Research to Impacts Map: **Agriculture for Nutrition**

Agrobiodiversity and Nutrition Project 2005-2014

24 - hour surveys
Photo credit: Grupo Yanapai

Summary: The aim of this project is to strengthen agrobiodiversity to broaden the food base. This includes an increase in small animal production and the installation of home gardens. Also to provide information and knowledge to women emphasizing the food products that originate in their own farming system.

For more information see:
https://www.ccrp.org/grants/agrobiodiversity-and-nutrition/

Los Andes
Community of Practice

Project Partners

Yanapai

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Instituto de Investigación Nutricional

Non-Governmental Organization · Farmer Organization · National Ag Research Center

COLLABORATIVE CROP RESEARCH PROGRAM

MCKNIGHT FOUNDATION

Understanding local contexts and knowledge around feeding practices and food availability

2011: **Baseline study** (n=182) in 4 communities in highland Peru (Huancavelica) shows that:

- **42%** of children were **stunted**
- **Infectious disease** might be principal cause of malnutrition.
- Child nutrition was better at times of **scarcity** because of bought foods and supplements.
- Main nutritional **deficits are Iron, Zinc, Ca and folic acid,** which can be remedied with legumes, animal products, fruits, and green vegetables.
- There is **not** a relationship between size of farm and nutrition.
- **Agrobiodiveristy was not associated with food security** in this population and did not protect against low dietary intakes of essential micronutrients. **Intake of animal protein** was the main determinant of dietary quality and raising small animals seemed to protect against food insecurity.

2013: Carrot, chard, watercress and onion seeds were distributed to 300 families, along with **training** on raising vegetables to 373 women organized in 14 mothers' groups. 65% of the families (n=300) **use the fresh vegetables** directly for home consumption.

2013: 15 women and 40 men established micro seed plots for **fava beans producing 212 kilos of 3 varieties** in 4 communities.

2012: Of 167 families that participated in a forage management farmer field school that focused on 2 introduced pasture grasses, a follow-up survey showed that 25% bought seed to increase pasture, 45% spent money for fencing, 80% invested in irrigation and **100% said they increased cows and cuyes** by 65% due to pasture. While families are not incorporating guinea pigs into their regular diet, **678 were eaten** during 15 wedding celebrations in June 2012. It is possible that this intervention resulted in more milk production from the cattle that led to milk availability for the children. from the cattle that led to milk availability for the cattle that led to milk availability for the children.

2011: 5 chickens each were distributed to **210 women** through **14 women's associations.** Initially, there was high chicken mortality that decreased with **training.**

2013: 50% of the women continue to use the profits from selling chickens to **replenish** their stock. Every 5 chickens provides **5.7 kilos of meat and 79 eggs per year.**

2012: 49 families were **visited and coached** on nutrition using the **TIPS** methodology. Around **30% had added important foods to their children's diets** like fava beans, eggs, cheese and meat one week later.

More diversified and nutritious food production throughout the year

Changes in knowledge, perception and attitudes of families towards child and family nutrition and roles and responsibilities

2015: Focus groups and interviews with participants (n=90) revealed the following changes in their practice due to the project:

- Prioritize child feeding and give them **foods specially prepared** for small children.
- Interest in preparing a balanced diet **complementing traditional foods** with vegetables, milk, and eggs

Changes in childhood feeding practices: frequency, diversity, consistency

2013: **endline survey** (n=225; 24-hour recall):

- Children of families who participated in project activities **consumed more legumes** (36% vs 26%)
- **Micronutrient deficiencies continue to be a problem,** with some numbers going up, some going down, but no real patterns emerging. This was probably influenced by **external factors** like distribution of **biofortified food** by other govt. agencies and the short time frame.
- **No obvious gains were made from biofortified potatoes** and increased animal product consumption that the project was promoting.