



Coop Research Program | Call 1

Elements of successful novel dual purpose chicken production systems

Background

Intensive specialization in the global poultry sector, driven by a desire for higher feed conversion efficiency, has resulted in a complete decoupling of egg and meat production. Today, poultry is bred and reared either for egg or meat production by a few, globally operating, specialized companies and farms. This is also the case for Swiss poultry farmers, including free-range and organic systems. This system is of increasing public concern as a large number of healthy, day-old male animals are culled due to their inability to lay eggs (2.5 million chicks/year in CH). Several countries are currently considering a ban on this practice.

Objective

The overall research objective is to identify key elements of successful dual purpose poultry production systems through comprehensive biological and consumer perception studies of both the egg and meat production. The project will investigate factors affecting adoption of dual purpose breeds, with special attention to the conflict between animal welfare and food-feed competition. The project will also consider possibilities for using food waste products to counter a lower feed conversion efficiency that is common in dual purpose production.

Research Approach

Biological experiments, including both layer and grower side, where genotypes are screened and characterized; consumer behavior studies including focus group interviews, customer surveys on purchasing behavior, and consumer perception surveys.

Relevance and Expected Outcomes

The project will identify (1) key elements of successful dual purpose chicken production that minimizes both animal welfare conflict (omission of the culling of day-old chicks) and feed-food competition (reducing human-grade food needed for feed) and (2) best ways to promote consumer acceptance of the eggs and meat from these systems. By developing a dual purpose strategy, Switzerland could become a role model for other industrialized countries in this respect.

Food System Challenges Addressed

Sustainable proteins, Sustainable livestock production, Consumers' perception of sustainability, Resource efficiency.

www.worldfoodsystem.ethz.ch/research/research-programs/CRP

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Project Duration 2014-2017

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