'No Feed, no eggs'

Scoping study on feed supply for boosting the poultry sector in Kinshasa, DRC





Study area: Kinshasa, DRC



Project Objectives

- Explore whether enough local feed grains can be produced to boost local poultry production and human food production.
- Create partnerships to improve local food production



Results: productivity scenarios

Table 2. Yield levels of maize and soybean used in the three productivity scenarios. See text for explanation.

Year / Scenario	Scenario 1: Status quo		Scenario 2: EFC	Scenario 3: Brazil	
	Maize	Soybean	Feed ingredients	Maize	Soybean
2023 2026	0.8 0.8	0.5 0.5	2.0 2.0	0.8 2.7	0.5 1.9
2030	0.8	0.5	3.4	4.6	3.2





Figure 13 Cultivation area needed to meet EFC s production targets in different years using three productivity scenarios. See Table 2 and text for explanation of the scenarios.

Results

- Climatic circumstances allow for a serious yield increase.
- Soils are slightly acidic, sandy, weathered and low in nutrients and organic matter.
- Organic matter is scarce in the area



Conclusions

Maize and soybean production has potential to increase considerably in the area:

- Climate is suitable for rainfed agriculture
- Soil fertility needs to be improved

Advise is to improve soil fertility by:

- Liming
- Organic matter addition & cover crops
- Fitted fertilization scheme and smart crop rotations



Impact cluster, 'Feed for Poultry DRC' applied

- Companies: 2 DRC, 3 NL, 1 FR/NL, 1 Congolese university and 1 NGO
- Training: for trainers, extension workers, 2.000 farmers
- Targets: 8.000 ton maize/yr. on 4.000 ha, jobs 1.000 fte
- Budget: € 1 million
- Start: February 2024 (ends in 2027)



Next steps (2)

Yield prognoses and soil fertility based on SMP results

Research: 2024 field tests with local university: Lime, fertilizer, hybrid seed monoculture and mixed cropping with local varieties

 Soil analysis: lab analyses combined with sensor testing (see next slide)



Next steps (3)

More soil data needed...

- Cluster will take soil samples at several locations in 2024
- Locations based on social parameters: potential and enthusiasm of local farmers to participate
- Samples will be analysed wet-chemically, GPS- and NIRreferences will be added to these samples
- In 2025, WUR can assist in making agronomical decisions based on soil data linked to GPS



Impact cluster project maize and soybeans

How did the support through SMP help the private applicant move forward?

- Essential data for the feasibility of the application with RVO
- Potential of maize production in the region
- Souil fertility strategies
- And lack of knowledge at the present resolution, digital soil maps of DRC are almost useless for agriculture





Thank you for your attention!

T6 explore the potential of nature to improve the quality of life

