ARGENINTA, FUNDACIÓN ARGENINTA, ARGENTINA

Innovate and intensify to adapt and grow

Innovating in the integral improvement of systems through sustainable intensification, increasing the adaptive capacity and resilience to climate change of family livestock systems in Argentina and Peru.

Argentina / Peru

15
Communities of practice participating

100
Livestock farms demos participating in the project

68
Training provided

19600
Farmers trained to adapt their livestock systems to climate change

Adapting family farming systems to climate change to improve livelihoods

The implemented initiative

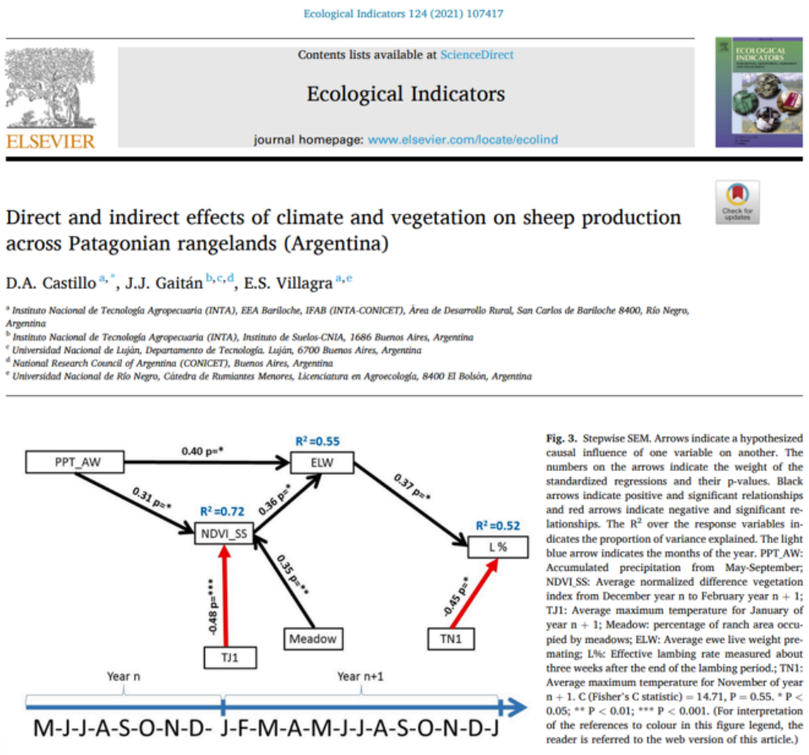
With FONTAGRO funding and its own resources, INTA and Universidad Agraria La Molina are promoting technological innovations in four regions of Argentina and Peru. The objective is to adapt family livestock systems to climate change and link their production, through organization, to short marketing circuits, thus improving their livelihoods.

Innovations in family livestock systems in Argentina and Peru

The technological solution

Family farmers in Argentina and Peru implement technological innovations in their livestock farms, such as: protective sheds; water collection, storage and transportation for family and animal consumption; improved irrigation systems; cultivation of forage species as a protein and/or energy bank; improvements in animal nutrition through technologies such as early weaning and strategic supplementation of pregnant females; control of predators and implementation of a health plan. They are also linked to local markets through fairs and/or associative sales. All these innovations allow family farmers to adapt their systems to climate change, improve production indicators and sell their products with better quality and in a fairly way.

Publications



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Direct and indirect effects of climate and vegetation on sheep production across Patagonian rangelands (Argentina)

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Fig. 3. Stepwise SEM. Arrows indicate a hypothesized causal influence of one variable on another. The numbers on the arrows indicate the weight of the standardized regressions and their p-values. Black arrows indicate positive and significant relationships and red arrows indicate negative and significant relationships. The R^2 over the response variables indicates the proportion of variance explained. The light blue arrow indicates the months of the year. PPT_AW: Accumulated precipitation from May-September; NDVI_SS: Average normalized difference vegetation index from December year n to February year n + 1; TJ1: Average maximum temperature for January of year n + 1; Meadow: percentage of ranch area occupied by meadows; ELW: Average ewe live weight premating; L%: Effective lambing rate measured about three weeks after the end of the lambing period.; TN1: Average maximum temperature for November of year n + 1. C (Fisher's C statistic) = 14.71, P = 0.55. * P < 0.05; ** P < 0.01; *** P < 0.001. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

Results

More than 16,000 farmers have been trained in management practices for adaptation to climate change through different means of communication. In Argentina, in the project's area of influence, silage production has more than doubled thanks to trials and training sessions. In Peru, the incorporation of improved pastures increased forage production in the demonstration fields by more than 20%, with a similar impact on milk production. The presence of protection dogs has reduced predation by more than 50% on farms where this method of predation control is used. The project favored the entry of producers into the formal sale of more than 72,000 kg of wool and the producers doubled their income. In fields where drip irrigation was applied, vegetable production increased by 50%.

MÁS INFO

Main donors

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Participating Organizations

FONTAGRO