How do livestock affect nutrition?

Ensuring access to animal-sourced foods is a powerful way to ensure that the world’s poorest people can improve their diet, either through the animals they raise or the income they receive from them.

While huge progress has been made in reducing hunger, two billion people globally are still not getting all the nutrients they need. Poor diets impair both physical and cognitive development, which prevents people, communities and countries from reaching their full potential.

Animal-source foods play vital roles in providing high-quality protein and important micronutrients to under-nourished people in poor countries, particularly children and women of maternal age. Experimental studies have shown that even small amounts of animal-sourced foods provided to children regularly, such as an egg a day, can have significantly benefit children’s physical and cognitive development. However, besides school feeding programs, which require large public expenditure, avenues for effectively increasing the amounts of milk, meat and eggs consumed by children and others who need them have been difficult to identify. Because small-scale farmers and herders in low-income countries tend to sell rather than consume most of the foods their animals produce, or tend to keep animals as a store of wealth or social capital, simply keeping livestock has not been confirmed as a sure way to increase people’s consumption of animal-sourced foods.

Rigorously documented studies present evidence that keeping livestock, or providing new livestock assets to rural households, does benefit household nutritional outcomes. The studies show that this is particularly true when such interventions are accompanied by appropriate livestock-related training and other support. In some cases, these benefits are experienced not only in the households receiving livestock but also more generally in their communities.
The following are just a few research examples of the wide range of livestock-related interventions that have been shown to benefit human nutrition.

- A study of a livestock distribution and farmer training program in Zambia found that providing cattle or goats increased diet diversity both directly and indirectly by increasing household income. It also led to greater diet diversity in the community.

- In Kenya, data from a rural survey showed that when women owned or co-owned livestock, the children in their households had significantly better weight-for-age scores.

- In Nepal, training in community development and livestock management had positive impacts on child diet quality, particularly in systems where livestock were important.

- A livestock asset transfer program in Rwanda increased household diet diversity, and directly impacted child nutritional status as measured by weight-for-age scores.

- A large dataset from rural Tanzania found that households that did not keep large livestock had a 50% higher chance of stunting among preschool children.

- A community-based rural development project in Bolivia with a livestock asset transfer component led to increased household diet diversity, largely due to increased consumption of animal-sourced foods.

- Impact studies in Bangladesh show consistently that poultry projects enhance nutrition in poor households, in part because the increased income from poultry and egg sales is used to purchase more animal-sourced foods than grains.

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