Women's empowerment, food security and nutrition of pastoral communities in Tanzania

Research snapshot

In response to environmental, social and political pressures, many of the world's 300-600 million pastoralists are shifting to more sedentary livelihood strategies ('sedentarisation'), negatively affecting their food security and maternal and child dietary intake. For example, reduced access to common land can reduce the ability of pastoralists to feed their livestock and therefore threaten their reliance on animal products for household food security and nutrition.

A mixed-methods study examined the relationship between women's empowerment, household food security, and maternal and child dietary diversity in pastoral communities in two regions of Tanzania to understand effective pathways to enhance maternal and child nutrition. A quantitative survey of 373 pastoralist women was undertaken; indicators across three domains of women's empowerment (access to and control over resources, control and use of income, and extent and control of work time) were scored and matched to a household food-insecurity access scale. Qualitative surveys were undertaken with two subsets of 176 and 62 semi-sedentary, extensive pastoralist women to understand the gender dynamics affecting the women's empowerment–food security and women's empowerment–nutrition nexus.

Both methodologies showed a positive correlation between women's empowerment, their dietary diversity and that of their children, and therefore their nutrition security. Only the qualitative surveys indicated a positive relationship between women's empowerment and household food security. A customary distinction of gender roles was revealed between men as guarantors of household food security and women as in charge of nutrition security; women's perception is that this distinction is detrimental to achieving nutrition security. This may explain the discrepancy in quantitative and qualitative results. More qualitative research is needed to understand the complex links in sedentarising communities between women's empowerment and food security and nutrition, as affected by the interplay of new livelihood arrangements, social and gender norms and household relations, as well as individual characteristics. The authors suggest the adoption of an empowerment–nutrition framework that includes non-economic domains of empowerment and control over purchasing, sales and preparation of animal-source food products. Dairying projects could combine technology and institutional interventions at different stages to enhance women's empowerment and opportunities should be considered to enhance gender equity in rapidly sedentarising communities.

Alternative ready-to-use therapeutic food yields less recovery than the standard for treating acute malnutrition in children from Ghana

Research snapshot

Only 20% of children with severe acute malnutrition (SAM) have access to ready-to-use therapeutic food (RUTF), the cost of which limits its accessibility. This randomised, double-blind controlled, clinical-equivalence trial compared the effectiveness of an alternative RUTF with standard RUTF in the home-based treatment of children aged 6 to 59 months with uncomplicated SAM and moderate acute malnutrition (MAM) in Ghana. Study participants were recruited at 29 clinics throughout five districts in the Brong Ahafo region. Alternative RUTF was composed of whey protein, soybeans, peanuts, sorghum, milk, sugar and vegetable oil. Standard RUTF included peanuts, milk, sugar and vegetable oil.

Analysis, conducted on an intention-to-treat basis, revealed that of the 1,270 children treated for SAM or MAM, 516 of 642 (80%) receiving alternative RUTF recovered (95% CI=77% to 83%) and 554 of 628 (88%) receiving standard RUTF recovered (95% confidence interval [CI]=85% to 90%). The difference in recovery was significant at 7.7% (95% CI=3.7% to 11.7%; p=<0.001). Among the 401 children with SAM, the recovery rate was 130 of 199 (65%) with alternative RUTF and 156 of 202 (77%) with standard RUTF (P=.01). The default rate in SAM was 60 of 199 (30%) for alternative RUTF and 41 of 202 (20%) for standard RUTF (P=0.04). Children enrolled with SAM who received alternative RUTF had less daily weight gain than those fed standard RUTF 2.4 ± 2.4 g/kg vs. 2.9 ± 2.6 g/kg, respectively; P<0.005). Among children with moderate wasting, recovery rates were lower for alternative RUTF, 386 of 443 (87%), than standard RUTF, 397 of 426 (93%) (P=0.003). The lower-cost alternative RUTF was less effective than standard RUTF in the treatment of SAM and MAM. Higher energy, protein and fat content in standard RUTF and/or food intolerance to or bioactive metabolites in the alternative RUTF may be contributing factors but, importantly, most failures in the trial were the result of defaulting and the definitive outcomes of those cases are unknown. The authors recommend caution and further testing before any alternative RUTF is used in an operational setting.