

Nutrition Bulletin

August 2017



Family Farms for the Future: Monitoring of Homestead Food Production at the Household Level

As a solution to poor land utilization, food and nutrition insecurity, the Family Farms for the Future (FF4F) project is fostering the adoption of Homestead Food Production (HFP) among farming communities in Cambodia. Findings after 16 months of project routine monitoring have recorded improvements in household gardening practices, food production, and female empowerment among beneficiary households. A distinct shift from traditional to improved agricultural practices can be seen; consistent with burgeoning increases in total yields and diversification of produce. Beneficiaries have also reported growing and consuming more HFP produce throughout the year, highlighting the achievement of HFP in providing adequate and nutritious food for the family.

INTRODUCTION

Helen Keller International (HKI), in collaboration with the University of British Columbia, (UBC) began implementation of the FF4F project in March 2016 in four provinces – Kampot, Kampong Cham, Prey Veng and Phnom Penh; reaching over 4,500 households in 450 villages across different agro-ecological zones and contexts. Participating households were given the choice of adopting the model that best suits their needs, preferences and location out of the three HFP models offered: (i) plant-based HFP only; (ii) plant-based HFP + aquaculture; and (iii) plant-based HFP + poultry. Beneficiaries were all provided with initial farming inputs, ongoing technical assistance, and multiple trainings on innovative agricultural practices, nutrition education, sanitation and hygiene, marketing strategies, and gender equity.

By July 2017, 16 months of project activities have been implemented with many milestones achieved during this time. Key accomplishments include the baseline and 24-hour dietary recall data collection; development of entrepreneurship training tools for selling surplus HFP products; and the establishment of 8 private hatcheries, 4 nursing ponds, and 225 Village Model Farms (VMFs) which function as hubs of technical expertise and support. Participating households have also received fish fingerlings, poultry breeding stock, and up to 15 varieties of nutrient-rich vegetable seeds including pumpkin, amaranth, collard greens, and tomatoes for cultivation.

Throughout the project, routine monitoring has been conducted to ensure continuous progress of ongoing activities and to identify areas to be strengthened. This bulletin describes findings from Round 1 and Round 8 of the FF4F routine project monitoring.

METHODOLOGY

Routine monitoring data was collected every two months from a random sample of 450 households. In order to obtain a sample proportional to the number of target households in each province, it was determined that 21 villages from Kampong Cham, 12 villages from Kampot, 12 villages from Prey Veng, and 5 villages from Phnom Penh will be selected at random for each round of monitoring.

The monitoring tool used is a simple checklist on agricultural program inputs received over the past two months as well as current household activities in horticulture, fish farming and poultry raising. It also captures information on the sale of HFP products where present, along with basic information on household income and expenditures.

The first round of data collection occurred in May 2016 among 447 households. It was jointly conducted by the HKI monitoring team and district officers from the Department of Agriculture. Round 8 of monitoring was administered in July 2017 by the HKI monitoring team among 451 households. However, 8 villages (n=65 households) selected from Kampot province for Round 8 monitoring were part of the control group from the a pragmatic delayed-intervention cluster trial whereby program activities were withheld for one year. In order to ascertain the progress made by participating households in the 16 months of project implementation, these 65 households were excluded from this analysis resulting in a sample of 386 households in Round 8.

KEY FINDINGS

Since project activities began, household gardening practices have greatly improved. The prevalence of households without gardens decreased from 45.6% to just 16.6%. Additionally, beneficiaries have been transitioning from having no gardens or traditional garden types to more improved garden types (**Figure 1**). In addition, over a third of participating households are cultivating produce throughout the year, in line with one of the program’s objective of fostering year-round production of fruits and vegetables.

Beneficiaries’ homestead gardens have also demonstrated promising results. Despite households reporting spending the same amount of time; a median of 60 minutes on HFP activities both in Round 1 and Round 8, more households have produced fruits and vegetables in the last 2 months at 83.4% (n=322) in Round 8 compared to only 54.4% (n=243) in Round 1. Among these households, an increase in agricultural diversity and production can also be seen with almost half of the households cultivating more than 6 varieties, and over a third producing over 40kg of fruits and vegetables (**Figure 2** and **Figure 3**)

Figure 1 Changes in Gardening Practices

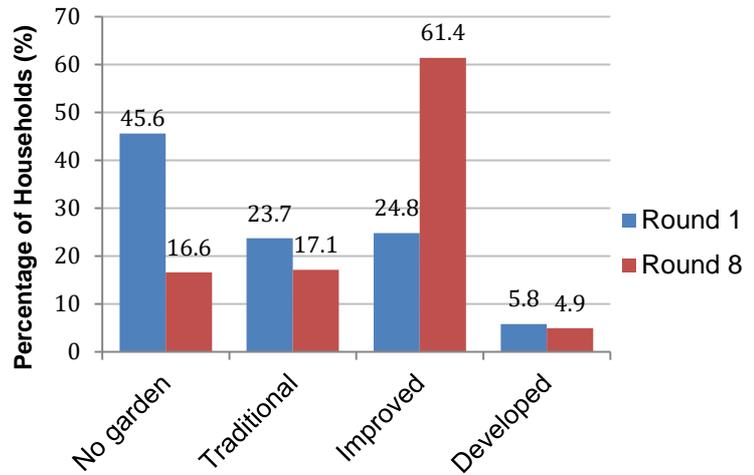


Figure 2 Number of varieties grown

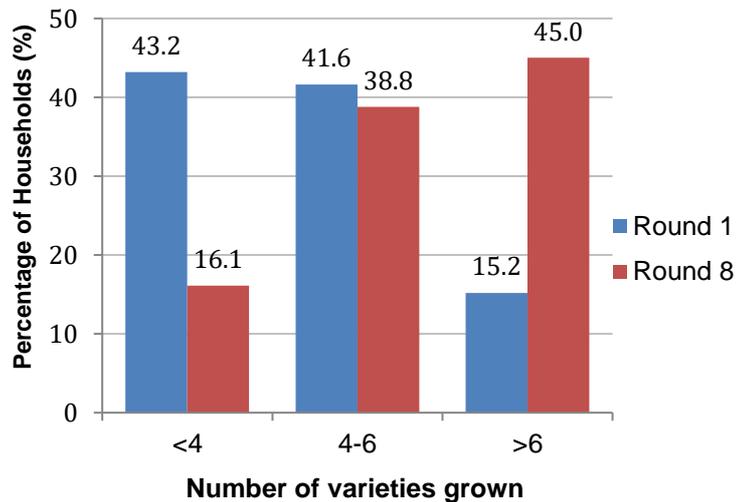


Figure 3 Production in the past 2 months

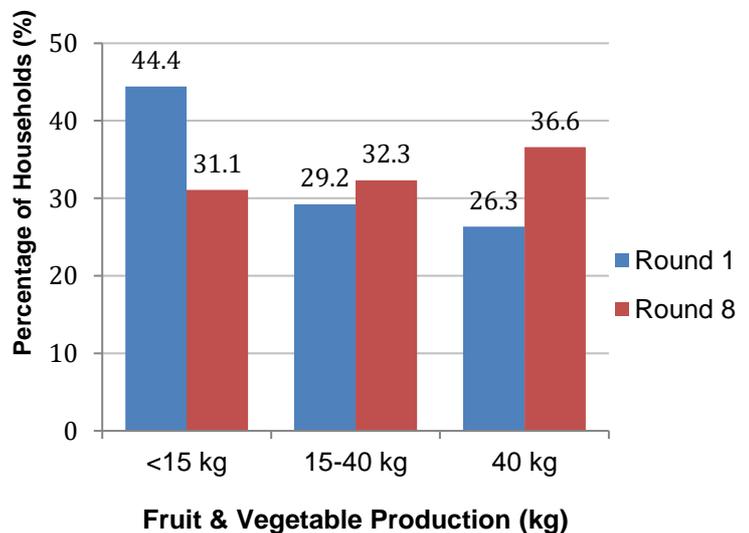


Table 1 Types of support received for HFP activities

Support Received	Round 1	Round 8
None	10.5	12.7
Training (any training)	89.3	74.6
Seed/seedling/sapling support from VMF,HKI or NGO	9.0	73.8
Seed/seedling sapling support from other source	0.9	2.1
Technical assistance from VMF, HKI or NGO	0.00	15.8
Technical assistance from other source	1.3	11.4
Visit	0.2	8.8
Other	0	1.0

The successes of these households can be partially attributed to the support and enabling environment that the FF4F project has provided for project beneficiaries. A greater number of beneficiaries reported receiving a wider array of support including training, seed support and technical assistance in Round 8 compared to Round 1 (**Table 1**). Additionally, only 1.6% (n=6) of households believed that HFP activities hampered childcare practices; a steep reduction from 17.0% (n=76) in Round 1.

Over three-quarters of beneficiary households reported that the primary use of the fruits and vegetables cultivated at home was for home consumption, while a smaller percentage of households predominantly sold the produce (**Figure 4**). The increased availability of nutrient-rich fruits and vegetables for home consumption is encouraging as it is able to contribute to improved food security and nutrition outcomes among members of participating households.

Another one of the FF4F project’s objectives is to support farmers in the transition from subsistence farming towards sustainable livelihoods through income generation from the sale of surplus HFP outputs. While over half of the households sold HFP products in the past two months, the prevalence of households engaged in marketing showed only a marginal increase from Round 1 to at 52.8% (n=236) to 53.1% (n=205) in Round 8 (**Figure 5**). Only vegetable sales grew, while fruits, eggs, poultry and fish products experienced a reduction in sales.

Figure 4 Primary use of HFP products

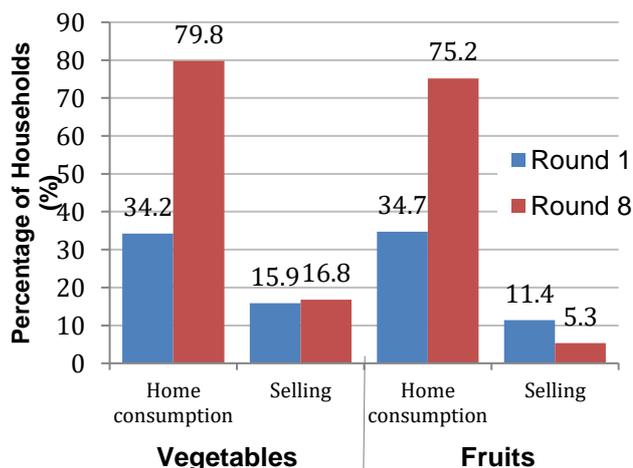
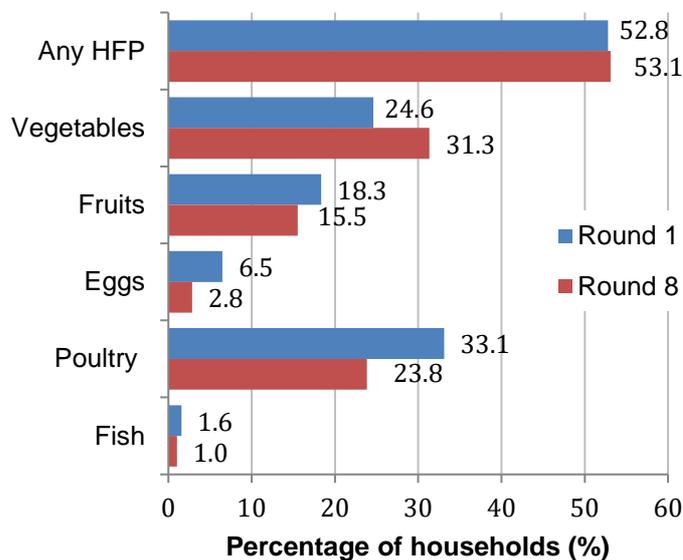


Figure 4 HFP products sold in the past 2 months



The income earned from the sales of HFP products were predominantly in the wife’s possession (92.2%), indicating that she was responsible for its utilization. Furthermore, the respondents indicating other household members specified a women relative, i.e. mother, grandmother, daughter and daughter-in-law, to be in control of the household finances. The increased access to funds among women in the household is in line women’s empowerment as women are more likely to invest in items benefitting the health and well-being of members in the household, particularly children.¹

Table 2 Primary money keeper in the household

Money keeper (%)	Round 1 (n=236)	Round 8 (n=205)
Wife	66.9	92.2
Husband	2.1	1.5
Both husband and wife	30.5	3.9
Other household member	0.4	2.4

CONCLUSIONS

The results from over one year of ongoing monitoring demonstrate the continuous progress made throughout the FF4F project. Advancement has been seen in numerous areas including household gardening practices, food production and consumption patterns, as well as women's empowerment. The increased production, diversity and consumption of nutrient-rich fruits and vegetables have improved households overall access to sufficient, safe and nutritious food enabling its members to have an active and healthy life.

Despite these promising results, project activities, particularly in facilitating the flow of alternative sources of income through the sale of surplus HFP products need to persist. Additional earnings would bolster rural farmers' households to break out of the cycle of poverty; not only paving the way towards successful and sustainable livelihoods, but also contributing to food security and overall health. Even now, the FF4F project team is piloting marketing strategies to expand linkages between households and markets in order to improve value chain participation.

In the remaining six months of the FF4F project, monitoring efforts will continue to ensure effective project implementation that builds the knowledge and capacity of beneficiaries and fosters long-term sustainability of improved outcomes. Moreover, throughout it all, project staff will encourage beneficiaries to take ownership and be self-sustaining in HFP activities and ensuring all members of their households are receiving adequate nutrition even beyond the lifecycle of the FF4F project.

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