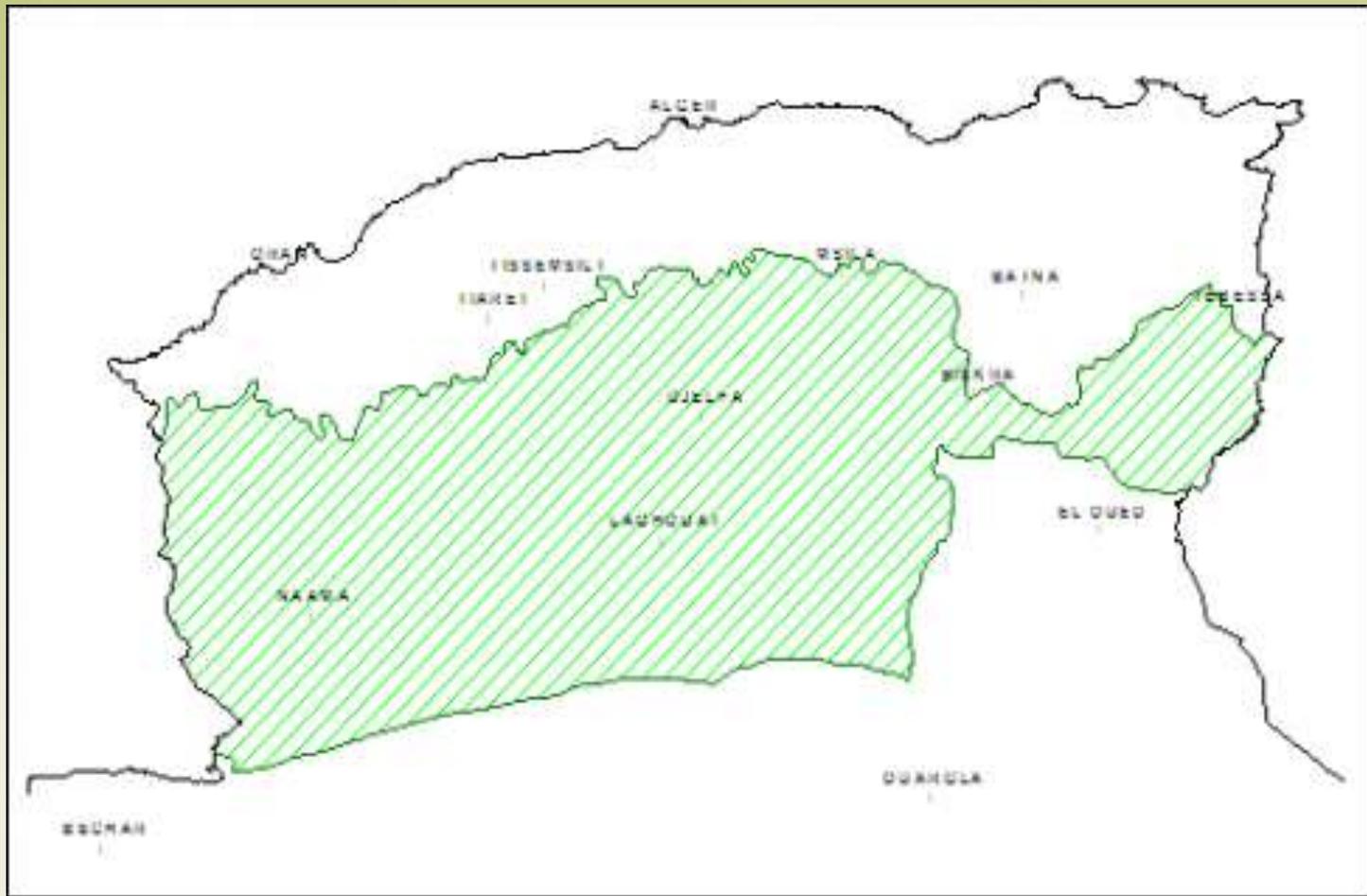


Effect of restoration through the fencing and planting
in the establishment of plant communities in the
Algerian steppe (wilaya of Djelfa)

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Context :

The Algerian steppes ecosystems are subject to an overgrazing related to an irrational exploitation of plant resources by human beings. This has generated major transformations in the potentialities and the aspect of the courses by affecting vegetation (diversity, biomass, etc.). Therefore, we are witnessing severe soil degradation (compaction, alteration of structural stability, etc.). In order to restore plant communities of these damaged land areas, we attempt to test pastoral management techniques, which if successful, will be applied on a large scale.

Comparison of different techniques for restoration of plant communities in a context of facies Alfa subjected to overgrazing.

Hypothesis:

- The superficial soil decompaction allows a better water infiltration, thus water runoff reduction, and the seeds bank germination in place.
- Water is the principal limiting factor in steppes environment, and a punctual watering will allow a faster restoration of the vegetation by improving and accelerating its germination.
- Mulching: it allows a better storage of water and an increase in the organic matter content.

We have selected 3 relatively degraded sites and then applied 5 procedures, each one repeated 5 times for each site. The procedures are:



-f



-fenced, o



-fenced and not decompacted plot

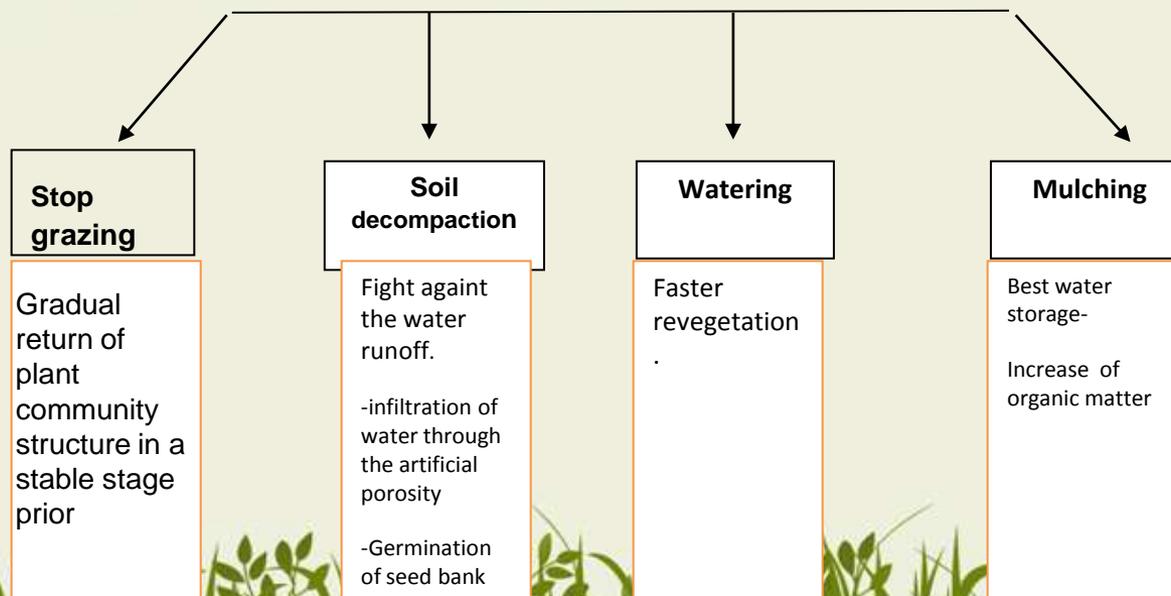
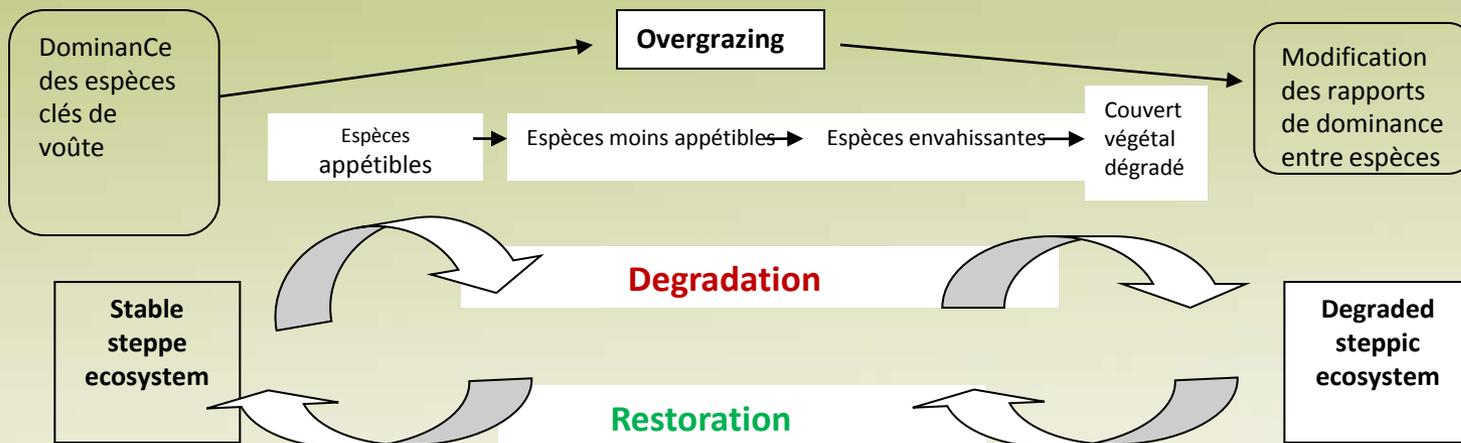
-decompacted and watered plot



-decompacted and sowed plot

-decomacted plot + livestock manure





Thank you for your attention

