ASSESSING THE IMPACT OF INCOME GENERATION ON A NUTRITION-SENSITIVE AGRICULTURE INITIATIVE IN INDONESIA

Helen Keller International, Indonesia

The Challenge

Undernutrition remains a critical problem in developing countries. In the Nusa Tenggara Timur (NTT) province of Indonesia, women and children under five have high rates of malnutrition and food insecurity. According to the most recent national health survey, the prevalence of stunting among children under five in NTT province is 51.7%—the highest in Indonesia.[1] Food insecurity, poor diets and inadequate young child feeding (IYCF) practices contribute to higher rates of illness, malnutrition and mortality. In some settings, studies have shown that home gardens improve household nutrition and income generation, but the relationship between household nutrition and income generation needs to be further explored.

The Intervention

Hellen Keller International (HKI) Indonesia implemented an enhanced homestead food production programme (EHFP) in NTT province, Indonesia. It combined home gardening of micronutrient-rich vegetables, poultry rearing and nutrition education with the aim of improving nutrition status and income generation among beneficiaries. Each intervention community comes together to form a demonstration farm (DF). Each DF has a lead farmer who receives agriculture inputs and training from HKI and then he or she transfers that knowledge to other community members who used the information to create their own homestead garden. The programme also included a collective marketing training module for women to promote the sale of surplus crops for supplemental income.

The Evaluation

This cluster-randomised trial was conducted in the Timor Tengah Selatan district in NTT province in Indonesia over two years. The target populations were children under age five, women of reproductive age and pregnant or lactating women. Households in nine DFs were selected for the intervention group (collective marketing), and another nine DFs were selected as the control group. This study examined changes in nutritional outcomes, income generation from the collective marketing approach, and if increased income was associated with improved household food consumption. The research team used structured questionnaires to gather data on food consumption and income generation.

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The Results

By the end of the programme, 11% of control households and 12.3% of the intervention households implemented collective marketing for their surplus produce, a point of emphasis in the training of the intervention group. Households among the control group increased their year-round production of vegetables from 33.7% to 46.6%. However, there was a decrease from 47.8% to 45.2% among the intervention households. Sales to village markets increased for the control group by 6.9%, but decreased 1.5% among the intervention group. Among both intervention and control groups, households earning additional income from their gardens decreased—from 22.3% to 13.3% for the intervention households and from 19.5% to 9.8% for the control households. However, income earned from raising chickens increased in control households from 23.7% to 37.9% while decreasing from 39.1% to 37.9% in intervention households. Among the households that earned additional funds, the money spent on the consumption of foods increased from 47.7% to 67.2%.

The Lessons Learnt

Production must be sufficient to produce a surplus. Factors such as weather, drought, access to water and other agriculture tools need to be considered in farming programmes to ensure an adequate amount of crop production. In addition, more time may be needed to encourage collective marketing. It was only one year between the implementation of the initial survey and baseline which may not have been enough to instil collective marketing practices in these communities.

Looking Ahead

This evaluation did not show that the collective marketing approach had a significant impact on the food consumption of households in Indonesia. El Niño weather patterns could have influenced overall crop production, which may have led to fewer surplus vegetables in the short duration of the intervention. Future studies using home gardens to improve nutrition should consider the potential impact of weather on crop yields to avoid such challenges.

The Nutrition Embedding Evaluation Programme (NEEP) is a four-year project (Oct 2013–Oct 2017) led by PATH and funded by the UK Department for International Development. NEEP aims to build the evidence base for what works in improving nutrition by conducting credible, robust evaluations of innovative interventions implemented by civil society organisations (CSOs). The programme provides grants to 18 CSOs to evaluate their programmes in 13 different countries. For more information, see **http://sites.path.org/mchn/our-projects/nutrition/neep/**

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References

[1] BPS. 2013. *Riset Kesehatan Dasar* (Basic Health Research). Statistics. Tahun, Indonesia: BPS; 2013. Available at http://www.depkes.go.id/resources/download/general/Hasil%20Riskesdas%202013.pdf.

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