

# EVALUATION OF HCL FOUNDATION'S POSHAN PROGRAMME (SAMUDAY PROJECT)

Organized at- Hardoi district (U.P.)



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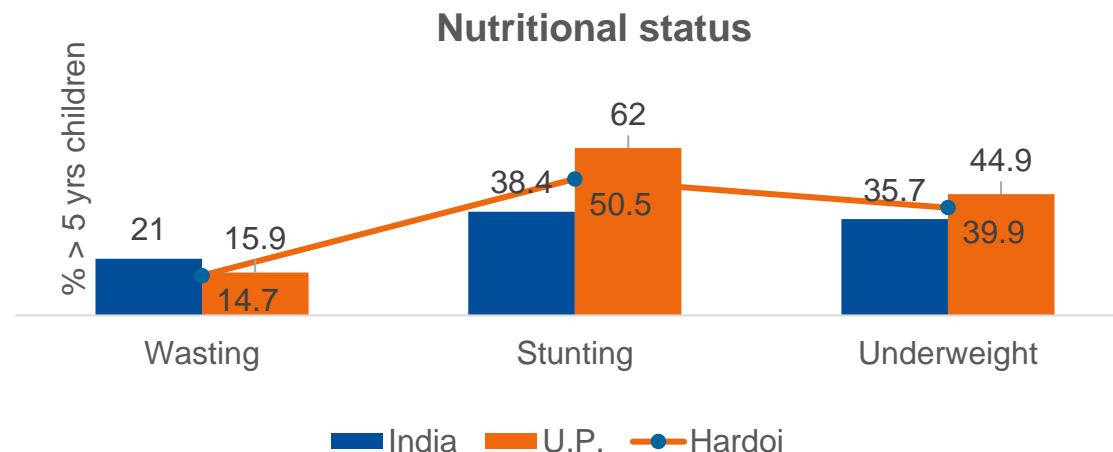




# Appreciating the need

## India malnutrition in numbers:

- Despite years of investment to address the issue of malnutrition, India ranks **94 among 107** countries in terms of child malnutrition\*
- NFHS-4 shows that the prevalence of **underweight-35.7%, stunted- 38.4% & wasted- 21.0%** among children under five
- An estimated **two thirds of deaths** among children under five are attributed to undernutrition#
- India loses up to **4%** of its gross domestic product (GDP) and up to **8%** of its productivity due to child malnutrition



In case of Uttar Pradesh, the issue of malnutrition is more alarming.

# About HCL Samuday

## About HCL Samuday:

HCL Samuday, is a CSR project of HCL, implemented in **3 blocks of Hardoi, U.P.**

*Blocks- Behender, Kachhauna & Sandila*



**Hardoi  
district map**

## HCL Samuday project aims to:



Bring down prevalence of wasted (severe & acute malnourished – SAM) and severe underweight (SUW) from 12% to 5% through nutrition camps



Minimize the prevalence of malnourished children through preventive measures and behavioral changes at community level

***The 14-days of Poshan Shivar camps were organized at Gram Panchayat level. However, due to sudden outbreak of COVID-19 and keeping GOI guidelines towards spread of COVID-19, the camps were converted into a 14-days door-to-door intervention.***

# Overview of project activities



**Anthropometric Screening-** Identified children U5 were screened in their respective villages to check their nutritional status as SAM/SUW/MAM



**Sensitization of parents of SAM/SUW children was done** to motivate them to act immediately



**Medical Camp-** organized for SAM/SUW children at GP level to check any clinical complications. Children without clinical conditions were enrolled to the program and those with clinical conditions referred to the NRC\*



**Nutrition camps-** Enrolled SAM/SUW children were provided with 3 meals (one energy-rich premix and two fresh cooked meals) per day during the 14 days of camp



**Door to Door visit-** Enrolled SAM/SUW children were provided with 3 meals (one energy-rich premix and two easy to cook meals) per day during the COVID situation for 14 days



**Enrollment of all children in AWCs-** To ensure that all SAM/SUW & MAM/UW children are enrolled in AWC and receiving THR or cooked meals to eat

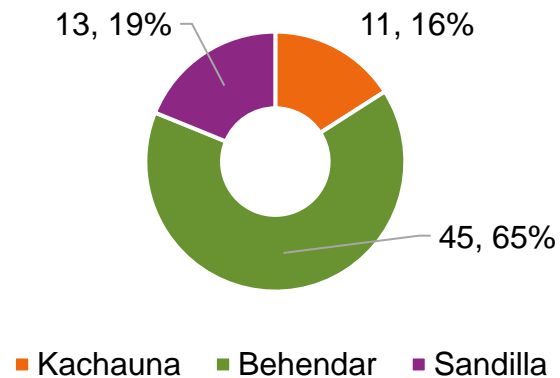


**Follow up home visits-** Children enrolled to the 14 days Shivar are tracked fortnightly. A total of 10 such visits are being made at household level of each child simultaneously counselling was also done to each child as per an individual's requirement

\*NRC- Nutrition Rehabilitation Centre

# Program outreach till March '21

## No. of nutrition camps organized

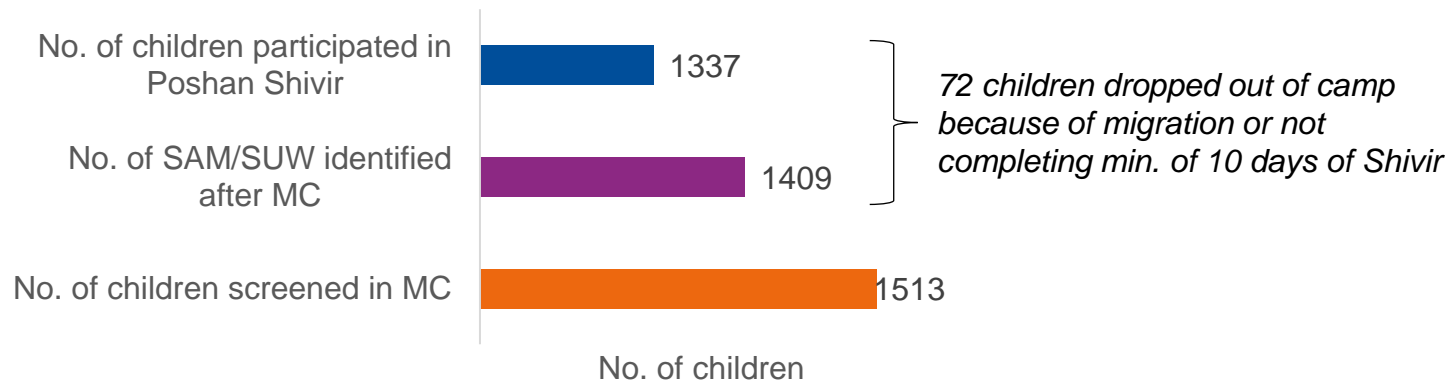


No. of follow-up visits	No. of GPs	%
10	28	40.6%
7	4	5.8%
6	8	11.6%
4	9	13.0%
None	20	28.9%
<b>Total</b>	<b>69</b>	<b>100.0%</b>

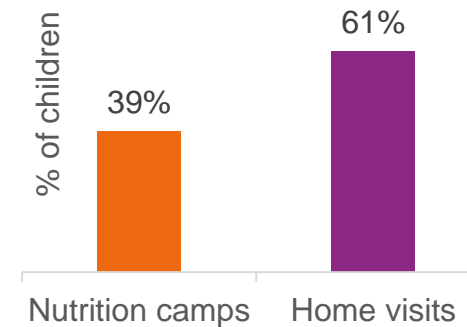


**COVID19 restrictions imposed a greater challenge to impede the activities of the program**

## Participation rate in Poshan Shivr



## Poshan Shivr medium



# Profile of program beneficiaries & study respondents



## Who are the program beneficiaries?

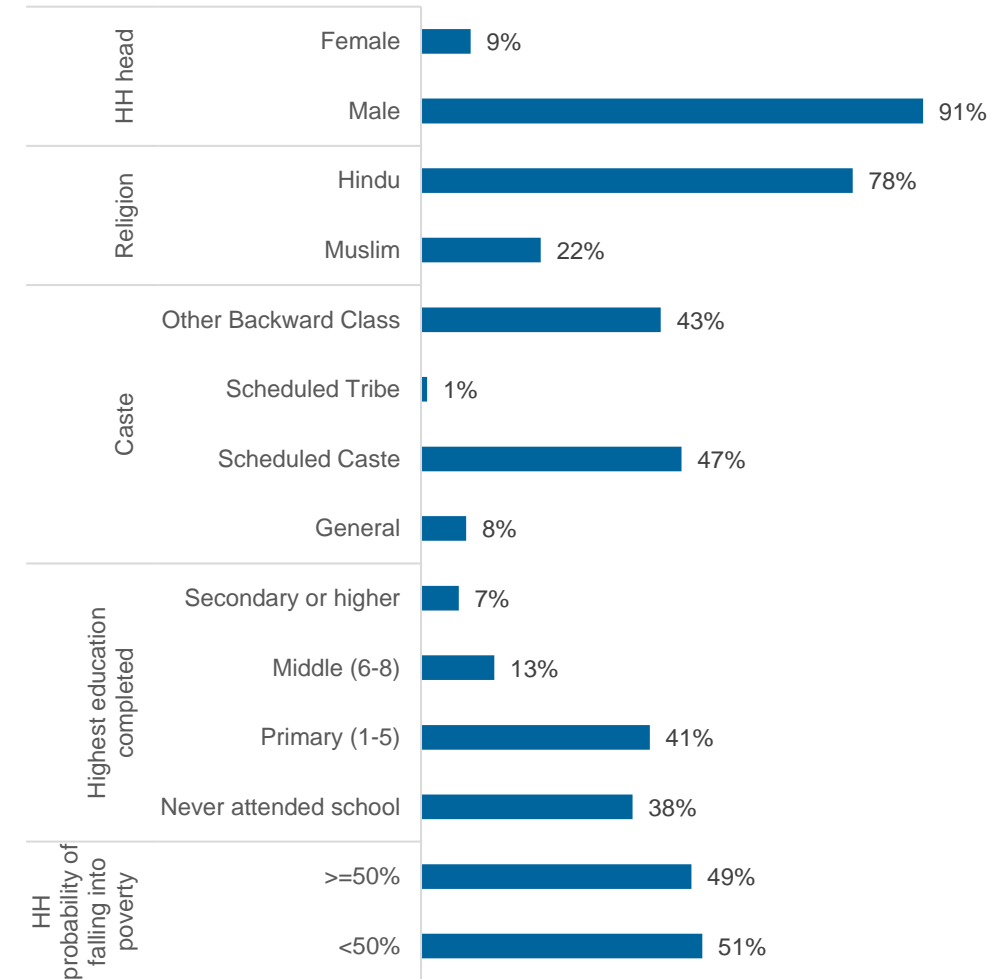
- **Pregnant mothers and lactating mothers having SAM/SUW child U5**
- **A total of 1,513 children** screened for the program
- **1,409 SAM/SUW children** identified and enrolled to the program after medical screening
- **1,337 children** participated in the Poshan Shivar



## Respondent profile: Care-taker of the child

- **In 92% of the HHs, mother is the primary caretaker of the child, 5% cases it is father**
- **Average age of the respondent is 30 years**
- **About 39% are illiterate** and just 7% have completed secondary or above
- **78% belong to Hindu religion** & rest are Muslims
- **47% belong to SC, 43% OBCs** & 8% belong to General caste

## Household profile





# Research methodology & scope

**Study design:** A cross-sectional study design was adopted

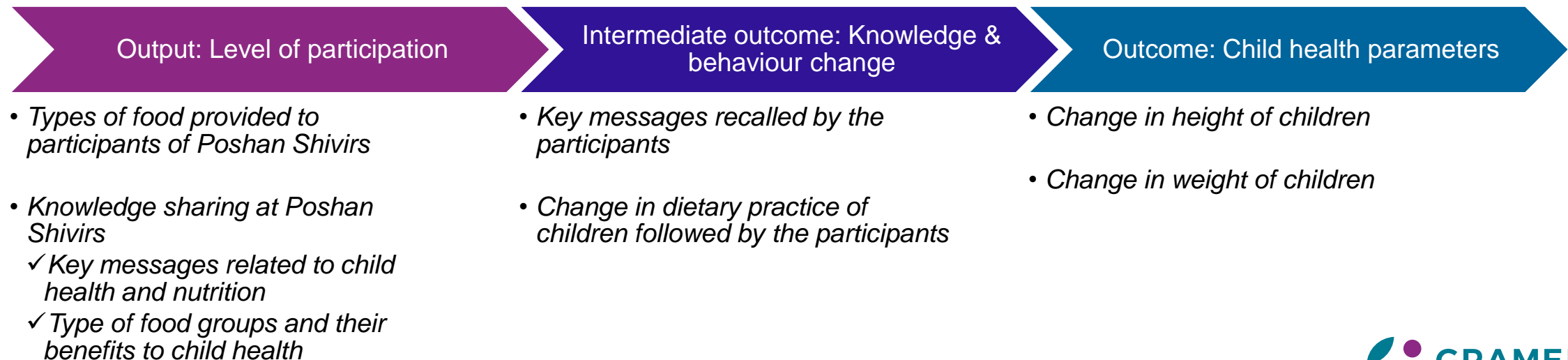
**Sample size:** A total of 451 households that participated in the Poshan Shivirs were included in the survey

**Respondent selection:** The respondent of the survey were member of the household that participated in the Poshan Shivar, i.e. the care taker of the children.

**Research objective:**

To understand the effectiveness of the HCL Samuday project

**Research scope:**

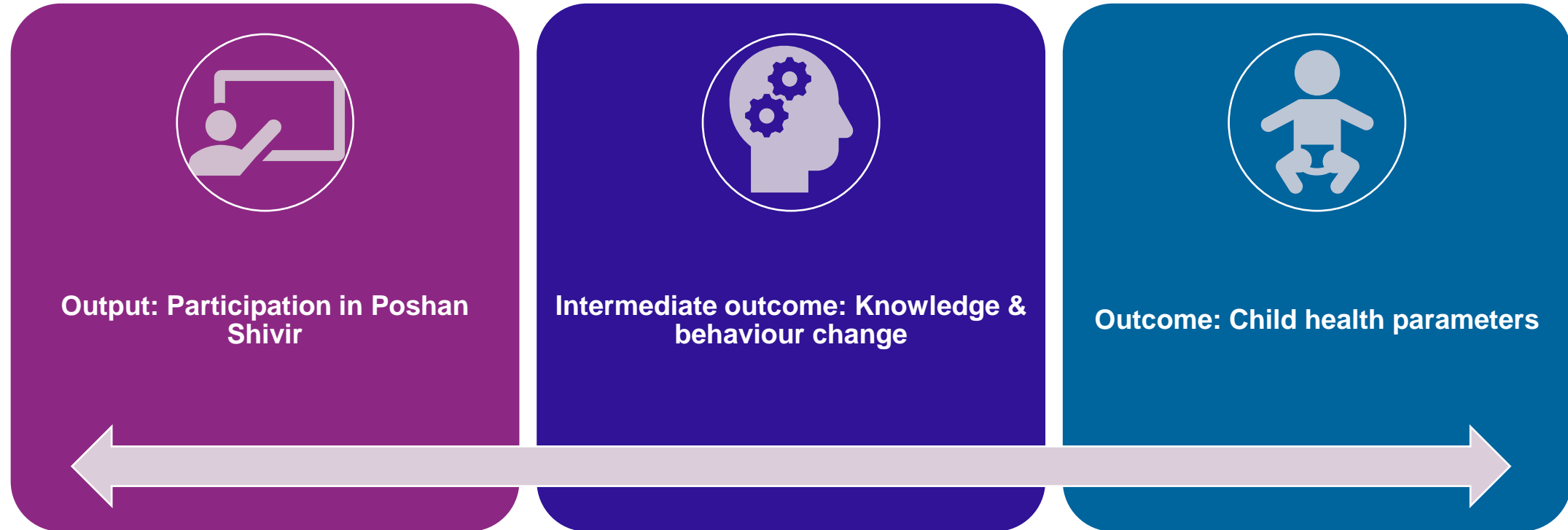




# Observations and Findings



# Impact assessment of HCL Samuday project

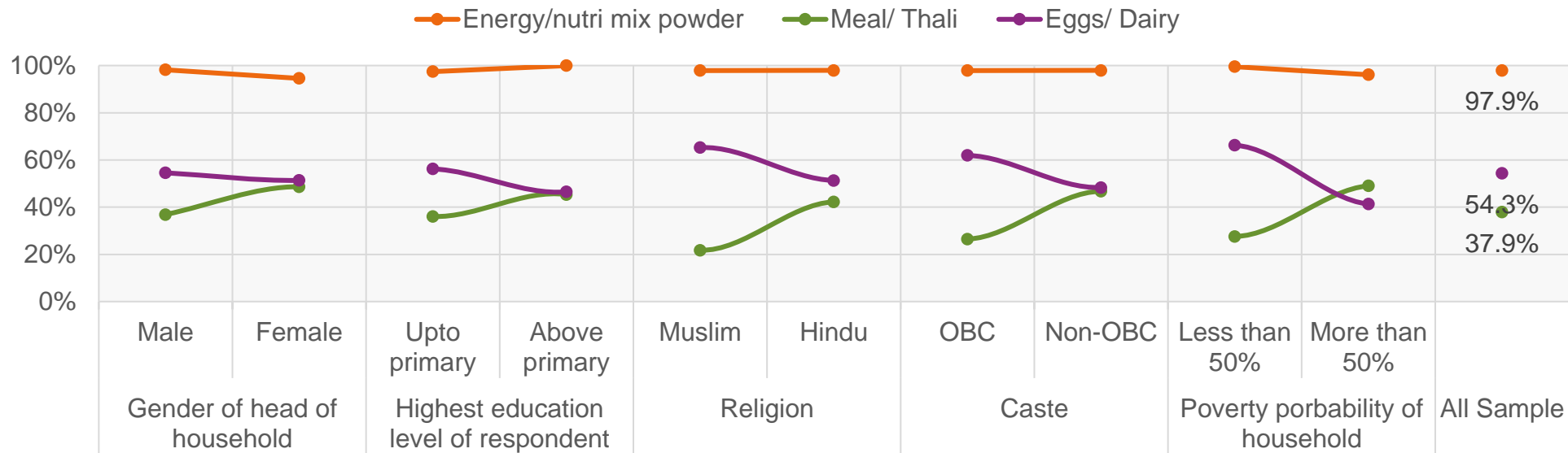


- *Level of participation*
- *Kind of food/meals received in the Shivr*

- *Learning from Poshan Shivr*
- *Kind of messages recalled*
- *Knowledge and practice of making nutrimix*
- *New food items introduced to children*

- *Change in child height and weight as recorded in follow up visits*
- *Perceived change in child height and weight as reported in survey*

# Level of participation and kind of food received



96% of the respondents reported having attended Poshan Shivar with their Child U5, organized in their village

## Type of food received:

- No one reported (s) that they had not receive any meal at Poshan Shivar
- A whopping 98% of them reported that they received nutrimix powder
- Close to 54% reported receiving eggs/dairy products during home visits/covid situation
- There is no significant heterogeneity in distribution of food items to the attendees of Shivar based on caste/religion/sex/economic status

# Learning from Poshan Shivirs



It has been observed that a very high proportion (~87%) of respondents adopted in their regular routine about importance of child nutrition and continued providing recommended nutritious food items even after the Poshan Shivar

## Kind of messages received by participants:



- An impressive 85% chunk of all respondent recalled that they were taught about ‘importance of child nutrition’ at the camps
- Another 70% recalled what nutritious food they were taught to give to their children
- Slightly higher male participants (85%) than female (78%) counterparts remembered what was taught to them
- No other heterogeneity was observed in across different groups of society

*“... having participated in the Poshan Shivar, I learned the importance of nutrition and recognize danger signs. The program has helped my child move from SAM to UW in just 4 months.”*

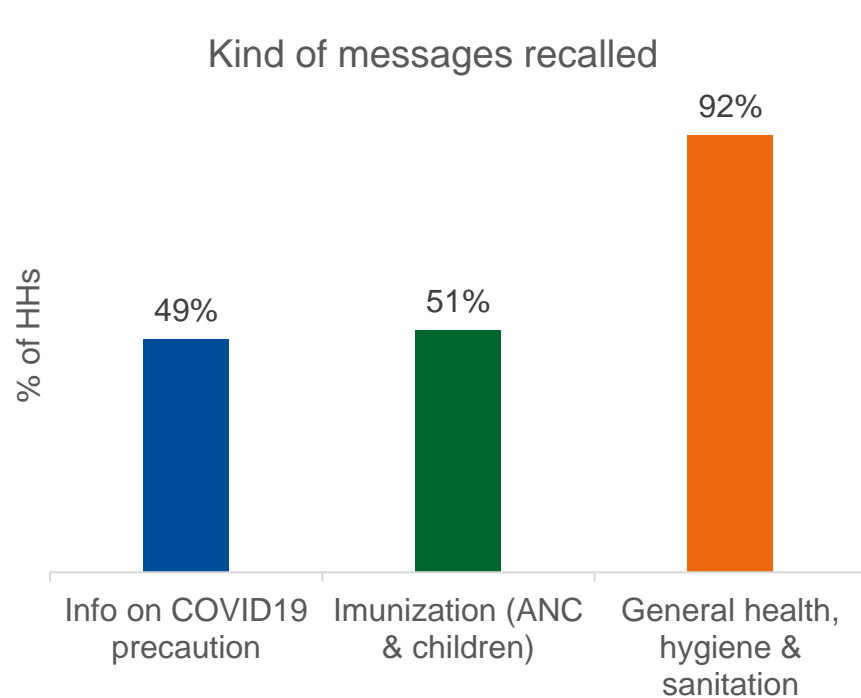
*- Poonam Devi, Petiyari village*



# Few important key messages retained (recall basis)

01  
10

Around 75% respondents were able to recall up to five key messages from the Shivr



Respondents were able to recall messages around general hygiene & sanitation, immunization and COVID related precautions.



Almost 92% respondent could recall about hygiene, sanitation, hand washing etc.



Around 51% were able to recall information on COVID-19 related precautions and,



Another 49% were able to recall information on ANC/child immunizations shared with them at the camp

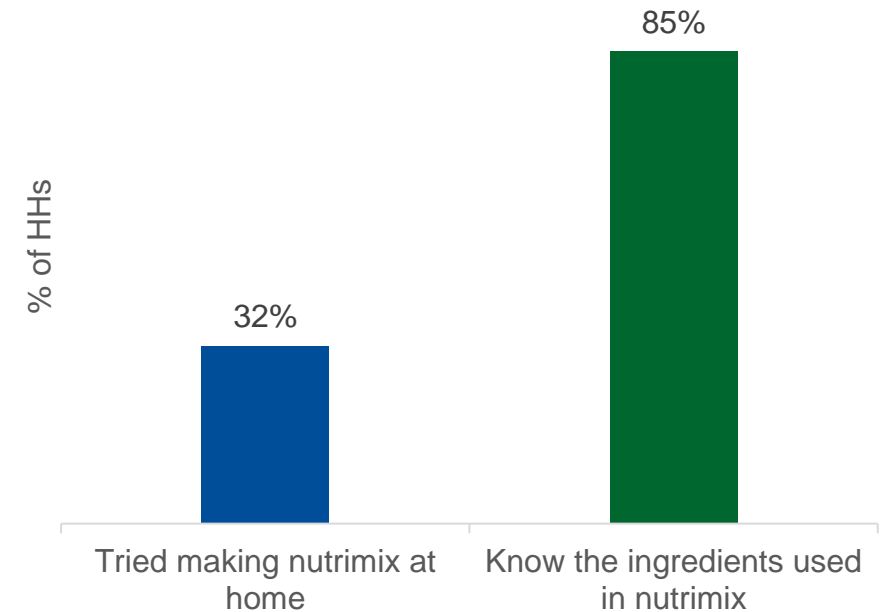
# Knowledge and practice of making nutrimix



- About 86% reported knowledge of ingredients used in preparing nutrimix at home
- However, due to lack of availability of ingredients, only less than a third actually prepared it at home

**Nutrimix:** A mixture of flour, gram flour, groundnuts, sesame seeds, milk powder, coconut powder, jaggery and ghee. All crushed and converted into a powder form. The nutrimix powder can then be added to water or milk and given to the child.

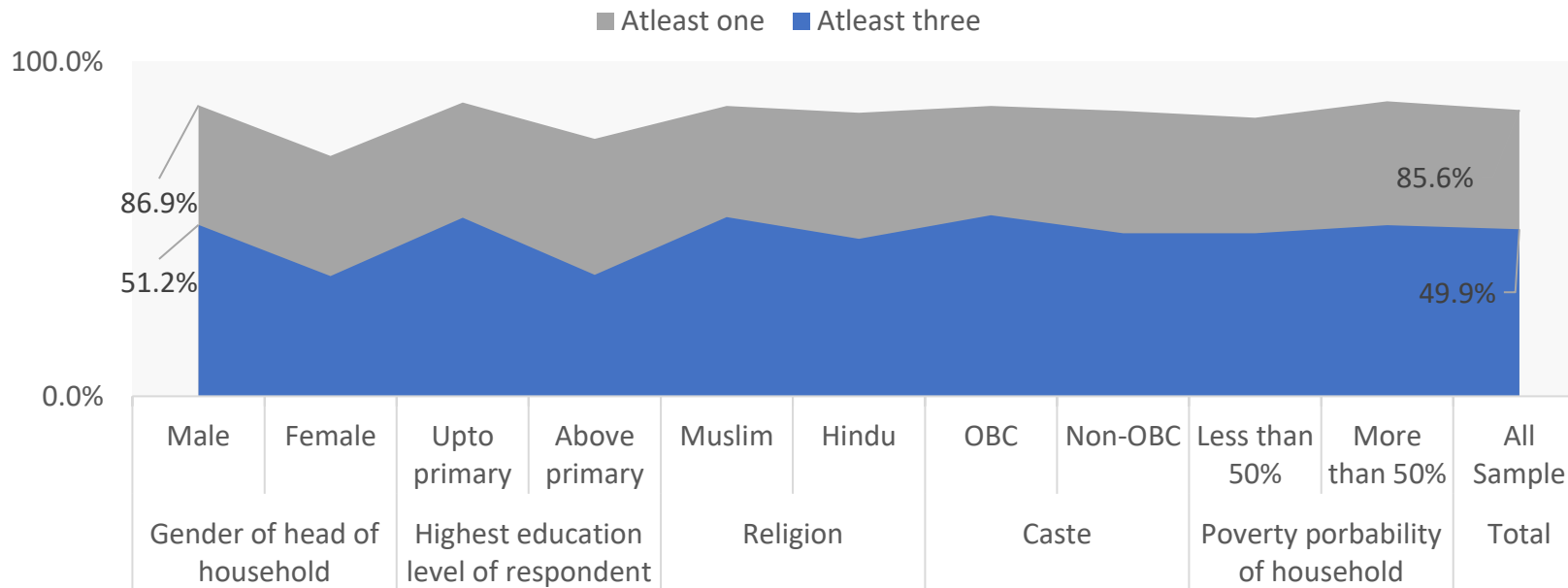
Knowledge & practice of nutrimix



*“...The Poshan Shivar helped me learn how to make the nutrimix using the available resources at home. I want my child to be healthy and I will give him the nutrimix regularly.”*

*- Rani Devi, Kalauli village*

# New food groups introduced to children after the Shivar



## Type of food groups:

- ❖ Grains, roots and tubers
- ❖ Dairy products (milk, curd, paneer)
- ❖ Eggs
- ❖ Legumes and nuts
- ❖ Flesh foods (meats, fish, poultry)
- ❖ Vitamin A rich fruits and vegetables
- ❖ Other fruits and vegetables



- As high as **86% respondents** started giving **at least one** (out of 7) new recommended nutritious food group(s) to their children after the Shivar which they were not giving earlier
- About **50% gave at least 3 types of new food** items to their children, which shows great impact of Shivar training on the respondents

*“....I learned during the Poshan Shivar that vegetables are good source of vitamins and minerals. I have started cooking vegetable on a daily basis so that my 3 year old boy can have it regularly.”*

*- Pushpa Singh, Sarsand village*

# Observed improvement in child anthropometry after the Shivr

**Poshan Shivirs (both organized in form of camps and home-visits) has helped in improving anthropometric parameters of the children.**

The height and weight of the children were measured as part of the follow-up visits conducted on a fortnightly basis.

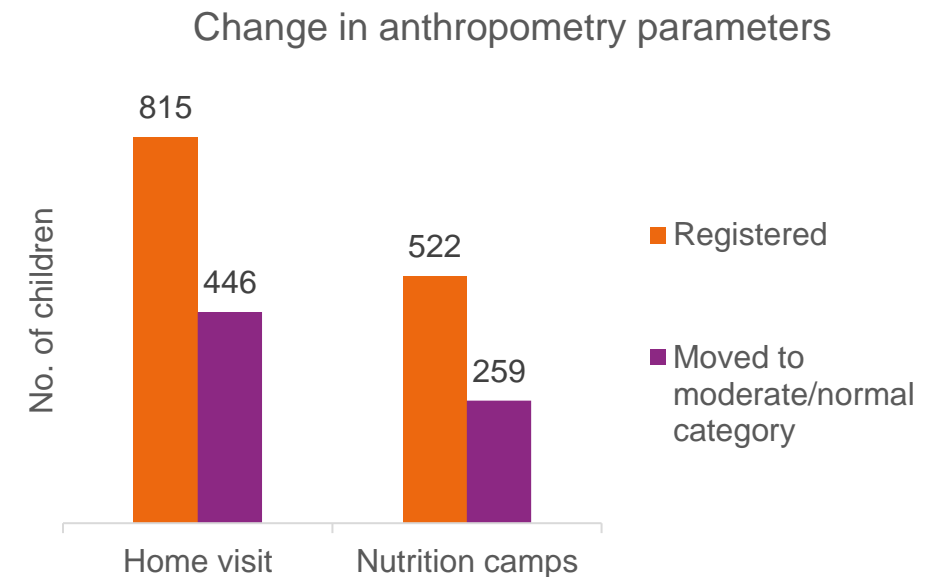
It is observed that,  
*after the 4<sup>th</sup> follow-up visit, there is an average weight gain of 414 gms,*  
*after the 7<sup>th</sup> follow-up visit, there is an average weight gain of 1039 gms, and*  
*after the 10<sup>th</sup> follow-up visit, there is an average weight gain of 1407 gms*



**Home-visits:** 55% children moved to moderate/normal category after participating in 14-day home visit nutrition program



**Nutrition camp:** 50% children moved to moderate/normal category after participating in nutrition camps



**The survey data also shows similar result:**

- As a result of nutrition rich food provided at the Shivirs, almost 80% respondents across the different categories observed change in children's height and another 20% observed positive change in children's weight



## Stories of impact (1/2)



*Poonam Devi aged 32 years living in Petiyari village in the Behendar block of Hardoi district is an agri wage labour. She lives with her husband and has a **three years old boy**, Ravi.*

*The economic condition of Poonam is not good and in terms of asset she has a gas stove and a colour television.*

*Before the project, she was **not aware** that her child was **SAM** and she also **did not know the right kind of food** to be fed to a three year old child.*

*Having participated in the Poshan Shivar has helped her **understand the importance of nutrition, recognize danger signs** and has helped her child **move from SAM to UW** in just 4 months.*

*She is hopeful that if she gives the right kind of diet to her child **as per the instructions taught** to her during the Shivar, her child will be healthy and happy.*

## Stories of impact (2/2)



*Rani Devi a resident of Kaluali village in Kachhauna block, aged about 30 years lives with her husband, in-laws and two children. Raju is her youngest child who is about **4 years old**.*

*Rani Devi works as a construction labour as well as take up NREGA work time to time. Her husband is an auto driver and in terms of asset, they own a fridge, gas/stove, a bicycle and few small furniture.*

*She used to take ration from the nearest Aanganwadi Centre for her child, Raju. However, she **didn't know** the right **quantity and right** food to be given to a 4 year old child.*

*She was shocked to know that Raju was **severely underweight** and having learned this, she quickly **showed interest** to participate in the Posha Shivar camp. She felt that she has **grown as a mother** after the camp as she is now able to **better care** for her child. She wished she could have taken similar care for her elder child as well. She now also knows how to **prepare the nutrimix** using the available resources at home and ensures to give her child **regularly**.*



# Thank you



[GrameenFoundation.org](http://GrameenFoundation.org)





## Annexures



# Analytical paradigm

**For the analysis of the data, we have adopted a two-step approach:**

**Univariate/group level analysis:**

- *To understand broad trends and pattern in data at a group level*

**Bivariate/sub-group analysis:**

- *To understand heterogeneity and variance across different categories within the group.*
- *The various groups across which the data is disaggregated are:*

Gender of the household	<ul style="list-style-type: none"><li>• Male</li><li>• Female</li></ul>
Highest education level of the respondent	<ul style="list-style-type: none"><li>• Up to primary</li><li>• Above primary</li></ul>
Religion	<ul style="list-style-type: none"><li>• Muslim</li><li>• Hindu</li></ul>
Caste	<ul style="list-style-type: none"><li>• Other backward caste (OBC)</li><li>• Non-OBC</li></ul>
Poverty probability of the household	<ul style="list-style-type: none"><li>• Less than 50%</li><li>• More than 50%</li></ul>



# Poshan Shivar participation & knowledge of handwashing

Indicator	Categories	Participation rate in Poshan shivar	Knowledge of 8 steps of handwashing
Gender of head of HH	Male	96.1%	93.9%
	Female	94.9%	89.7%
Highest education level of respondent	Upto primary	96.4%	93.3%
	Above primary	94.5%	94.5%
Religion	Muslim	93.9%	92.9%
	Hindu	96.6%	93.8%
Caste	OBC	96.4%	92.4%
	Non-OBC	95.7%	94.5%
Poverty probability of HH	Less than 50%	97.0%	96.1%
	More than 50%	95.0%	90.9%
Total	All Sample	96.0%	93.6%

## Survey question:

- *Did you participate in the 'Poshan Shivar' / nutritional camp or did someone visited you?*
- *Do you know the 8 steps of handwashing?*

# Learning from the camp

Indicator	Categories	Importance of child nutrition	What nutritious food to give	How/where to avail nutritious food	When to provide food	Basic child care & hygiene	Did not learn anything
Gender of head of HH	Male	85.4%	68.9%	45.2%	28.8%	35.4%	1.0%
	Female	78.4%	73.0%	51.4%	32.4%	46.0%	0.0%
Highest education level of respondent	Upto primary	85.3%	69.7%	43.8%	27.7%	36.0%	0.9%
	Above primary	82.6%	67.4%	53.5%	34.9%	37.2%	1.2%
Religion	Muslim	84.8%	66.3%	43.5%	26.1%	28.3%	3.3%
	Hindu	84.8%	70.1%	46.3%	29.9%	38.4%	0.3%
Caste	OBC	85.7%	65.1%	41.3%	28.0%	38.1%	1.6%
	Non-OBC	84.0%	72.5%	49.2%	29.9%	34.8%	0.4%
Poverty probability of HH	Less than 50%	85.8%	68.4%	44.4%	34.7%	36.9%	0.9%
	More than 50%	83.7%	70.2%	47.1%	23.1%	35.6%	1.0%
Total	All Sample	84.8%	69.3%	45.7%	29.1%	36.3%	0.9%

## Survey question:

- *What did you learn from the nutrition camp?*

# Number of key messages recalled

Indicator	Categories	Mean/avg.	Zero	Up to 5	6 and above
Gender of head of HH	Male	3.8	3.9%	76.9%	19.2%
	Female	4.6	5.1%	56.4%	38.5%
Highest education level of respondent	Upto primary	3.8	3.6%	76.7%	19.7%
	Above primary	4.0	5.5%	69.2%	25.3%
Religion	Muslim	3.6	6.1%	84.7%	9.2%
	Hindu	4.1	3.4%	72.5%	24.1%
Caste	OBC	3.3	3.6%	81.1%	15.3%
	Non-OBC	4.0	4.3%	70.6%	25.1%
Poverty probability of HH	Less than 50%	4.0	3.0%	75.0%	22.0%
	More than 50%	3.7	5.0%	75.3%	19.6%
Total	All Sample	3.9	4.0%	75.2%	20.8%

## Survey question:

- Which all messages that was given in the Poshan Shivar are you able to recall?



# Meal/food given in the camp

Indicator	Categories	Energy/nutrimix powder	Meal/thali	Eggs/dairy	Did not receive any meal/food
Gender of head of HH	Male	98.2%	36.9%	54.6%	0.0%
	Female	94.6%	48.7%	51.4%	0.0%
Highest education level of respondent	Upto primary	97.4%	36.0%	56.2%	0.0%
	Above primary	100.0%	45.4%	46.5%	0.0%
Religion	Muslim	97.8%	21.7%	65.2%	0.0%
	Hindu	98.0%	42.2%	51.3%	0.0%
Caste	OBC	97.9%	26.5%	61.9%	0.0%
	Non-OBC	98.0%	46.7%	48.4%	0.0%
Poverty probability of HH	Less than 50%	99.6%	27.6%	66.2%	0.0%
	More than 50%	96.2%	49.0%	41.4%	0.0%
Total	All Sample	97.9%	37.9%	54.3%	0.0%

## Survey question:

- *What meal/food was given to you in the Poshan Shivar?*

# Knowledge and practice

Indicator	Categories	Gave meal/food to child as instructed by expert	Knowledge about ingredients used in nutrimix powder	Tried making the nutrimix powder at home	Ever explained health & nutrition key messages to anyone
Gender of head of HH	Male	87.9%	86.6%	32.8%	55.1%
	Female	73.0%	70.3%	24.3%	62.2%
Highest education level of respondent	Upto primary	87.6%	87.0%	32.3%	57.4%
	Above primary	82.6%	77.9%	31.4%	48.8%
Religion	Muslim	85.9%	84.8%	33.7%	54.4%
	Hindu	86.8%	85.3%	31.7%	56.0%
Caste	OBC	85.7%	85.2%	27.0%	48.7%
	Non-OBC	87.3%	85.3%	36.1%	61.1%
Poverty probability of HH	Less than 50%	83.6%	86.7%	33.3%	54.2%
	More than 50%	89.9%	83.7%	30.8%	57.2%
Total	All Sample	86.6%	85.2%	32.1%	55.7%

## Survey question:

- *Did you give the meal/food to your child as instructed by the expert?*
- *Do you know about the ingredients used in the nutrimix powder?*
- *Have you tried making the nutrimix powder at home?*
- *Have you ever explained or discussed the health & nutrition key messages to anyone in the community?*

# Change observed in child's health after the camp

Indicator	Categories	Yes, child height has improved	Yes, child weight has improved	No change observed
Gender of head of HH	Male	80.6%	18.7%	0.8%
	Female	86.5%	13.5%	0.0%
Highest education level of respondent	Upto primary	80.7%	18.7%	0.6%
	Above primary	82.6%	16.3%	1.2%
Religion	Muslim	90.2%	8.7%	1.1%
	Hindu	78.6%	20.8%	0.6%
Caste	OBC	78.8%	20.6%	0.5%
	Non-OBC	82.8%	16.4%	0.8%
Poverty probability of HH	Less than 50%	80.9%	18.7%	0.4%
	More than 50%	81.3%	17.8%	1.0%
Total	All Sample	81.1%	18.2%	0.7%

## Survey question:

- *Do you observe any change in your child health (height and weight) after the camp?*