

Women's Agricultural Work and Nutrition (WWN)

Survey Findings and Implications



This is a fact sheet that summarizes some of the main findings of the WWN study conducted in rural areas of the Sindh province.

Background

What is LANSa, and how we became interested in this issue?

Leveraging Agriculture for Nutrition in South Asia – or how can agriculture lead to improvements in nutrition, given that

- High proportion of workforce relies on agriculture for their livelihood
- Agricultural change can lead to improved availability and access to an adequate diet

Pakistan Evidence Review – found important knowledge gap with respect to women’s work in agriculture and nutrition outcomes

- Labour Force Survey gives different statistics
- Some global evidence but none in Pakistan about linkages

Women’s Work and Nutrition (WWN) Survey

- Collaborative effort within LANSa between the Collective for Social Science Research and the Leverhulme Centre for Integrated Research on Agricultural and Health (LCIRAH)
- How can we address the knowledge gap identified in the Pakistan Evidence Review
- Preliminary qualitative research in rural communities in Punjab and Sindh
- Uniquely designed sample survey conducted to high globally-accepted standards, particularly for anthropometrics

Sampling and data

- Representative survey of irrigated rural areas of Sindh
 - Randomly drawn sample of villages across 13 districts, all births in reference period documented
 - Over 1,000 mother-child recruited in baseline
- Unique features
 - Questions on women’s work based on prior qualitative research
 - Baseline and endline surveys with same cohort
 - Allowing analysis of stunting and growth over time
 - Precision
 - Rigorous probing of child’s date of birth
 - Anthropometric measurement training of high globally-recommended standards

Food Insecurity & Hunger

Table 1: Households worried about not having enough to eat by wealth (%)

	Baseline	Endline	Neither	Both
	N= 1153	N=1031	N=1026	N=1026
All	59.1	60.9	21.9	41.8
Wealth status				
Poorest	82.7	78.0	2.6	64.2
Poor	73.2	72.8	8.2	52.3
Average	62.8	63.7	15.2	44.1
Rich	51.3	57.9	26.3	34.9
Richest	26.9	32.5	55.2	14.4



Table 2: Households that went to bed hungry By wealth (%)

	Baseline	Endline	Neither	Both
	N=1149	N=1035	N=1026	N=1026
All	35.4	25.2	52.8	13.7
Wealth status				
Poorest	63.0	51.8	20.5	36.8
Poor	45.4	30.3	41.5	18.1
Average	33.6	26.3	51.0	11.3
Rich	23.7	13.9	66.5	3.8
Richest	12.6	4.6	82.5	0

Highlights:

- Three-fifths worry about not having enough to eat
- A quarter actually experience hunger at least once a month
- Food insecurity strongly associated with poverty, but high proportion of 'richest' also food insecure

Women's Work

Table 3: Women's work by type (%)

Type of work	Ever	In pregnancy	After birth of child
	N=1048	N=1048	N=1035
Any work	89.1	75.6	85.8
Agricultural work	81.0	64.6	72.9
Farming	66.6	43.3	54.8
Livestock	69.7	57.0	64.0

- Majority of women work during pregnancy and after child birth
 - Not always counting their work as work, or as choice



Woman agricultural worker harvesting sugarcane in Mirpurkhas district of Sindh

Women's Agricultural Work

Table 4: Women's work by tasks

Tasks	Ever (%) N=1048	In pregnancy (%) N=1048	After birth of child (%) N=1035
Picking cotton	51.2	28.6	36.9
Weeding/Digging	31.0	19.1	31.0
Harvesting grain (mainly wheat and rice)	39.8	14.4	31.2
Sowing/transplanting rice	22.4	11.4	10.6
Harvesting vegetables (chili/others)	17.4	8.0	16.0

Table 5: Women's Agriculture work by Household wealth, Mother's education and Food Insecurity

		During pregnancy (%)	After child birth (%)
Overall		64.5	72.9
Wealth status			
Poorest		82.6	86.4
Poor		74.1	79.5
Average		59.5	73.7
Rich		60.7	72.7
Richest		44.8	51.8
Mother's Education	No	70.2	78.0
	Yes	40.6	51.9
Worry about not enough food to eat	No	52.9	61.0
	Yes	72.6	80.3
Vulnerable to sleeping hungry	No	58.7	70.2
	Yes	75.2	80.8

Highlights:

Women's work – unpaid or underpaid

- Digging, weeding, harvesting (grains, cotton, vegetables, chilis), livestock
- Cotton (and chili) harvesting relatively less flexible
- Livestock seen as chore rather than work

Main drivers of women's work

- Household poverty
- Lack of education
- Food insecurity
- Interconnected factors but with distinctive policy implications too

Women's Health

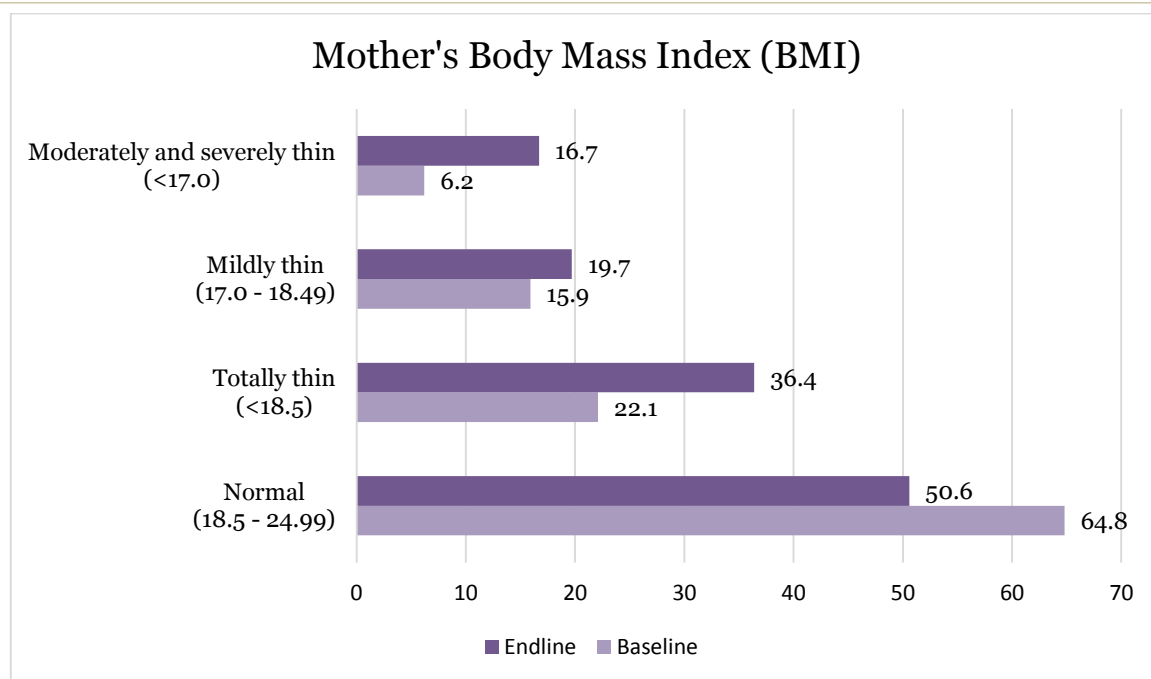


Table 6: Mother's BMI by Thinness (%)

		Totally thin at baseline BMI <18.5 N= 1146	Totally thin at endline BMI <18.5 N=909
Overall		22.1	36.4
Wealth status			
Poorest		38.4	51.4
Poor		22.1	42.9
Average		18.5	33.5
Rich		19.1	34.1
Richest		13.2	18.9
Any work during pregnancy	No	17.8	
	Yes	23.2	
Agriculture work during pregnancy	No	19.0	
	Yes	23.4	
Cotton picking during pregnancy	No	19.8	
	Yes	27.0	
Any work after childbirth	No		31.8
	Yes		37.0
Agriculture work after childbirth	No		31.7
	Yes		37.9
Cotton picking after childbirth	No		32.4
	Yes		42.7

Highlights:

High prevalence of 'thinness' among women

- Over a third thin in endline
- Associated with poverty and work

Child Nutrition

Table 7: Prevalence of Stunting and Wasting (%)
By Sex, Wealth status and Mother's characteristics

	Wasting Below -2		Stunting Below -2	
	Baseline	Endline	Baseline	Endline
All	13.7	18.6	45.8	61.1
Sex				
Male	12.1	19.5	47.3	63.4
Female	14.9	17.7	44.2	58.8
Wealth status				
Poorest	16.9	32.8	53.1	73.4
Poor	11.4	18.5	44.4	70.8
Average	12.6	17.6	49.1	63.9
Rich	14.8	13.5	41.7	52.9
Richest	11.6	11.6	38.6	42.4
Mother's education				
None	14.0	19.8	47.0	65.1
Primary +	11.3	14.1	40.3	45.2
Mother's BMI				
Thin	15.4	25.7	64.4	67.4
Normal	12.9	15.8	43.7	61.8
Overweight	15.0	11.7	24.8	43.1

Table 8: Stunting (%) by Mother's work

	Baseline Below -2	Endline Below -2
Overall	45.8	61.1
Any work		
No	41.6	55.1
Yes	47.1	62.2
Agriculture		
No	40.9	55.8
Yes	48.5	63.3
Cotton picking		
No	42.4	57.8
Yes	54.4	67.1

Table 9: Wasting (%) by Food Insecurity and WASH

		Baseline Below -2	Endline Below -2
	Overall	13.7	18.6
Worry about not enough to eat	No	13.7	14.8
	Yes	13.4	21.1
Vulnerable to sleeping hungry	No	12.6	17.1
	Yes	15.1	23.4
Use of soap post-defecation	No	13.1	18.5
	Yes	12.8	18.9
Animal waste in compound	No	15.2	14.2
	Yes	13.1	20.3

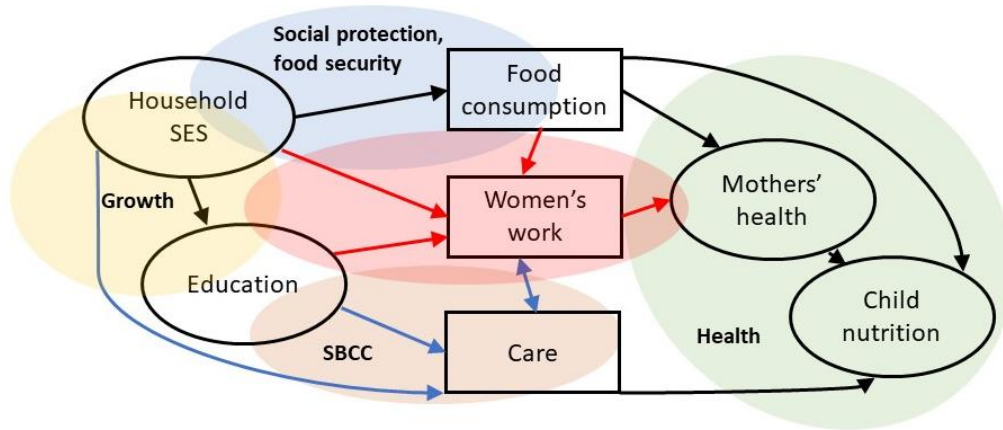


Highlights:

- Wasting and stunting prevalence increases with age
- Endline wasting associated with household poverty, food insecurity and mother doing agricultural work
- High proportion of children already stunted at baseline (aged 0.5-3 months), then further deterioration
- Stunting associated with mother's BMI, household poverty and food insecurity, and work (particularly cotton-harvesting)

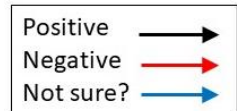
Policy Priorities

Recognition, protection, promotion of rights of women agricultural workers' and wellbeing at the center



Possible areas of action

- Law and legislation
 - Drafting laws, garnering cross-party support
- Data and research
 - Changing definitions, methodologies
- Existing policies and programmes
 - Growth
 - Food security and social protection
 - Health and nutrition interventions
- Mobilisation and organization
 - Forming unions, associations; articulating demands
- Networking within country and global/regional experiences



Further reading

Pradeilles, R., Norris, T., Ferguson E., Gazdar, H., Mazhar, S., Mallah, H., Budhani, A., Mehmood, R., Aslam, S., Dangour, A., Allen E. (2018). *Catch-up growth and associated factors in infants in Pakistan*. Maternal and Child Nutrition Journal.

Pradeilles, R, Allen, E., Gazdar, H., Mysorewala, A., Mazhar, S., Dangour, A., and Ferguson, E. (2017). *The relationship between crop-related agricultural workload and maternal and infant nutritional status in rural Pakistan*. Paper presented at the Agriculture, Nutrition and Health Academy Scientific Symposium, July 2017, Kathmandu

Haris Gazdar and Marium Ibrahim, *Poverty, Food Security and Nutrition: Linking SDGs Through Women Agricultural Workers*. in Z. A. Bhutta and J. K. Das eds. *Health and SDGs in Pakistan*. Paramounts. August 2018.

Sidra Mazhar, Mysbah Balagamwala and Haris Gazdar, *The Hidden Economic Backbone-Women in Agriculture*. Paper presented at the LUMS International Conference on Gender, Work and Society. April 2017.

Mysbah Balagamwala, Haris Gazdar and Hussain Bux Mallah, *Women's Agricultural Work and Nutrition in Pakistan: Findings from Qualitative Research*. LANSAs Working Paper, Volume 2015, No.02. LANSAs. January 2015.

Mysbah Balagamwala and Haris Gazdar, *Agriculture and Nutrition in Pakistan - Pathways and Disconnects*. LANSAs Pakistan Evidence Paper. LANSAs and Collective for Social Science Research. May 2013.

About LANSA consortium

LANSA is an international research partnership of six research development organisations. Led by M.S. Swaminathan Research Foundation in India, other partners include BRAC in Bangladesh, Collective for Social Science Research in Pakistan, Institute of Development Studies (UK), International Food Research Policy Research Institute (USA) and Leverhulme Centre for Integrative Research on Agriculture and Health (UK). LANSA research is funded by the Department for International Development (DFID), UK Government.

We are finding out how agriculture and agri-food systems can be better designed to advance nutrition. We are focused on policies, interventions and strategies that can improve the nutritional status of children in South Asia.

Website: www.lansasouthasia.org

About Collective for Social Science Research

The Collective for Social Science Research was established in 2001 with a small core staff of researchers in the social sciences who have extensive experience conducting multidisciplinary research both in Pakistan and internationally. Areas of research interest include social policy, economics, poverty, gender studies, health, labour, migration, and conflict. The Collective's research, advisory, and consultancy partnerships include local and international academic institutes, government and non-governmental organizations, and international development agencies.

The Collective is recognized for three main areas of innovation in the practice of applied social sciences in Pakistan: the introduction of a political economy perspective in macro- and micro-issues; the attention to informal collective action and social networks; and the combination of quantitative and qualitative research methodologies. The Collective's objective is to produce high quality academic research in the social sciences and to foster informed debate on social, political and economic issues and policies.

Collective for Social Science Research

173-I, Block 2, PECHS, Karachi-75400, Pakistan | Telephone No: +92 21 34551482, +92 21 34541270

Fax: +92 21 34547532

Website: www.researchcollective.org

Email: info@researchcollective.org

Twitter: [@CollectiveKHI](https://twitter.com/CollectiveKHI)

Facebook: [@CollectiveforSocialScienceResearch](https://www.facebook.com/CollectiveforSocialScienceResearch)