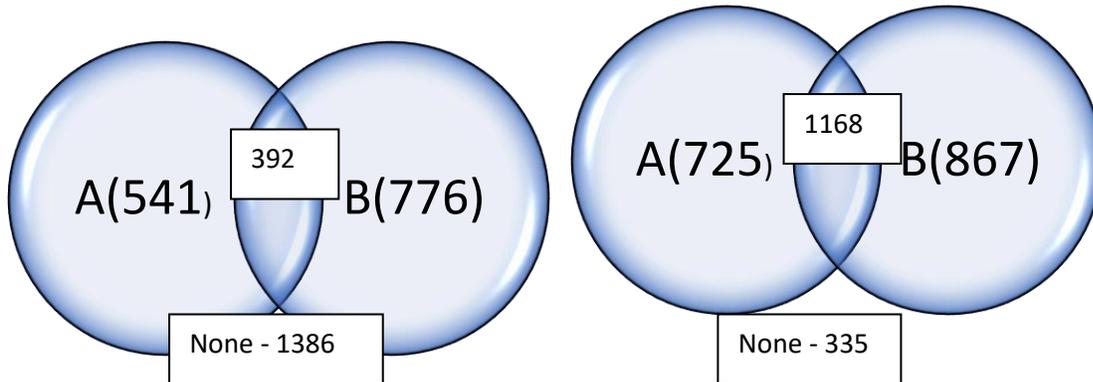
- In the assessment number of children who did not know either of the skills reduced by 1712. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 586 during the period.

Level 2: Maths (n-3095)

Skill A: Addition Subtraction without carry,
Simple multiplication

Skill B: Tables up to 10

| | Baseline | 1 st Assessment |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 933 | 1893 |
| Children who knew skill B | 1168 | 2035 |
| Children who knew both | 392 | 1168 |
| Children who did not know either | 1386 | 335 |



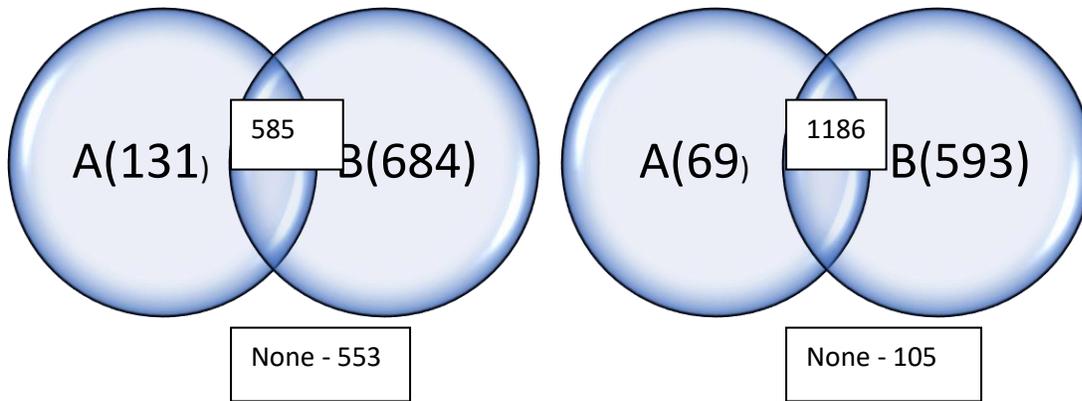
- In the assessment number of children who did not know either of the skills reduced by 1051. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 776 during the period.

Level 3: Maths (n-1953)

Skill A: 3 digit multiplication and division

Skill B: Identify 3 digit numbers

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 716 | 1255 |
| Children who knew skill B | 1269 | 1779 |
| Children who knew both | 585 | 1186 |
| Children who did not know either | 553 | 105 |



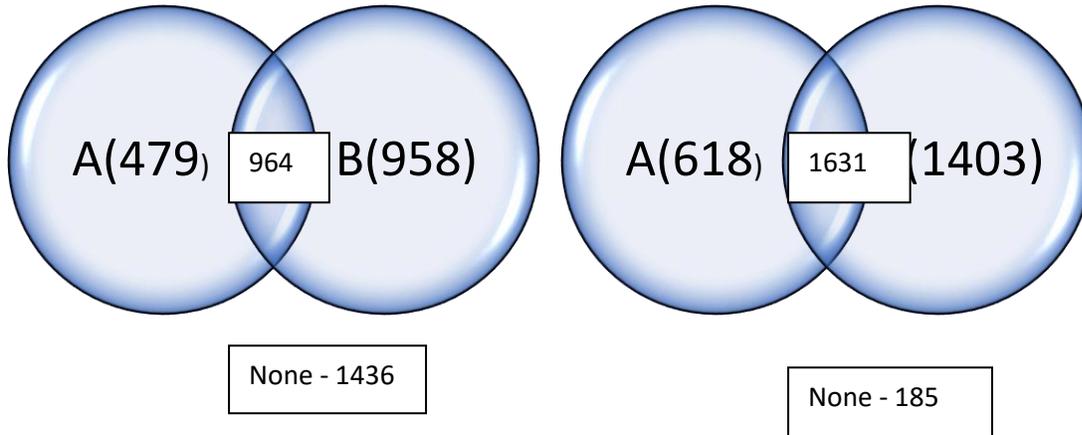
- In the assesement number of children who did not know either of the skills reduced by 448. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 601 during the period.

Level 1: Hindi (n- 3837)

Skill A:Able to read and write alphabetsन, श, र

Skill B:Reciting varnamala

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 1443 | 2249 |
| Children who knew skill B | 1922 | 3034 |
| Children who knew both | 964 | 1631 |
| Children who did not know either | 1436 | 185 |



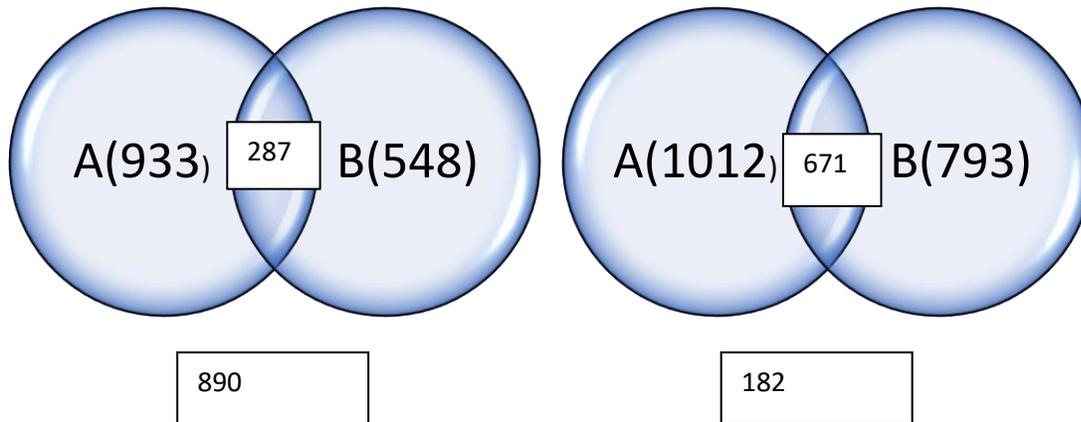
- In the assessment number of children who did not know either of the skills reduced by 1251. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 667 during the period.

Level 2: Hindi (n- 2658)

Skill A: Able to read and make Simple words as नर, तल, सर

Skill B: Use of matra's नारी, तिल, सूरत

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 1220 | 1683 |
| Children who knew skill B | 835 | 1464 |
| Children who knew both | 287 | 671 |
| Children who did not know either | 890 | 182 |



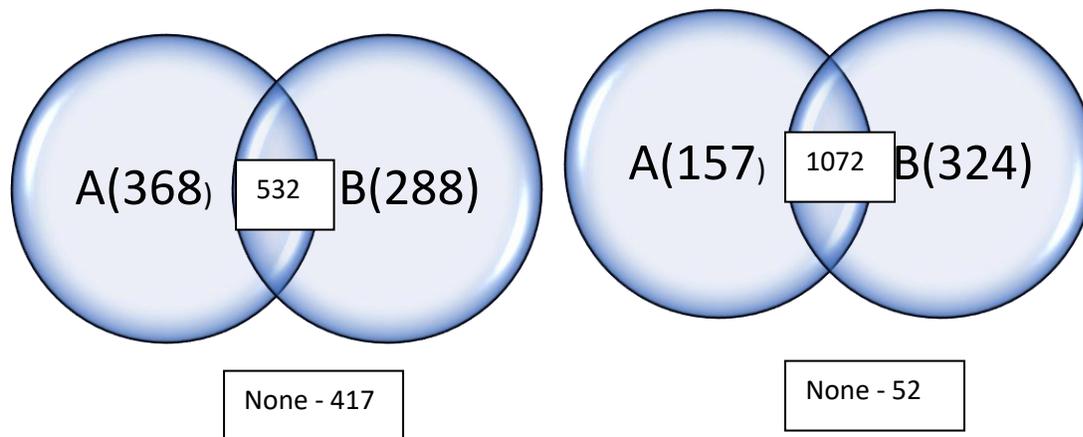
- In the assessment number of children who did not know either of the skills reduced by 708. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 384 during the period.

Level 3: Hindi (n- 1605)

Skill A: Able to make sentences, antonyms and synonyms

Skill B: Able to read a paragraph

| | Baseline | 1 st Assesement |
|----------------------------------|----------|----------------------------|
| Children who knew skill A | 900 | 1229 |
| Children who knew skill B | 820 | 1366 |
| Children who knew both | 532 | 1072 |
| Children who did not know either | 417 | 52 |



- In the assessment number of children who did not know either of the skills reduced by 365. Even the children who did not know either of these skills showed improvements in understanding the concepts but could not solve the problems without mistakes. Children who knew both the skills increased by 540 during the period.

CONCLUSION:

- Overall, we saw significant improvements in all these subjects across all levels.
- Children have learnt basic manners and etiquettes, like wishing goodmorning/hello to other people.
- Staying in remote tribal villages, they were very shy to speak to strangers. But now they are showing willingness to speak and interact with people from outside.
- Children have learnt basic hygiene practices and the teachers in the Kutir ensure that they follow these regularly. For instance, washing hands, brushing their teeth etc.
- Younger children (between ages 4 to 6) have learnt Hindi and English alphabets, numbers from 1 to 100. They are taught in a playful manner, involving them in various group games. Children have learnt poems in Hindi and also Shlokas in Sanskrit, which they chant daily.
- Children in the age group of 7-10 (class 3-5) did not know basic language and mathematical skills expected at their level. But now most of them have learnt to do simple additions, subtractions, multiplication and division. Similarly, in languages such as Hindi and English, the children have improved their reading skills and also vocabulary.
- Children have also learnt certain basic general awareness things such as names of months in Hindi and English, names of seasonal fruits, vegetables and crops in Hindi and English.
- Children in the age group of 10-13 (class 6-8) have also shown improvement in their academic knowledge and skills. For instance, none of them knew about geographical maps and neither of them could state city's, state's names nor they could locate them on maps. But now, they have slowly but firmly started to gain this knowledge and can proudly tell names of states, capitals and names of some major countries. They can also locate their district on the map. Similarly, in maths, they are catching up to their respective grade levels because of the Kutir teachers' efforts. They have learnt decimal, percentage etc.
- Children are also taught about great personalities and their great works. Children have been told stories about Swami Vivekanand, Sri Ramakrishna Paramahansa, Mahatma Gandhi, APJ Abdul Kalam etc.

English– Learning Level* Rubrics

| Level 1 | Level 2 | Level 3 |
|---|-------------------------------------|-------------------------------|
| Able to identify alphabet (Lower case and upper case) | Simple words as BOX, SUN ,BAT | Words as BOXING, SUNNY ,CYCLE |
| Able to identify objects – Cat, Apple, Gun | Able to recite the name of the week | Able to make sentences |
| | Names of fruits | Able to read paragraphs |

Hindi– Learning Level* Rubrics

| Level 1 | Level 2 | Level 3 |
|--|--|--------------------------|
| Able to read and write alphabets न, श, र | Able to read and make Simple words as नर, तल, सर | Able to make sentences |
| Reciting varnamala | Use of matra's नारी, तिल, सूरत | Able to read a paragraph |

Math – Learning Level* Rubrics

| Level 1 | Level 2 | Level 3 |
|---|--|--|
| Able to read numbers like 1,2,50,75 | Addition Subtraction without carry. Simple Multiplication | 3 digit Multiplication and Division |
| Able to count objects (1-10) | Numbers in words (1-10) | Numbers in words (1-50) |
| Able to recall the sequence of numbers | Knowledge of multiplication tables upto 10 | Knowledge of multiplication tables upto 15 |
| Identify numbers (single digit and multiples of 5 and 10) | Identify numbers – Double digits like 77,82,93 | Read 3 digit numbers |

Seva Kutirs :Impact on Nutritional Outcomes

In the Seva Kutirs, children get breakfast, with seasonal fruits and milk in the morning and dinner (roti, sabzi, rice and dal) is served in the evening. In the afternoon, children get lunch in the government schools/anganwadis. So, the aim is to ensure 3 course meals to children so that they stay well nourished.

Food habit

The age group below 4 years and the children above this age group (6-11) are under the Aaganwaadi program and mid-day meal respectively. But the other two diets are still home fed which is still not nutrient rich in their food habits in such areas. The major source of staple food production is *maize and wheat* in the area (Rich in Carbohydrates, poor in proteins and vitamins). The food production last for three/four months on an average the rest is acquired through PDS. It plays an important role in food security.

Three times meal is still a dream for many families from their own production. In some families due to inadequacy of food, women tend to skip meal or get insufficient quantity. Eating hot cooked meal is considered to be a status symbol in the community. Vegetable consumption is very less.

Approaches:

a) **Direct Service:** Providing nutritionally high enriched diets for children in such areas in mornings and evenings. It will complement the mid-day meal program of the government. This diet plan (**Menu**) will be closely monitored and executed keeping an individual child's need in focus (**Menu shared in the annexure**)

b) **Convergence :** This is also a very good opportunity to continuously map the status of the children in such areas in terms of their health and converge with other agencies both government and non-government looking at solving health issues of children like anaemia which is predominant in such areas. We have also liaison with Tehsil Government hospital, Khategaon, Dewas District for First Aid box.

c) **Impacting Agriculture and access to nutrient rich food :** The back end of the mission which requires to supply nutrient rich raw material in these villages through the Kutirs will try to achieve supply locally in due course of time. That is the supply side will try to give an impetus to local agriculture to produce high nutrient rich and the demand which will be initially met from outside suppliers will eventually be at a large scale met by the families of the children through improved agriculture practices. This will be done through executing a convergence with government (agriculture department) and non-government organization (farmer producer companies) whose focus is on agriculture improvement. Thus the habit of growing and eating nutrient rich diet will slowly see a movement from institution (Kutir) level to family level.

We conduct baseline assessment and then further assessments after 6 months. Below is the result of these assessments for the 100 Seva Kutirs :

Total No. of Children: 8100

Methodology

Anthropometric tools used-

1. Calculation of Height&Weight for children above 5 years (BMI)
2. Mid Under Arm Circumference (MUAC) tape for children below 5 year.

1. BASELINE REPORT

1.1. Baseline result :

| Status | | Total |
|---------------------------------------|--|-------|
| No. of severely malnourished children | | 5689 |
| No. of children with moderate BMI | | 748 |
| No. of children with healthy BMI | | 1660 |
| No. of obese children | | 3 |

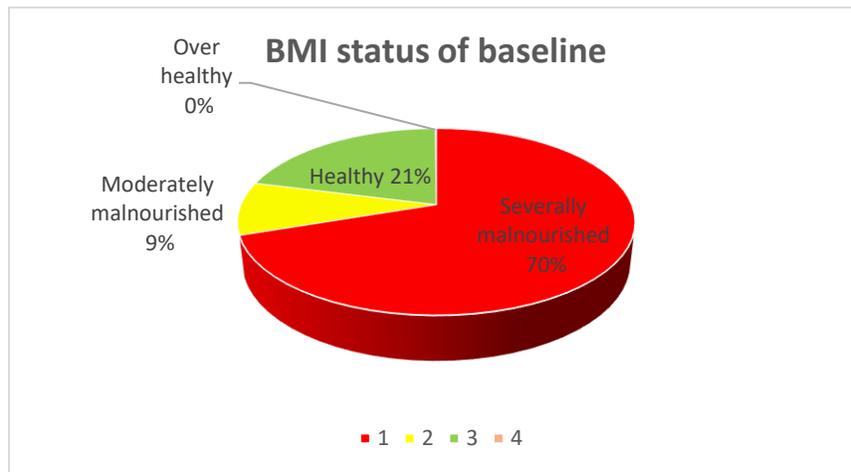


Fig- 1 Represent the BMI status of baseline. Out of the total population 70% children were severely malnourished whereas only 20% of children were healthy.

2. Assessment Report

In the Nutrition Baseline we found that 70% of children were severely malnourished and only 20% children were healthy. In the assessment held, we witnessed a marked improvement in BMI levels, though it was not enough for all the children to move from category of malnourished to normal.

| Status | | Total | |
|---------------------------------------|--|-------|--|
| No. of severely malnourished children | | 4566 | |
| No. of children with moderate BMI | | 1073 | |
| No. of children with healthy BMI | | 2458 | |
| No. of obese children | | 3 | |

| | Number of Children |
|--|--------------------|
| | |

| | |
|--------------------------|------|
| Positive Movement in BMI | 6804 |
| Negative Movement in BMI | 486 |
| No Movement in BMI | 810 |

Conclusion

In the assessments, we found that there has been improvement of BMI for a large number of children (around 84 %). However, for a small number of children, the BMI has either reduced or it has not shown any movement. Some of the reasons for this are mentioned below :

The probable reasons for decline of BMI

1. Seasonal illness
2. Children not in a habit of consuming vegetables
3. Fluctuation in attendance due to seasonal migration.

Working towards-

1. Intensively working with the 6 % of decline children on finding exact reasons for decline.
2. Convergence with the Government health departments.
3. Agriculture impact- supplement of Moringa or Drumstick powder along with milk.

Seva Kutirs : Salient Impact Features

The key objectives of the SevaKutirs project are to address the problems of malnutrition and poor educational status of children from poor, rural tribal villages in Madhya Pradesh. In the SevaKutirs, children are divided into 3 groups, as per their learning levels. At present, there are more than 9000 children in 115 Seva Kutirs in 5 districts in MP – Dewas, Sehore, Mandla, Sheopur and Chhindwara.

The key educational and nutritional impact that has been seen in the 100 Seva Kutirs is listed below. There are a total of 8100 children in these 100 Seva Kutirs.

Key Educational Impact

- Children in the age group of 4 to 6 years of age have shown a 52 % improvement in terms of learning basic functions in English language such as being able to identify alphabets (A, a, B, b and so on) and being able to identify & name objects (such as Cat, Apple, Ball etc). Similarly, in Hindi they have shown a 54 % improvement and in Maths, as high as 75 % (in terms of being able to read numbers and count objects).
- There is a 64 % improvement in children of 6 to 10 years of age (grades 2 to 5) in terms of learning their grade level skills in English language (such as reading simple sentences) and 60 % improvement in Hindi language & in Maths, they have shown a 43 % improvement in skills such as addition and subtraction without carry and multiplication.

- For children in grades 6 to 8 (11 to 14 years of age), there is a 55 % improvement in terms of mastering their grade level skills in English language, such as reading paragraphs. In Hindi, this has been 52 %. In Maths, the improvement is 19 % in terms of mastering skills such as 3 digit multiplication and division, LCM, HCF, fractions etc.

Key Nutritional Impact

- There is a 20 % decline in the numbers of children with severe malnourishment. The level of nourishment is calculated on the basis of BMI (Body Mass Index) for children above 5 years of age and Mid Under Arm Circumference (MUAC) tape to children below 5 years.
- 84 % of children showed a positive movement in BMI. That means that there is indeed an improvement in their nutritional status, though it may not have been sufficient for these children to come into the normal category.
- There is a very small percentage of children (6 %) who have shown a negative movement in BMI. This is because of various illnesses that they catch. This is in fact an effect of their malnourished status because children who are malnourished catch diseases such as flu, diarrhoea etc very frequently. But with the nutrition that they are getting in the Seva Kutirs, this figure is expected to go to 0.

Other Secondary Impact

- We have arranged the admission of 785 students in Government secondary schools at class 9 level. Out of this, 91 children have been admitted into government hostels. These children are from remote areas and would have dropped out of school education if we had not got them admitted into these schools and hostels.
- We have also started hostels in rented buildings for 92 students in Mandla and are in process of starting this in Sehore for 26 students, who could not be admitted into government hostels and whose day-schools are very far-off from their homes / villages.