RAPID DIET ASSESSMENT TOOL:
Demystifying IYCF assessments- Extrapolation of education/ learning initiative

A Cross-Sectional study of HOSHIARPUR (PUNJAB) Block

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Pratham Education Foundation

- Pratham Education foundation was established in 1995 in Mumbai and has grown in both scope and geographical coverage since then.
- India's largest non government organization.
- An innovative learning organization created to improve the quality of education.
- Run various programs reaching 7.7 million children across the country*.

*http://www.pratham.org/



ASER (Annual Survey of Education Report)

- ASER Centre was established in 2005.
- The largest non-governmental household survey conducted in rural India.
- ASER surveys have been involving more than 25,000 volunteers and covering over 700,000 children in 15,000 villages each year.
- Tracks children's ability to read and do basic arithmetic involving local organizations and institutions in every rural district in the country.
- Has become an important resource for the education policies of both Central and State governments.

ASER Testing tool for Arithmetic

MATH TEST SAMPLE (1)

	Number recognition 10–99	Subtraction 2 digit with borrowing	Division 3 digit by 1 digit
3 7	65 38	51 − 35 = ____ ; 67 − 48 = ____	7) 918 (
1 4	92 23	84 − 49 = ____ ; 73 − 36 = ____	6) 769 (
8 9	47 72	56 − 37 = ____ ; 31 − 13 = ____	8) 987 (
5 2	56 87	45 − 18 = ____ ; 43 − 24 = ____	4) 513 (
	29 11		
Ask the child to recognise any 5 numbers. Atleast 4 must be correct.	Ask the child to recognise any 5 numbers. Atleast 4 must be correct.	Ask the child to do any 2 subtraction problems. Both must be correct.	Ask the child to do any 1 division problem. It must be correct.

ASER Testing tool for Language

Story

…is a little girl. Her mother gave her a book. It had lots of stories and nice pictures. Seema reads it every morning on her way to school. She learned many words. Her teacher was very happy. The teacher gave Seema another book. It had more stories. She showed it to all her friends.

Para

I go to school by bus.
The bus has four wheels.
It has many windows.
It is blue in colour.

e	d	w
s	c	
g	h	z
i	q	

hand	star
bus	
cat	book
day	few
old	
sing	bold

IYCF: FEW FACTS

•Sound Infant and young Child Feeding (IYCF) practices are known to improve child's growth, survival and intellectual development.

•There is a policy push in India to unpack age appropriate complementary feeding so that the same can be better understood and adopted at community level.

•An innovation was hatched extrapolating ASER/Pratham approach for large scale assessment and community participation approach in education for assessing IYCF and other domains involving National Service Scheme (NSS) students.

K.E.Y (Knowing and Engaging for Young child food and feeding)

- An ECD-Nutrition curriculum to train frontline workers/volunteers to work with caregivers of very young children (less than 3 years) on nutrition, health and overall development.

- Simple, measurable and actionable indicators have been identified to enable volunteers and caregivers to monitor Young child food and feeding practices, growth and overall health and development.





ECD Nutrition curriculum comprises of:

- Main K.E.Y module

- Supporting modules- Growth monitoring, Immunization, Diarrhoea, Water, hygiene and sanitation

Rapid diet assessment tool developed

Based on ASER philosophy of community involvement, simple assessment and understandable evidence

Rapid Diet Assessment tool:

- A rapid diet assessment tool was developed.
- An attempt to involve common people/ with not necessary technical background to unpack the age appropriate complementary feeding.
- A possible interface for common people to look at IYCF, analyze and assess gaps for possible action
- Reference period: 24 hour

Rapid diet assessment tool

FOOD INTAKE PROFORMAE - BASELINE

(Mother and Birth - 2 years old child)

Identification:

Child's Name:

Date of birth: DD MM YY

Child's Age: (in months)

Mother's Name:

Surveyor's Name: Date of Survey: __/__/____

Food Practices: (Tick the appropriate)

Vegetarian	M	C	Eggitarian	M	C	Non-vegetarian	M	C

Nature of the previous day of the survey:

Normal		Special (feasting/fasting)	

Is the child well today: Yes No

Instructions:

About the Tool:

This tool has **3 sections. Section 1,2,and 3.**

Section 1 of the tool has to be filled in the field by asking **the mother/primary caregiver of the child.** Other family members can also participate.

Section 1 of the tool is about the **food record of the mother**. This record is used as a reference to a child's diet so that detailed information about child's diet can be obtained. For example ask the mother when you ate this and then what did you feed the child, was anything fed to the child before or after that meal?

Section 3 SHOULD NOT be asked but **should be filled** from **the food intake record** taken in **Section 2.**

Ensure that **Section 3** is filled before submitting the form and preferably before going to the next household.

How to ask about diet (Food Intake):

Ask about food as normal conversation and not as formal questions/interview. Be patient. Respondents take time to recollect.





Respondents tend to give general food intake. Ask specifically about the last 24 hours. In case the last day was not a normal day then take record of the day previous to that or general food intake.

Very often you will find a difference in what the mother/primary caregiver is saying and what others are saying about child's food. Enquire patiently and try to get the real picture.

Rapid diet assessment tool

Section 1- Mother's Food Intake

- Ask mother/caregiver of the … reference period: last 24 hours.
- Ask about food as norm… and not as formal questions/interview. Be very patient. Respondents take time to recollect.
- Ask what was eat… hours. Start with the most recent meal and then go backwards to cover the 24 hour period.

W… eaten ?	What was eaten ?	Ingredients

Now go to section 2 and start asking about child's diet. Remember to come back to this section and complete the table as instructions below.

Given below is the list of food items. From the information about various dishes eaten and ingredients that go into the dishes (collected above) write (1) against the food item if it was ever consumed in the last 24 hours by mother or write (2) against the food item if it was not consumed.

	S. No.	Food product (Ingredients)	Write code (1=Yes; 2=No)
1- Energy giving foods	(A)	Rice, roti made of atta/bajra/ maize/maida, bread/pav	
	(B)	Roots like potato, sweet potato, yam	
	(C)	Visible fat like cooking oil/butter/ghee	
	(D)	Nuts like dry fruits like peanuts, almonds etc	
	(E)	Sugars like table sugar, sugarcane, jaggery and jam	
2-Body building foods	(F)	Pulses like soyabean, lentils, rajma	
	(G)	Milk like Animal milk-cow/ buffalo/sheep	
	(H)	Milk in tea	
	(I)	Milk products like curd, *paneer* buttermilk, *khoya*	
	(J)	Egg	
	(K)	Meat and meat products like chicken, mutton, meat	

	S. No.	Food product (Ingredients)	Write code (1=Yes; 2=No)
3- Protective foods	(L)	Green leafy vegetables like Methi, Palak, Bathua etc	
	(M)	Dark colored vegetables like pumpkin, tomato, carrot etc	
	(N)	Other vegetables except onion	
	(O)	Citrus fruits like orange, lime, mausami, guava, amla etc	
	(P)	Dark yellow or orange colored fruits like mango, papaya	
	(Q)	Other fruits like apple, peach, banana	
4- Foods bought from market	(R)	Packaged foods: Namkeen or sweet snacks like biscuits, namkeens	
	(S)	Packaged foods: Aerated Drinks like cold drink	
	(T)	Unpackaged foods like samosa, kachori, bread pakoda etc.	

Rapid diet assessment tool

Section 2 - To [illegible] or the target child by asking the mother or primary caregiver

1. In case, the child is given only [illegible] the number of times fed _____ & leave other sections blank. *2. Was water given in the last 24 hours? Yes/No*

Note: For column G, H & [illegible]tion as mentioned by caregiver while s/he explains the recipe. Do not specifically ask these questions.

When was food eat…	S.N.	[illegible] food? (the dish) C	[illegible]pared at Home 2=Neighbour 3=Bought from market 4=Anganwadi centre 5=Mother's milk* 6=Any other (Specify) (multiple option possible) D	Ingredient (Don't take information about dry spices)  E	Food from family pot** 1=Yes 2=No  F	Which utensil was used for cooking? 1=Iron 2=Any other G	Special measures for increasing energy density taken? 1= Added ghee 2=Added Jaggery 3=Use of ARF^ 4=Any other(specify) 5=No such measure taken H	Measures taken to improve nutritional quality of food? 1=Used lemon juice for better iron absorption 2=Germinated grains 3=Fermented the foods 4=Any other (specify) 5= No such measure taken I	Quantity *Note: Fill the quantity in terms of Spoon and Katori as shown below or in pieces/units for solid foods* J	Consistency 1= Thick 2= Thin 3= Medium 4= Solid K
1 Meal 1 (M-1)	11									
	12									
	13									
2 Meal 2 (M-2)	21									
	22									
	23									
3 Meal 3 (M-3)	31									
	32									
	33									


Teaspoon


Tablespoon


Katori/Bowl

**In case of mother's milk, leave column E to K blank.*
***Food that is prepared for the entire family & not especially for the child.*
^ARF: is Amylase Rich Flour that is made of germinated or sprouted cereals which are rich in a particular enzyme.
Note: *In case of Water, Snacks and Commercial foods, leave column E to G blank.*

Training Process:

• 60 NSS students got Training on KEY in a workshop mode. First two days, information was given to them to build their capacities on allied topics followed by field exposure

•To understand field realities, students got involved in doing the survey in 40 villages of Hoshiarpur Block.

•Simple Rapid Diet assessment tool and a questionnaire was used to gauge information in order to understand the local perceptions, existing knowledge and practices in the community.

• Desk check of all the forms was done.

METHODOLOGY:

• 40 villages were randomly sampled of Hoshiarpur II block using probability proportional to size (PPS) sampling technique.

•Villages selected were as per the Census 2011 village list.

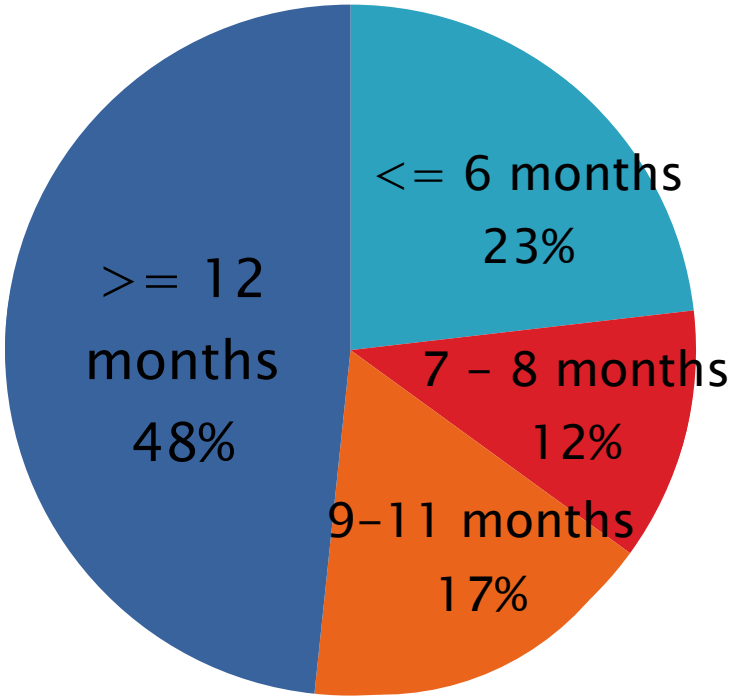
• List of less than 2 year old children was obtained from Anganwadi centres.

•16 households were covered from each village in order to give us a total targeted sample of 640 households to create a block report card of Hoshiarpur block.

FINDINGS:

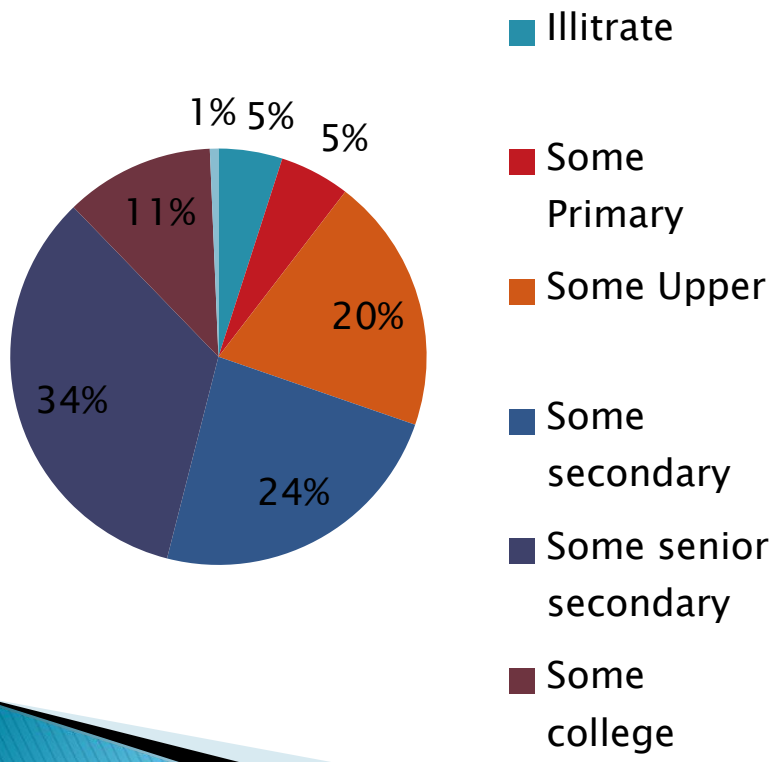


Age Distribution of Children (n=604)

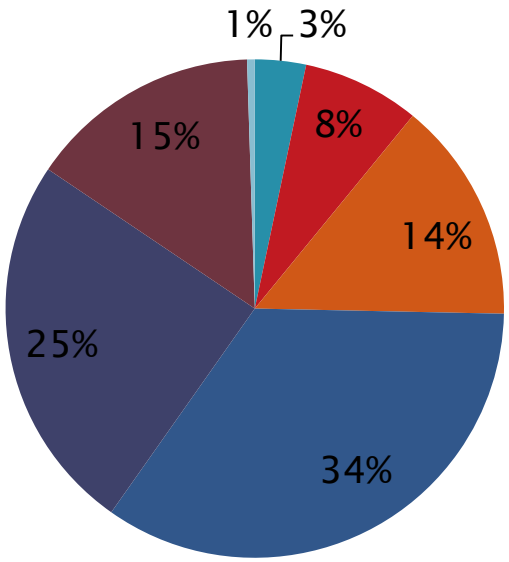


Educational Qualification

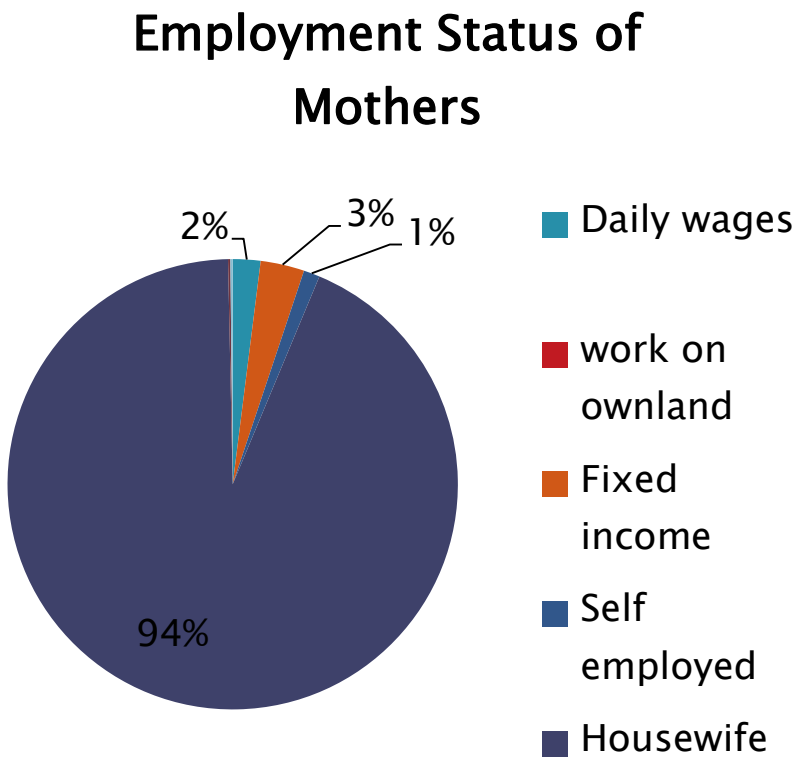
Educational qualification of Mother

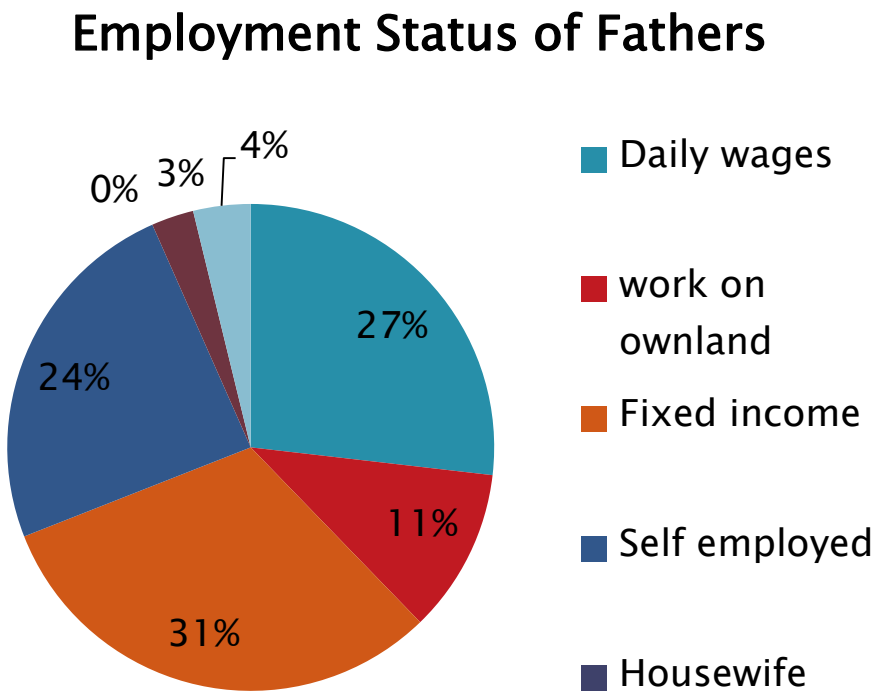


Educational qualification of Father

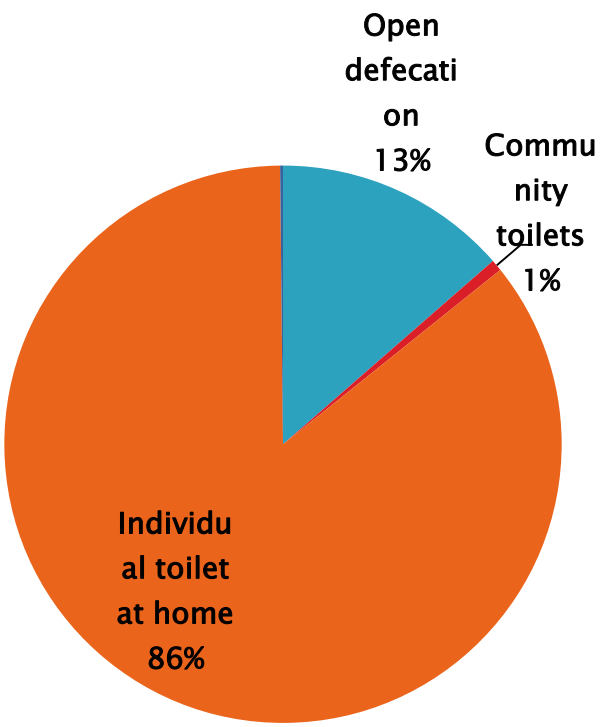


Employment Status

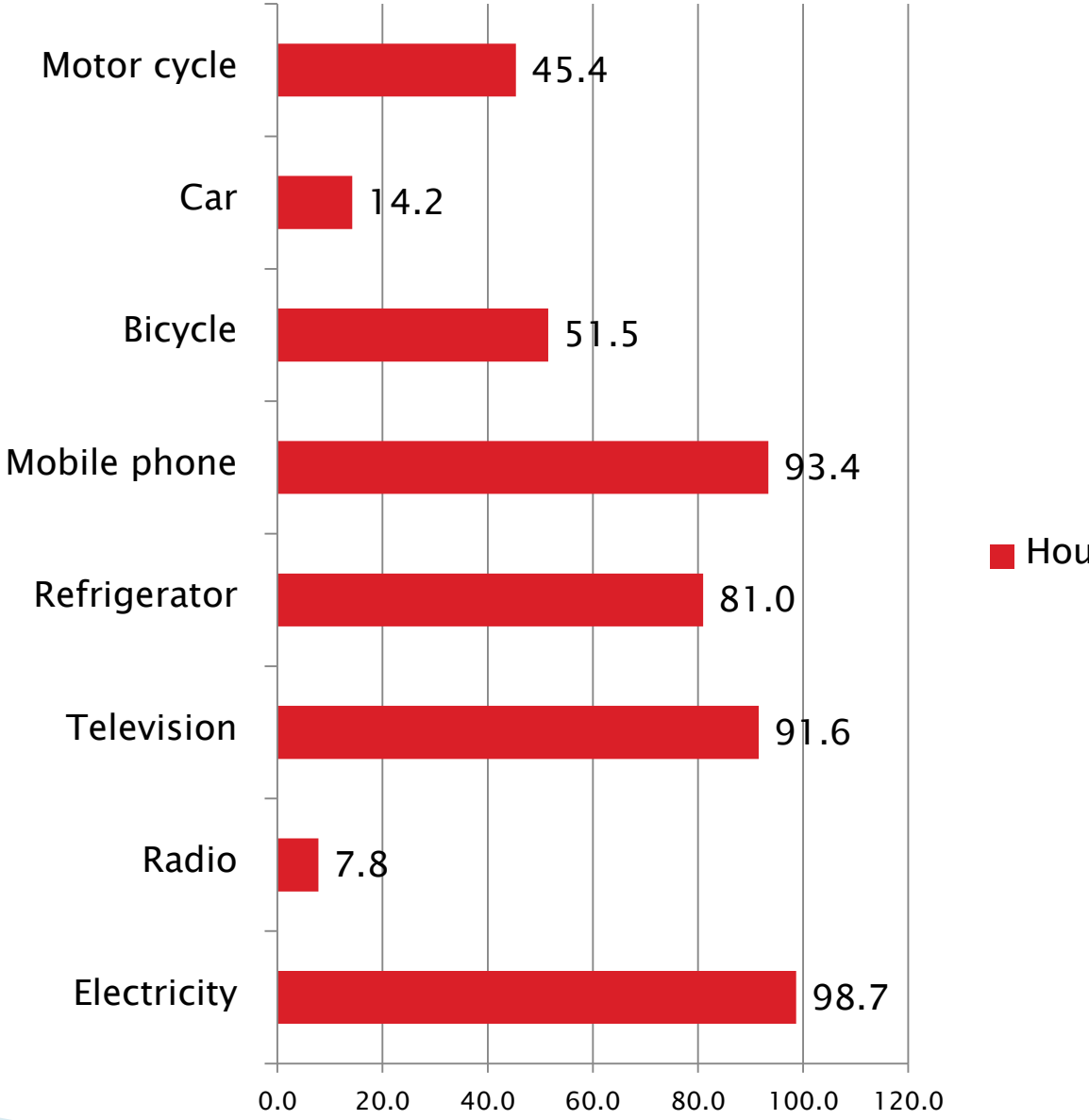




Toilet facility



Household possession



Infant and Young Child Feeding Practices

Distribution of children according to exclusive breastfeeding and other than mother milk (<= 6 months)

Age	Exclusive breastfeeding		Other than Mother milk	
	n	%	n	%
<=6 (N=139)	108	77.1	31	22.3

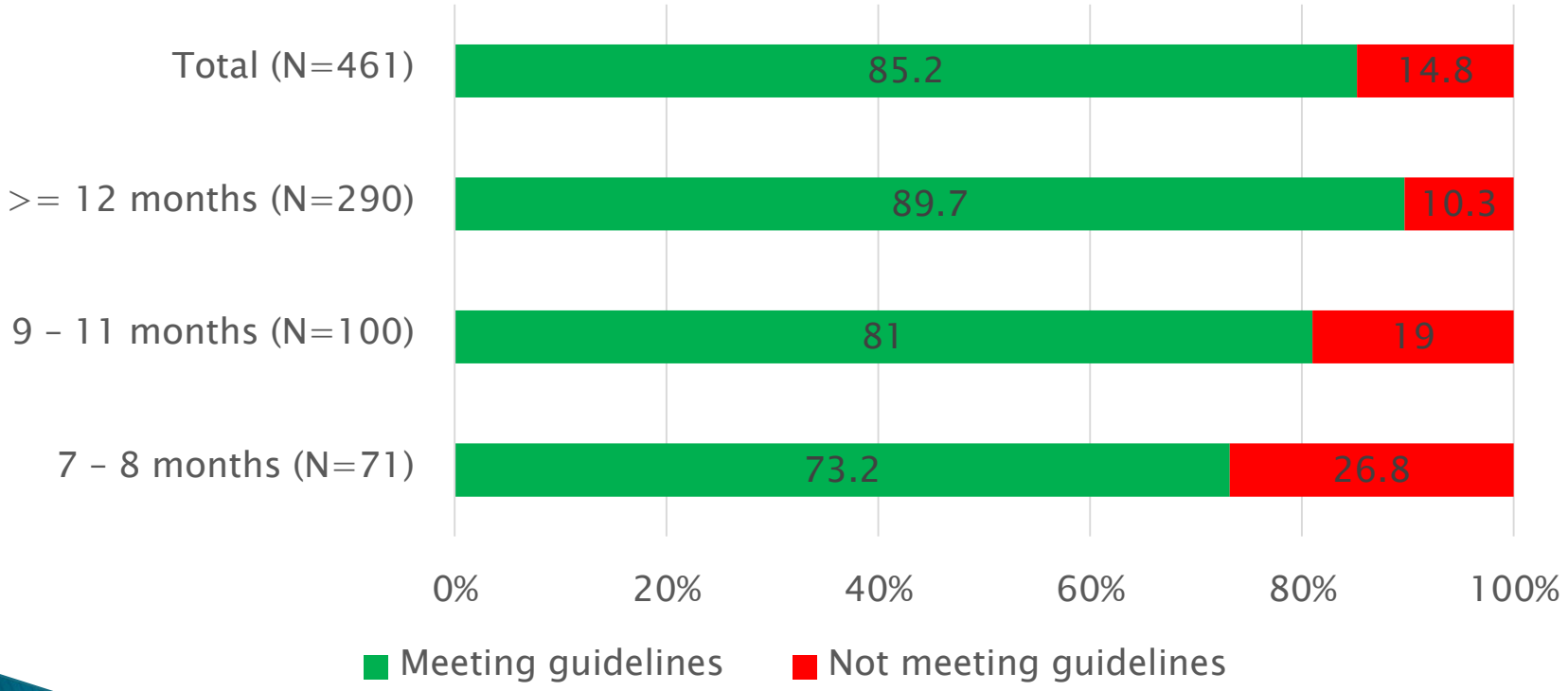
Distribution of children according to exclusive breastfeeding and other than mother milk (6 months above)

Age	Exclusive breastfeeding		Other than Mother milk	
	n	%	n	%
7 – 8 months (N=71)	19	26.8	52	73.2
9 – 11 months (N=100)	16	16.0	84	84.0
>= 12 months (N=290)	13	4.5	277	95.5
Total (N=461)	48	33.8	413	89.6

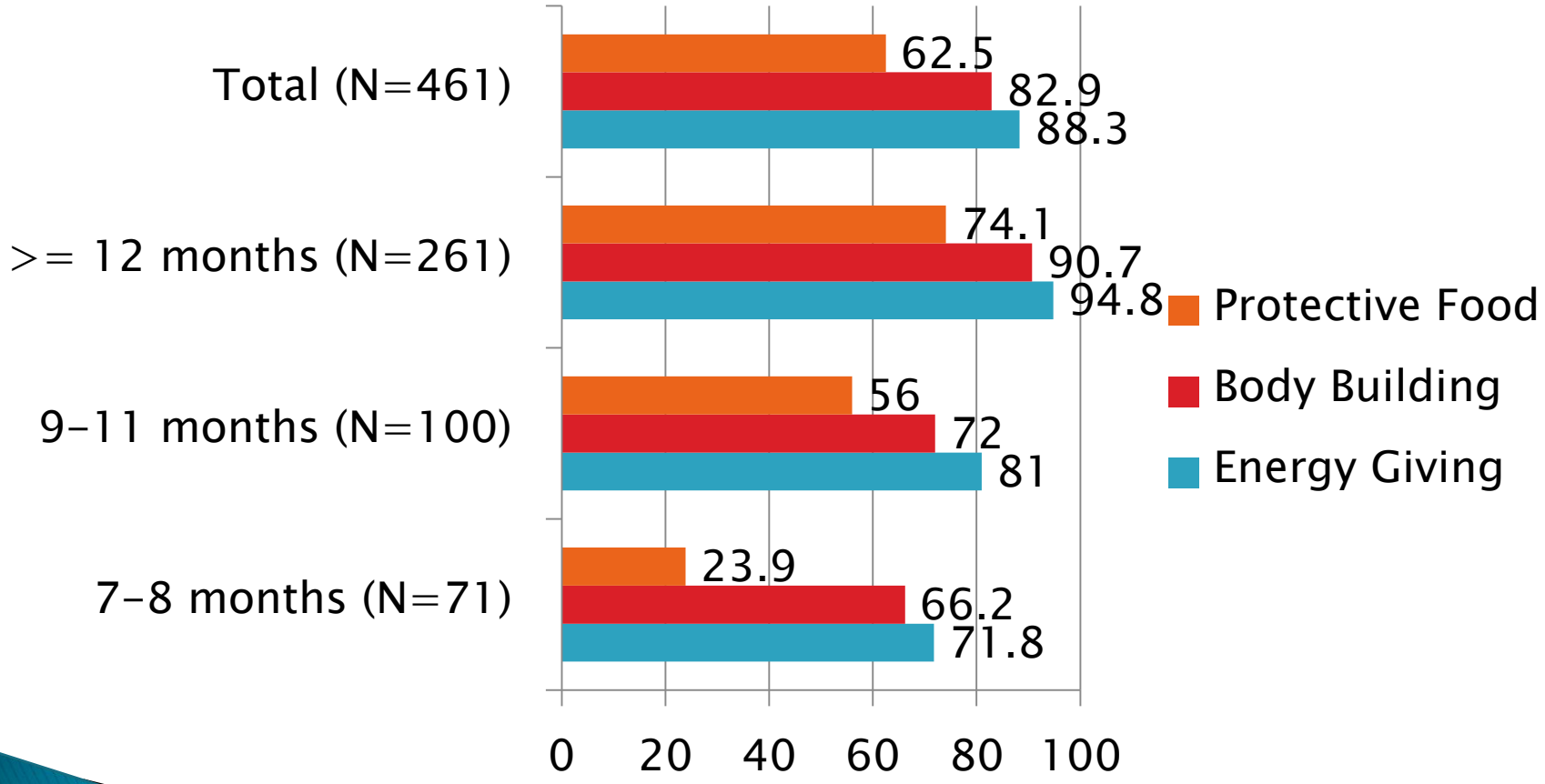
Number of time additional feed was given according to the adherence to the guidelines

Category	Guidelines	Meeting guidelines		Not meeting guidelines	
		Total	%	Total	%
7 – 8 months (N=71)	>=3 feeds	52	73.2	19	26.8
9 – 11 months (N=100)	>=4 feeds	81	81.0	19	19.0
>= 12 months (N=290)	>=4 feeds	260	89.7	30	10.3
Total (N=461)		393	85.2	68	14.8

Number of time additional feed was given according to the adherence to the guidelines



Dietary Diversification



Meal consistency for children above 6 months

>6 Month Child (Meal items consistency)		
Consistency	**No of meal**	**%**
Thick	172	6.3
Thin	1063	38.9
Medium	485	17.7
Solid	1016	37.1
Total	2736	100.0

Measures taken to improve energy density of >6 month child meal

	7-8 months	9-11 months	>=12 months	Total	%
Added Ghee	12	31	120	163	35.3
Added Jaggery	0	0	0	0	0
Use of ARF	0	0	0	0	0
Any other	0	0	0	0	0
Total				163	

Measures taken to improve nutritional quality of food

	7-8 months	9-11 months	>=12 months	Total	%
Cooked in Iron utensils	17	42	191	250	54.2
Used lemon juice for better iron absorption	1	0	3	4	0.8
Germinated grains	0	0	0	0	0.0
Fermented the foods	0	0	0	0	0.0
Any other	0	0	0	0	0.0
No such measure taken	0	0	0	0	0.0

Other Domains

GROWTH MONITORING

Do you have the growth chart of your child?		
	n	%
Yes	460	76.2
No	140	23.2
Not responded	4	0.7
Total	604	

If yes, why do you think regular weighing of children is important?		
	n	%
It helps in weight gain of the child	128	21.2
To monitor child's growth	**395**	**65.4**
Doctor has asked to do so	22	3.6
Any other	14	2.3
Don't know	39	6.5
Not responded	6	1.0

According to you, how often should a child be weighed?		
	n	%
Every month	**324**	**53.6**
Once every three months	54	8.9
No specific time	64	10.6
At the time of immunization	83	13.7
Any other	16	2.6
Don't know	55	9.1
Not responded	8	1.3

Do you think regular weighing of a child is important		
	n	%
Yes	**552**	**91.4**
No	51	8.4
Not responded	1	0.2

If the weight was not measured, what is the reason? (n=338)		
	n	**%**
AWW was not present	17	5.0
Weighing machine was not available at AWC	13	3.8
Lack of information about child's weighing	**93**	**27.5**
Lack of time	158	46.7
Any other	40	11.8
Not responded	17	5.0
Total	338	

Practice

Have you got your child weighed this month?		
	n	%
Yes	264	43.7
No	338	56.0
Not responded	2	0.3
Total	604	

Diarrhoea

When your child had Diarrhea last, what did you do ?	n	%
Gave ORS	**46**	**22,4**
Gave home made sugar and salt solution	8	3,9
Gave home made fluids	9	4,3
Took child to trained health worker	105	51,2
Mother's milk	14	6,8
Any other	23	11,2
Total	205	

When child has diarrhoea, should there be any changes in the food and drink intake pattern of the child?	n	%
Increased food intake	27	4,5
Increased fluid intake	**49**	**8,1**
Did not change anything	114	18,9
Stopped feeding mother's milk	5	0,8
Decreased food and fluid intake	**42**	**7,0**
Not Responded	367	60,8
Total	604	

Do you know how to prepare ORS solution?		
	n	%
Explained Fully	**46**	**7.6**
Explained partially	364	60.3
Don't know	**169**	**28.0**
Not Responded	21	4.1
Total	600	

IMMUNISATION

Do you think immunization is important		
	n	%
Yes	**598**	**99.0**
No	5	0.8
Not responded	1	0,2

If yes, why is immunization important?		
	n	%
Protect from diseases	**572**	**94.7**
Everybody says so	8	1.3
Family members asked to	7	1.2
AWW told so	18	3.0
Neighbours do it	0	0.0
Don't know	9	1.5
Any other	3	0.5

Do you have your child's immunization card?		
	n	%
Yes	**554**	**91.7**
No	48	7.9
Not Responded	2	0.3
Total	604	

If yes, vaccination status (for children >=12 months)		
	n	%
Total immunization (n=290)	**229**	**79.0**

CONCLUSION:

•Majority of the households have access to facilities but they have very little knowledge about right practices that need to be followed for development of a child

•. It seems to be not so much of a problem of access but a problem of awareness.

• we should be emphasizing more on making stakeholders than making beneficiaries.

•Easy assessments instruments like the one used here might have a potential to demystify young child food and feeding by involving ordinary people in assessments and understanding the gaps to propel action.

Acknowledgements

- Rayat Bahra Institute of Management, Hoshiarpur

- Vajinder, Punjab state head, Pratham Pujab Team

- Capacity Building Unit, ASER Centre

THANK YOU!

No. of children given different food groups

		Energy Giving						Body Building							Protective Foods						
		Cereals & Millets	Roots & Tubers	Sugars	Fats & Oils	Nuts	Energy Giving	Pulses	Milk from animals	Milk in tea	Milk & Milk products	Egg	Meat	Body Building	Mother's milk	Green leafy vegetables	Dark colored fruits	Other vegetables	Citrus fruits	Dark colored fruits	Other fruits	Protective food
7-8 months (N=71)	71	42	8	23	1	33	51	12	35	4	13	0	0	47	59	0	3	14	2	0	3	17
	%	59,2	11,3	32,4	1,4	46,5	71,8	16,9	49,3	5,6	18,3	0,0	0,0	66,2	83,1	0,0	4,2	19,7	2,8	0,0	4,2	23,9
9-11 months (N=100)	100	69	15	53	0	50	81	39	57	7	26	0	1	72	78	1	34	45	2	3	15	56
	%	69,0	15,0	53,0	0,0	50,0	81,0	39,0	57,0	7,0	26,0	0,0	1,0	72,0	78,0	1,0	34,0	45,0	2,0	3,0	15,0	56,0
>= 12 months (N=290)	290	262	84	225	1	202	275	131	194	44	129	2	0	263	168	8	139	195	7	16	41	215
	%	90,3	29,0	77,6	0,3	69,7	94,8	45,2	66,9	15,2	44,5	0,7	0,0	90,7	57,9	2,8	47,9	67,2	2,4	5,5	14,1	74,1
Total (N=461)	461	373	107	301	2	285	407	182	286	55	168	2	1	382	305	9	176	254	11	19	59	288
	%	80,9	23,2	65,3	0,4	61,8	88,3	39,5	62,0	11,9	36,4	0,4	0,2	82,9	66,2	2,0	38,2	55,1	2,4	4,1	12,8	62,5

Measures taken to improve energy density of >6 month child meal

	7-8 months	9-11 months	>=12 months	Total	%
Added Ghee	12	31	120	163	35,3
Added Jaggery	0	0	0	0	0,0
Use of ARF	0	0	0	0	0,0
Any other	0	0	0	0	0,0
Nothing	0	0	0	0	0,0
Total				163	