Technological innovation for family beef cattle production in the South American Chaco.

Technology adoption in management and infrastructure, forage and feeding, herd management and animal health, is vital to improve the sustainability of family livestock systems in this region.

Technology innovations

The implemented initiative

The project seeks to improve the efficiency, stability and resilience of family beef cattle systems. Specifically:
1) Productive systems were surveyed in each of the agroecological zones and alternatives improving the usual practices are proposed.
2) A network of pilot sites in farmers' fields was assembled, where the proposed technologies are adapted, evaluated and demonstrated to ranchers.
3) A technical assistance and training plan for family beef cattle innovation is being implemented.
4) A system of registration and monitoring of cattle farms have been developed, and it was evaluated whether they adopted the proposed technologies and their effects on the productive system.

Tools to address the problems

The technological solution

With a participatory approach, extension agents and producers agreed the critical technologies to be implemented in each pilot site, which were grouped into 4 types:
a) fodder and food: pastures implantation, preparation of fodder reserves, heads´ load adjustment to fodder supply and animal requirement, and improvement of grazing systems;
b) infrastructure and business management: field divisions, water collection and distribution systems; registration and monitoring of administrative performance indicators.
c) Animal health: Adaptation of the health plan to the system and the area, control of parasitic and infectious diseases and bull evaluation.
d) Herd management: monitoring of the animal body condition, elimination of unproductive categories, supplementation of calves and heifers, service seasonning, pregnancy diagnosis and early weaning.

Results

- An updated characterization of family cattle systems in the Chaco region and technological alternatives to be incorporated into intervention strategies and continuity to the actions in the future is available.
- An installed network of 90 pilot sites in the 3 countries, which adopt technological improvements and serve as demonstrative and training units during the project and afterwards.
- Trained producers, extension agents and advisors in bovine production in the Chaco. A virtual livestock innovation course for the region that can be scaled up to other producers will be available.
- Information available on productivity indicators, level of adoption of the proposed technological alternatives and their effect on the productivity of family livestock systems.