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Degree of Exposure to *Suaahara II* and Maternal and Child Dietary Diversity

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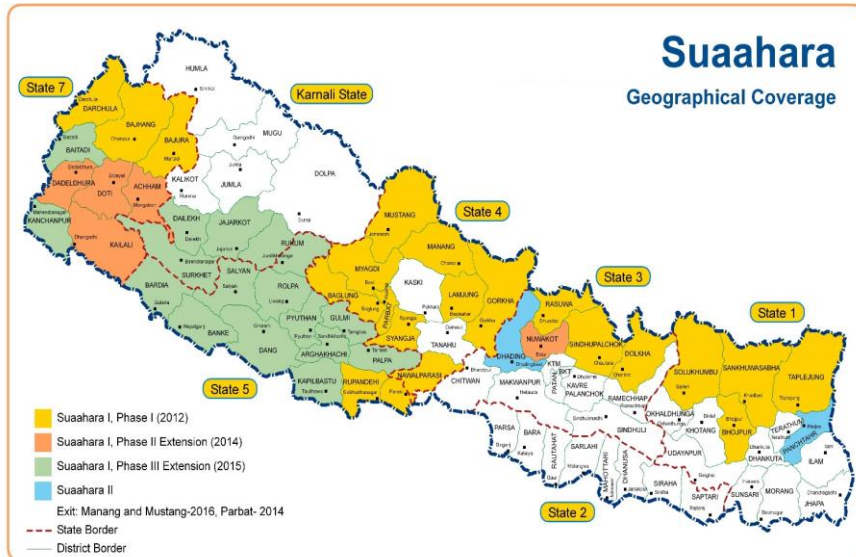




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Suaahara II Background



- ❖ Builds on Suaahara I (2011-2016)
- ❖ April 2016 – March 2021
- ❖ Funded by USAID
- ❖ Working in 42 of 77 districts
- ❖ Targets 1.5 million households in the 1000-day period
- ❖ Multisector programming:
 - nutrition,
 - health,
 - family planning,
 - WASH,
 - agriculture,
 - gender and social equity, and
 - nutrition governance



Exposure Platforms



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परिवारकै स्वास्थ्यका लागि

- Home visits

- Group meetings
- Key life event celebrations
- Community fairs
- Radio contests & awards
- Food demonstrations

- Radio program
- Push messaging
- Videos for frontline workers
- Social Media

Interpersonal communication (IPC)

Community mobilization (CM)

Mass Media (MM)

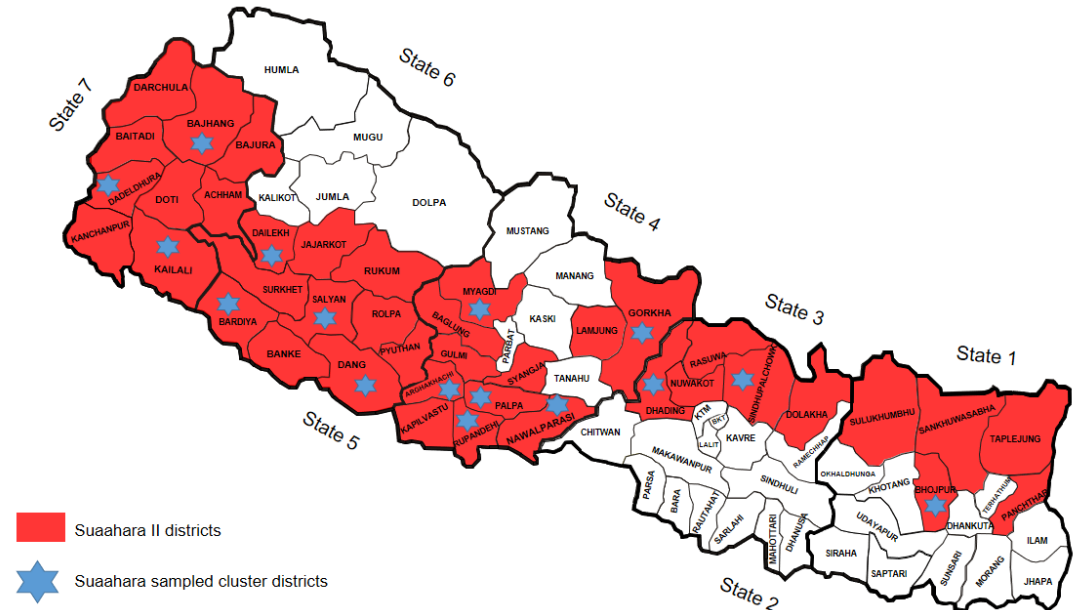


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Survey Details

- ❖ Suaahara II cross-sectional annual survey dataset (2017)
- ❖ Multi-stage cluster sampling, using PPS (districts, municipalities, wards, and old wards)
- ❖ 3,635 households randomly selected for interview with mothers and HH heads
- ❖ Data collection by New ERA in (June-Sep 2017)
- ❖ NHRC Ethics approval





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Study Objectives and Methodology

- ❖ Study objective: investigate associations between exposure to Suaahara II and maternal & child dietary diversity
- ❖ Analysis Methods:
 - ❖ Linear regressions for dietary diversity scores
 - ❖ Logistic regressions for meeting minimum dietary diversity
- ❖ Exposures: interpersonal communication (IPC), mass media (MM), community mobilization (CM), any and multiple exposure
- ❖ Outcomes: maternal and child dietary diversity
- ❖ Confounding Variables: mothers' age and years of education, number of children <5 living in household, socio-economic status, caste/ethnicity, agro-ecological zone, urban/rural residence (+ child age & gender, any child illness in 2 weeks prior to survey for child regressions)



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Dietary Diversity

Child dietary diversity:

- ❖ Milk, other than breast milk, and dairy such as cheese and yogurt
- ❖ Grains, roots, & tubers
- ❖ Vitamin A-rich vegetables & fruits
- ❖ Other fruits & vegetables
- ❖ Eggs
- ❖ Meat, poultry & fish
- ❖ Legumes

Women's dietary diversity:

- ❖ Grains, white roots, tubers, plantains
- ❖ Pulses
- ❖ Nuts & seeds
- ❖ Dairy
- ❖ Meat, poultry & fish
- ❖ Eggs
- ❖ Dark green leafy vegetables
- ❖ Other Vitamin A-rich vegetables & fruits
- ❖ Other vegetables
- ❖ Other fruits

Child minimum dietary diversity: consumption of 4 out of 7 food groups

Women's minimum dietary diversity: consumption of 5 out of 10 food groups 6



Results: Background Demographics

Sample characteristics	Mean (SD)/%	Sample characteristics	Mean (SD)/%
Mothers' age (years)	26.2 (5.5)	Equity quintile	
Mothers' education (years)	6.1 (4.3)	Quintile 1 (lowest)	21.7%
Child age (months)	24.7 (16.0)	Quintile 2	28.6%
Child sex: female	44.4%	Quintile 3	23.2%
Children <5y in household	1.2 (0.4)	Quintile 4	20.4%
Caste		Quintile 5 (highest)	6.1%
Brahmin/Chhetri	39.4%	Mothers' DDS	4.1 (1.2)
Socially excluded	49.5%	Mothers meeting MDD	35.5%
Other	11.1%	Child DDS	3.6 (1.1)
Agroecological zone		Children meeting MDD	54.5%
Terai	31.3%		
Hills	56.2%		
Mountains	12.5%		
Residence: rural area	50.0%		

N=3635



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Results: Exposure to Suaahara II



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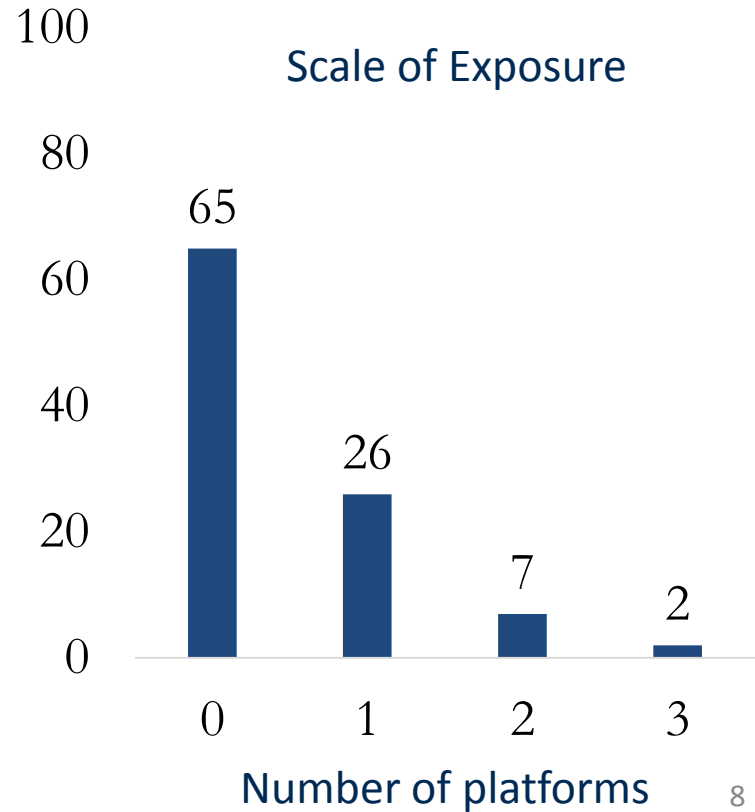
22%

11%



Any: 35%

13%





Results: Maternal Diet

IPC and CM, but not MM, have positive, significant association with Maternal Dietary Diversity

	DDS (N=3635)		MDD (N=3635)	
	Beta (95% CI)	p	OR (95% CI)	p
Any	0.09 (0.00, 0.17)	0.05	1.16 (1.00, 1.36)	0.05
Interpersonal Communication	0.15 (-0.01, 0.31)	0.07	1.31 (1.00, 1.72)	0.05
Community Mobilization	0.14 (0.02, 0.26)	0.03	1.37 (1.11, 1.70)	<0.001
Mass Media	0.07 (-0.02, 0.17)	0.14	1.08 (0.91, 1.28)	0.38



Results: Child Dietary Diversity

MM had positive, significant association with child dietary diversity

Child age: 6-23.9m

	DDS (N=1383)		MDD (N=1383)	
	Beta (95% CI)	P	OR (95% CI)	p
Any	0.09 (-0.04, 0.22)	0.19	1.24 (0.95, 1.61)	0.12
IPC	0.01 (-0.20, 0.22)	0.91	1.05 (0.68, 1.63)	0.82
CM	-0.06 (-0.26, 0.14)	0.58	0.82 (0.54, 1.24)	0.36
MM	0.11 (-0.05, 0.27)	0.18	1.38 (1.01, 1.88)	0.04



Results: Maternal Diet

Exposure to 3 platforms results in stronger, positive association with maternal dietary diversity

	Dietary Diversity Score (N=3635)		Minimum Dietary Diversity (N=3635)	
Scale (ref. group: 0)				
1	0.04 (-0.05, 0.14)	0.38	1.08 (0.92, 1.27)	0.36
2	0.18 (0.00, 0.36)	0.05	1.34 (0.99, 1.83)	0.06
3	0.45 (0.14, 0.76)	<0.001	2.31 (1.46, 3.65)	<0.001



Results: Child Dietary Diversity

As exposure increases from 1 to 2 to 3 platforms the degree and strength of association with child dietary diversity increases, but only among older children.

Child (6-23.9 m)					Child (24-60 m)			
	DDS (N=1383)		MDD (N=1383)		DDS (N=1774)		MDD (N=1774)	
	Beta (95% CI)	p	OR (95% CI)	p	Beta (95% CI)	p	Beta (95% CI)	p
1	0.11 (-0.04, 0.26)	0.15	1.27 (0.95, 1.71)	0.11	0.07 (-0.04, 0.17)	0.20	0.06 (-0.17, 0.30)	0.60
2	0.06 (-0.22, 0.35)	0.67	1.20 (0.66, 2.17)	0.56	0.19 (0.03, 0.36)	0.02	0.36 (-0.02, 0.75)	0.07
3	-0.27 (-0.69, 0.15)	0.20	0.61 (0.22, 1.72)	0.35	0.41 (0.16, 0.67)	<0.001	0.33 (-0.39, 1.06)	0.37



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Key Findings

- Positive trend of improved dietary diversity with increasing exposure to SII platforms
- Percentage of population exposed to SII seemingly low but as expected after 1 year of program implementation & staff to population ratio- 625 field staff : 750,000 households
- Results suggest that a multi-pronged intervention package is necessary to address poor maternal and child dietary practices
- Barriers to behaviour change differ between maternal and child diets
- Importance of interpersonal communication as an exposure platform for behavior change



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Key Implications for the program

- Increase frontline workers – 825 Community Nutrition Facilitators working from year II
- Promotion of Bhanchhin Aama using non-radio platforms i.e. stickers, SMS, Facebook, YouTube, etc.
- Localized production of BA: 14 FMs locally producing the program
- Community Events like Poshan Chautari and Key-Life Events
- Regularization of HMGs through the FLWs
- Increase in the number of platforms: SMS Push Messaging, IVR, Facebook, YouTube



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Suaahara II thanks the Government of Nepal for their leadership. 15