An innovative value chain from farms to canteens
Association of Moringa and annual crops in Togo

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Context

Togo faces threats to properly feed soils and human beings

70% of the population live from agriculture which make them vulnerable to :

Ecological Threats
Climate change, deforestation, erosion and degraded soils.

Economic Needs
Need of high productivity due to small plots per inhabitant.

Nutrition emergencies
Severe malnutrition for 14% of the children younger than 5 y.o.

Moringa can bring a response to Togo's climate, economic and nutrition situation

Resilient crop
Adapted and resistant to tropical and arid climate.

Productivity
Fast growing tree, multiple products (leaves, pods and seeds).

Nutrients source
High concentration in proteins and source of 90 nutriments.

Case Study

Integrate Moringa all along the value chain in Kpalimé and Tchamba

Association of Moringa to already existing crops (peanut, corn and soy) to foster :

- Mitigate climate risks.
- Better use of small plots and income diversification.
- Nutrition improvement.

Our Approach

We adopted a holistic vision of the value chain from production to commercialization encompassing agricultural production, packaging/marketing/business plan, markets' access and commercialization.
We use an agronomic and human-centred methodology in order to build environmentally and sociologically sustainable solutions in the long term.

The framework used is QGDH©* from the Ethical Leadership©[1], an innovative tool to understanding every needs on a value chain.

**QGHD©:*
Qualité Globale à Dimension Humaine / Global Quality at Human Dimension.

- Identify key stakeholders.
- Highlight actor's needs.
- Find innovative levers ("leadership") to satisfy human needs ("ethical").

Case study

Producers of Moringa: planting trees to maximize production

Method

1. Study site : Kpalimé.
2. 2 years of studies.
3. 16 plots of 20m x 20m.
4. Different tree density.
5. Measure of height and robustness.
6. Measure of leaves and pods production.

- Trimming / Height
- Spacing
- Associated crops

Results

Trimmed Moringa are 3 times more robust than the non-trimmed 180 cm trimming leads to higher leaves production than 150 cm trimming.

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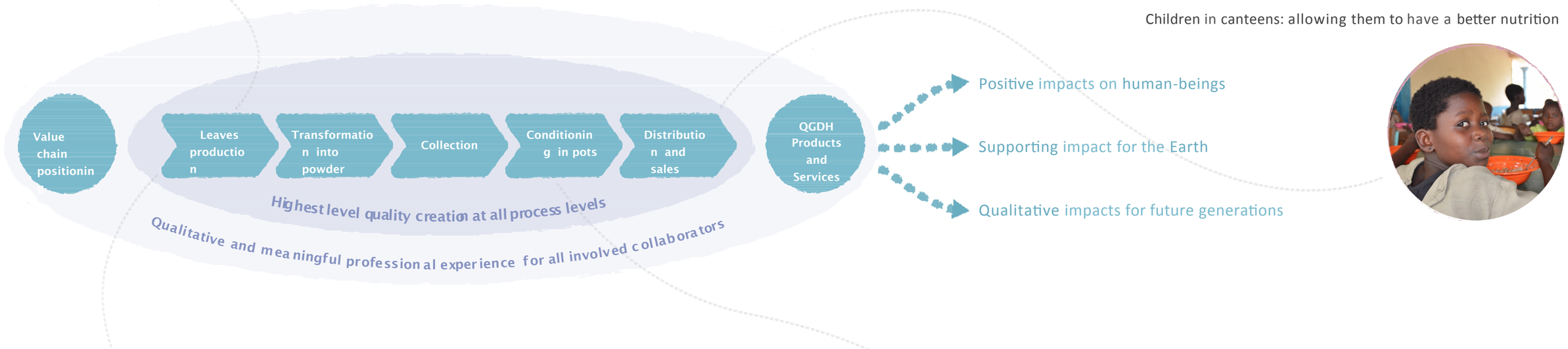


Children in canteens: allowing them to have a better nutrition

Agro-ecological Farmer field schools: training future generations and continue agronomic testing

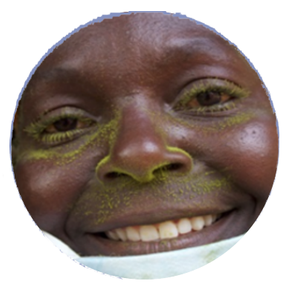
Method

1. Study sites : 2 in Tchamba, 0,5ha each.
2. Tests on rotation with soy, corn and Moringa

20 producers trained each year

Measure of microbiotic life, insects attacks, biomass production and yields on associated crops

Women cooks in canteens: allowing them to assume ownership of the program



Conclusions

Ludic discovery instead of imposed project → Recipes tested with families instead of health obligation → Value chain created considering skepticism and barriers → Perspectives: transmission and spreading

References:
[1]Gött, 2009
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Abotsi, K.E., Fare, Y., Auzanneau, F., Villon, F., Métro, N., Mawussi, G., Kokou, K. Croissance et productivité du *Moringa oleifera* Lam. en plantation agroforestière au Togo.