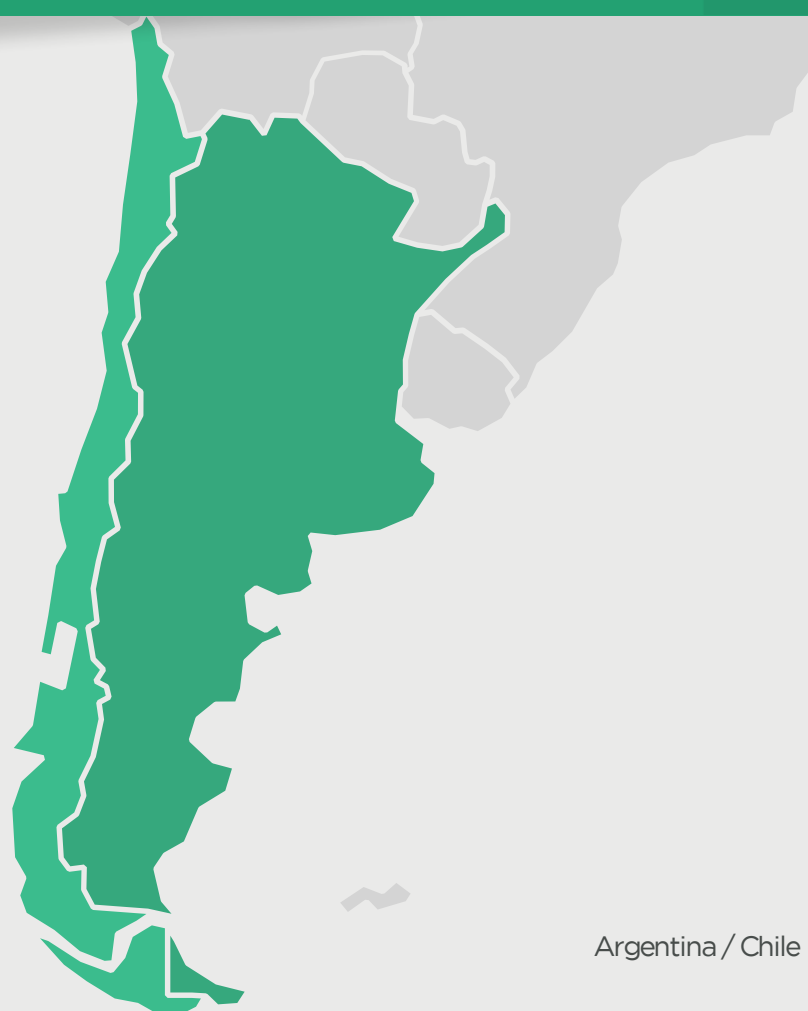




An agroecological model for coccidiosis in family poultry farming

The project pursues technological innovations for family poultry throughout the establishment of a baseline and then design and disseminate a pilot agroecological model.



Argentina / Chile

We focus on the recognition of coccidiosis as a factor in productivity decrease in family poultry farming and in the implementation of innovations to control it

The implemented initiative

Articulating the work of INTA (Argentina) and Prodesal (Chile), the objective of this proposal is that the benefits of the model that is designed out could reach more than 60,000 producers and that it could be included in institutional and governmental programs, aligning with public policies for gender equity, food security and

environmental protection. More than 1,500 people will receive technical assistance, and participate in trainings and awareness campaigns. Potentially, through local radios and social networks, it is expected to reach about 200,000 people.

The implementation and dissemination of the agroecological model that is developed, will improve animal health, productivity and the environment benefiting family poultry farming and consumers.

The technological solution

In the project region's family poultry farming, the prevalence of coccidiosis, nor the circulating species of the Eimeria parasite are known. Understanding the environmental conditions in which birds are raised is strategic to control the disease. Therefore, a survey of family poultry farming was carried out in the regions of Chile and Argentina where the project is developed, to know in detail the practices of poultry management, the facilities, the typology of the producers, etc. At the same time samples were obtained to assess the status of the disease and recognize it as a potential factor for

decreasing productivity in family farms. Based on these results, an agroecological model will be designed for assessing coccidiosis by adapting existing technologies, including good management and animal well-being practices and- according to experimental results- the use of natural compounds (origanum, garlic and/or black acacia) to control the disease. Then, the productive model developed will be promoted through training, technical assistance and the use of media in the regions involved

First diagnosis ever made of coccidiosis in family poultry farming in the project region

DIAGNOSIS OF COCCIDIOSIS IN FAMILY POULTRY FARMING IN ARGENTINA AND CHILE

WHAT ARE WE LOOKING FOR?

Establish a baseline for introduction of technological innovations adapted to the family poultry farming of Argentina and Chile and, in the end, design and disseminate a pilot agroecological model for the control of avian coccidiosis.

WHAT DID WE DID?

We survey 106 producers of 69 egg and meat chickens' farms.

We sampled bed, fecal matter and bird intestines to analyze the presence of Eimeria

RESULTS 1

- 59 % farm are managed by men + women, 26.5 % by women and 14.5 % only by men
- 69 % do not handle stress well, whether due to low temperatures, high humidity and/or mixture of birds of different ages

RESULTS 2

- The frequency of cases of coccidiosis (prevalence) is 84.2%
- By PCR, 7 species of Eimeria were detected: E. mitis (52.81 %), E. tenella (42.77 %) and E. acervulina (39.30 %) were the most frequent
- 48.5 % of farmers, on average, did not know the disease.

PART OF THE TEAM

MÁS INFO



Results

First Coccidiosis study carried out in the family poultry farming of Argentina and Chile:

- 101 biological samples taken: 50.8 % bed, 40.6 % fresh fecal matter and 8.9 % of intestines
- The frequency of cases of coccidiosis (prevalence) was 84.2% !!!!
- 7 species of Eimeria were detected by PCR : E. mitis (52.81 %), E. tenella (42.77 %) and E. acervulina (39.30 %) the most frequent
- 48.5 % of producers on average ignore the disease. In Chile the percentage is 94.7 %!!

- Between 48-53% are managed by women farmers
- In Chile, 85.7 % of the farms clean with a frequency less than one month, while in Argentina 64.9 % clean in each breeding period .
- The low use of effective disinfectants against Eimeria could explain the high prevalence of the disease
- 69 % of farms generate stress by management due to low temperatures, high humidity and mixture of different ages of birds
- An oocysts and DNA 's bank with field isolates was generated.