How Can Crop-livestock Integration Enhance Food Security and Nutrition in Southern Malawi?
Crop Livestock Integration and Marketing in Malawi (CLIM²)
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Background
The Malawian diet is dominated by high-carbohydrate foods, notably maize. Many rural Malawians, especially children, face malnutrition: 47% percent of children aged under five are malnourished and 20% severely stunted (NSO, 2014). With extremely small land sizes, it is difficult for a farmer to produce enough food for the family.

A family of five consumes about 1 t of maize per year. With on average farm size of 0.8 ha and maize yields of <1.5 t/ha, almost for half a year, a family does not have enough food to eat. Female-headed households are worse off (CLIM² baseline).

In Southern Malawi, low consumption of legume and livestock-sourced protein hinders children’s physical and cognitive development.

Results
When grain harvests fall short, farmers buy food and pay their children’s school fees by selling livestock. Raising livestock allows farmers better access to more nutrient-dense food.

Chimtengo Youth Club established a ‘Chicken Project’; women and girls grew sorghum, pigeonpea and cowpea to feed the chicken. This led to higher production of eggs – for consumption and/or sale.

Approach
A farmer’s ‘vision’ at an Innovation Platform (IP) meetings: improved chicken production for nutrition and income.

The CLIM² project encourages the use of livestock-based protein for nutrition enhancement, production of nutrient-dense crops and feeds, and value addition in communities in the following ways:

- **Create awareness**: With better understanding on production of more nutritious food per unit land, farmers readily switch from maize to more nutrient-dense crops.

- **Value addition to crops**: Dual-purpose cultivars, residue management, and agronomic and post-harvest practices add value to crops (e.g. aflatoxin prevention).

- **Increase animal protein consumption**: Improving access to livestock and dairy, especially where women participate, enhances local food consumption and the capacity to buy food.

- **Stimulate small-to-medium enterprises**: Pilots with women/youth groups will help engage in agribusiness. IPs help enhance on-farm production, nutrition and market participation.

Key messages
The potential for farmers to improve nutrition locally is high; diversifying and shifting crops from sale to livestock feed is one way to increase availability of animal-sourced protein.

Local business opportunities that foster integration of crops and livestock can enhance nutrition sustainably.

Programs need better alignment of agricultural development, nutrition and health, to enable uptake.