

Acknowledgements

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Summary

In the municipality of Tecoluca in El Salvador the NGO CORDES (Fundación para la Cooperación y el Desarrollo comunal de El Salvador) wants to stimulate small-scale organic dairy farming as a means of rural development of the region. Part of the project is the setting up of a milking plant, by which the produced milk will be sold.

The organic milk production is bound to certain norms. An example is that the use of a conventional, modern, western medicine is permitted only if no organic alternative is available. The question is then: what are the alternatives? Up till now, no local research on this has been carried out and in general the organic farms make use of conventional medicines.

The basis for the research in this thesis is the desire to use traditional veterinary knowledge of the local farmers as a basis for the development of these organic alternatives. An embracing, modern term for these methods is ethnoveterinary medicine (which will be abbreviated as "EVM").

This report consists of a literature study and a following field study. For the field study, two case studies and 5 workshops are conducted, the workshops in different regions of El Salvador. From the literature study it comes forward that a holistic view of the situation as a whole is very important when using EVM, as all aspects on a dairy farm influence each other. Animal health can therefore not be seen apart from the management on other fronts. It has no use searching for curative methods when causes of the health problem lie in another field.

In order to obtain a more complete image of the management on the local dairy farms in the practical situation in Tecoluca, two brief case studies have been conducted. These focus on a number of important points, like alimentation, availability of water and young stock rearing. From this it came forward that the field of alimentation (especially in the dry season) may need more attention than that of animal health. The possibilities for supplementary feeding next to grass in the dry season are limited, seen the fact that many of these are from conventional origin (according to the norms 60% of the total ration has to be from organic origin). Next to this, the farms don't adapt the rations to the varying individual needs of the animals.

From the literature study it comes forward that EVM doesn't offer equal opportunities under all circumstances and with all health problems; for acute problems the use of conventional means will be the only solution, because in general these work faster than EVM. However, in these situations, EVM can have a supporting function. But, the problems where

EVM offers biggest chances and where it could replace the conventional medicines, is with common diseases and chronic problems, like colds, skin diseases, worms and reproductive disorders.

The field research focuses mainly on this last group of diseases. During the first workshop, in Tecoluca, a ranking list was made of the health problems that were considered most important according to both the staff of CORDES as the local dairy farmers. Of these, the diseases were chosen where EVM would offer most possibilities as alternative to conventional medicines. These are: "external parasites", mastitis, pneumonia in calves, retention of the placenta and neonatal diarrhoea. During the workshops in the other regions, other priority diseases came up: Mieda de araña (an infection which is caused by a spider that lays its eggs on the coronal suture) and bubas (ulcers). Of "parasites" it didn't become totally clear which ones are most important - the research has focussed on ticks and stomach and intestinal worms.

In order to collect the local, traditional, veterinary methods for these problems, four participative workshops have been conducted in other regions in El Salvador where CORDES has dairy projects. These regions are: San Vicente-La Paz, Cabañas-Cuscatlán, Sur la Libertad and Norte la Libertad. The workshops were held with both groups of men and women.

In general, the women came up with more methods than the men and showed more enthusiasm towards EVM. Quite a large part of the men seemed to find conventional medicine much more interesting to use. The collected methods have been evaluated by making use of literature and discussions with experts in the field of animal health. This has lead to recommendations for the methods that seem to offer best possibilities. The used evaluation method is called "non-experimental validation". The usefulness of the methods has been measured against the following points: availability, effect on the environment and the animal, ease of preparation, efficacy and affordability.

The recommendations mainly comprise of methods that use medicinal plants that are locally easily available. A handout has been made of the recommendations, which has been handed out to the farmers. This research only forms a basis: the recommendations will have to be developed further and experimented with. It is therefore recommendable that they will be used as a basis for more detailed practical research at the local farms, conducted by and with the farmers. The objective is to test how the methods function on the farms, to adapt them and to convince farmers to actually make use of useful methods.