



Towards Tackling Stunting in Children in Rwanda Under Two-Years-Old: A Multi-Faceted Approach

A new study, the collaborative survey titled ‘Nutrition, Markets and Gender: An integrated approach toward alleviating malnutrition among vulnerable populations in Rwanda’, launched in Kigali today, outlines that a multi-faceted approach is needed among agricultural and health sectors to tackle malnutrition and under-nutrition among Rwanda’s population of children under two-years-old.

Stunting increases the risk of illness and premature death in children. It is associated with abnormal physical growth, delayed mental development, poorer school performance and later reduced productivity in the work force.

“The effects of stunted growth can be permanent and even passed to the next generation,” said Dr. Mercy Lung’aho, a nutritionist at the International Centre for Tropical Agriculture and study team leader.

Rwanda has made significant gains in reducing hunger and undernutrition, authors note, but reducing prevalence of child stunting to 18 percent by 2018 and ending hunger and under-nutrition by 2050, require accelerated progress.

“Tackling the root causes of stunted growth in children, and undernutrition - which drove losses of 11.5 percent of Gross Domestic Product in 2012 - is absolutely vital for Rwanda’s national development.

“A multi-faceted response needs to be launched on all fronts to tackle this problem in line with the findings of this study,” said Dr. Louis Butare, a co-author and Director General at the Rwanda Agriculture Board.





Link Between Livelihoods and Stunting

The study, which analyzed 2,788 households across nine districts in Rwanda, highlights that in general, households with a stunted child earn less cash income from livelihood activities including farming. Households who earn extra income through petty trade or business enterprises have fewer stunted children.

The lower incomes earned from crop production among households with stunted children reflect lower production and less quantities sold on the market. Families producing more than 500 kilograms of crops are 50 percent less likely to have stunted children.

Ninety percent of households surveyed spend extra money on food first, before other household necessities, health or school fees. Results show that families who have extra income spend it on food - yet those with low income suffer twice: they can neither produce enough food for subsistence, nor can they buy extra food.

The report highlights that children with good diet diversity are around 60 percent less likely to be stunted. Other major contributing factors to reduced stunting include access to clean water and improved farm productivity.

Highlighting Need to Invest in Farming as a Business

The study also highlights that farmers who invest in their farming as a business – particularly women, empowered to invest their income in farming are less likely to have stunted children.

A positive correlation was found between the use of productivity enhancing technologies, like chemical fertilizer and improved seeds, and less stunting in children. Families that don't use fertilizer are around 15 percent more likely to have stunted children, for example.

Yet only three percent of farmers surveyed put farming inputs – fertilizer or improved soil fertility management – at the top of the list for investment. Results suggest that although boosted agricultural production can lower stunting and improved nutrition, investing in improved farming practices is not a household priority.



Investing in Productive Assets and Gender Empowerment

One way to improve this situation could be to support both men and women with access to farming assets and credit. Stunting in children significantly increased when households rely on seeds provided as gifts or free handouts. On the other hand, farmers investing in better quality seed and improved varieties or fertilizers recorded less stunting in children.

Using the Women Empowerment in Agriculture Index (WEAI), the study also found that stunting is around half as likely - 46.6 percent - in families where women don't control valuable "productive assets" – like mobile phones for information about and access to seeds, farm inputs like fertilizer or credit.

In Rwanda in general, women empowerment was found to be high – around between 60 to 80 percent of households surveyed. In particular, when women can make decisions about selling agricultural land and have access to the credit made, their children are around 20 percent less likely to be stunted.

Empowerment of both women and men is therefore crucial to reduce stunting in children. Individual satisfaction and leisure time, access to credit and information about credit were all factors associated in the study with lower stunting.

In addition, investing in labor-saving technology that allows mothers to spend more time providing nutrition, for example through breastfeeding, or improving sanitation, health and emotional care resulting in lower stunting of their children.

This is important because sanitation was clearly linked to stunting: Households that sourced their drinking water from public or communal sources were three times more likely to be stunted than those with access to treated water.



Sowing the Seeds: Towards Improved Nutrition

But increased agricultural production and consumption of food does not necessarily lead to well-nourished populations. The nutritional value of the harvests, eating habits and lifestyles are some other factors at play which require attention, say authors.

In Gisenyi, an urban area in the north-western part of Rwanda, stunting levels are the lowest in the surveyed sectors, at 16 percent. Yet the number of overweight women, and levels of anemia in both women and children are among the highest in the country.

Strategies to boost production of more bio-diverse and nutritious foods for low-income populations, are therefore critical to address stunting in children, in addition to boosting agricultural production.

The findings of the report suggest that a multi-facet approach is needed to tackle malnutrition and stunting in children under two, with no single sector able to address malnutrition alone.

They provide a sound roadmap towards achieving Rwanda's commitments outlined in the Compact2025, presenting an opportunity for improved coordination among health and agricultural sectors towards ending hunger and undernutrition by 2025.



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