



Women Agricultural Workers and Nutrition in Pakistan

Pakistan has high rates of child undernutrition (both stunting and wasting). The country's agricultural sector is a source of livelihood for over 40 per cent of the workforce. The LANSAs Evidence Review for Pakistan¹ found that there had been steady feminisation of the agricultural workforce as men moved out of the sector and women remained.

Women's work in agriculture might impact nutrition through three possible pathways. On the positive side, women's income is thought to lead to their economic empowerment and pro-nutrition consumption choices in the household. On the negative side, with patriarchal norms on child care in place, women's work adds an extra burden on their time, hence compromising the care of their children. Also, women's own health might suffer if their higher energy consumption due to work was not compensated by improved diets.

Methods

LANSA researchers resolved to examine these issues through a formative study of the impact of women's agricultural work on their own health and the health and nutrition of their children. Research collaboration was set up between two LANSAs partners – the Collective for Social Science Research (CSSR) and the Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH).



◆ A woman cuts sugarcane for fodder in Tando Mohammad Khan district, Pakistan.

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¹ Balagamwala M and Gazdar H (2013), 'Agriculture and Nutrition in Pakistan: Pathways and Disconnects', IDS Bulletin, 44: 66-74

Preliminary qualitative research showed that agricultural work was highly gendered². There were certain tasks and activities that were associated with men and others with women. Much of women's agricultural work was unrecognised and unpaid. In some activities such as cotton harvesting where women were paid wages, their rates of pay were lower than men's wages for comparable work. Women were acutely aware of the trade-off between their work and their children's care, but many of them simply had no choice in the matter.

A cross-sectional survey of Women's Work and Nutrition (WWN) was conducted in irrigated rural areas of the Sindh province of Pakistan in 2016. A representative sample of mother-infant dyads (n=1161) was recruited when infants were 2–12 weeks of age. The survey included

a questionnaire administered to the mother and maternal and infant anthropometric measurements (i.e. weight, height and length). Besides questions about food consumption, care practices and household socio-economic conditions, a key focus of the questionnaire was on maternal work history. Insights from qualitative research informed the design of the questionnaire to ensure that women's work was properly enumerated³. This survey was repeated ten months later.

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Findings

It was found that agricultural work during pregnancy is associated with poor maternal and early infancy nutritional status⁴. Maternal body mass index (BMI) and infant Z-scores of



◀ In Pakistan, there are some tasks, such as feeding and watering livestock that are specific to women.

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² Balagamwala, M, Gazdar H and Mallah HB, 'Women's Agricultural Work and Nutrition in Pakistan: Findings from Qualitative Research', LANSAs Working Paper, Volume 2015, No.02. LANSAs. January 2015

³ Mazhar S, Balagamwala M and Gazdar H (2017), 'The Hidden Economic Backbone - Women in Agriculture', paper presented at the International Conference on Gender, Work and Society, LUMS, April 2017, Lahore

⁴ Pradeilles et al (2017), 'The Relationship Between Crop-Related Agricultural Workload and Maternal and Infant Nutritional Status in Rural Pakistan', paper presented at the ANH Academy Scientific Symposium, July 2017, Kathmandu



◀ Woman drying dung cakes to be used for fuel in Tando Mohammad Khan district, Pakistan.

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length-for-age (LAZ) and weight-for-length (WLZ) were calculated. The percentages of under-weight, over-weight or obese mothers and stunted or wasted infants were estimated. The impact of crop-related agricultural activities on maternal BMI and infant LAZ was examined using multivariable linear regression analysis. It was explored whether relationships between work in agriculture, during pregnancy, and infant growth were explained by intermediate effects on maternal BMI.

A high percentage of both mothers and infants were malnourished. Overall, 22% of mothers were underweight and 13% were over-weight/obese; 45% of infants were stunted, and 12% were wasted. Forty-three percent of women reported doing crop-related agricultural work during pregnancy of which 29% reported being involved in cotton-picking. The most common crop-related activities performed during pregnancy were: cotton picking (28.6%) followed by weeding (16.8%), and grain harvesting (14.4%).

Crop-related agricultural work (including

cotton harvesting) during pregnancy had a negative effect on maternal BMI even after accounting for the effects of education and household wealth – poorer and less educated women also had lower BMI scores. It was also found that cotton-picking performed during pregnancy was negatively associated with infant length at 2–12 weeks of age. Indeed, infants of mothers who engaged in cotton-picking during pregnancy were shorter and this association remained after adjusting for potential explanatory factors such as differences in education and socio-economic status. Finally, it was observed that 14% of the relationship between cotton-picking and infant growth operated via maternal BMI – a pregnant women’s cotton harvesting work has a direct impact on her infants’ nutritional status, and also an indirect effect through her own poor health.

“ For agriculture to play a more positive role for nutrition in Pakistan there needs to be greater recognition of the impact of women’s agricultural work by government, communities and families. ”



✦ Women carrying vegetables they have harvested. A scene from Mirpurkhas district, Pakistan.

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Implications

These findings are significant because they help to disentangle the various effects of women's agricultural work on nutrition and highlight the difficult trade-off faced by poor rural women whose work in

agriculture is driven by the need to support household consumption in the first place. For agriculture to play a more positive role for nutrition in Pakistan there needs to be greater recognition of the impact of women's agricultural work by government, communities and families.

Credits

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