AQUAPONICS IN ETHIOPIA
PROJECT
Approach and final results
Targets

Aquaponics in Ethiopia

Technically Feasible and sustainable aquaponics

• System optimization
• Productivity improvement
• Capacity building
• Market analysis

Reputable Business model for Ethiopia

Establish center of expertise on aquaponics

Knowledge pool Resource center

• RUE improvement
• Business model development
• Value chain mapping
• Market chain creation
Three models

Hawasa
- Mixed
- Backyard

Shewarobit
- Women
- Backyard

Metehara
- Youth
- One site
Resource use efficiency

• RUE improvement
  • PhD study
    • Abebe Tadesse on Aquaponics diets
  • Masters study
    • Luis Rosado on RUE
  • Bachelor study
    • M, Koop on BSF

FCR
• Fish 1.35
• Vegetable 0.62

WUE
• Fish 162l/kg
• Vegetable 70.6l/kg

EUE
• Fish 9.3kwh/kg
• Vegetable 3.9kwh/kg
Business approach

- All expense by beneficiaries
- Fingerlings expense by project
- Entire production expense by project
- Entire installation by Project

- First cycle
- Second cycle
- Third cycle
- Initiation
Business model

• Business model development
  • Business modeled
  • Accessible on web site

• Value chain mapping
  • Input-Service-Product chain mapped

• Market chain creation
## Business model

<table>
<thead>
<tr>
<th>Beneficiary</th>
<th>CONSUMED AT HOME</th>
<th>SOLD</th>
<th>EXPENSES</th>
<th>PROFIT</th>
<th>PROFIT MARGIN</th>
<th>LABOUR</th>
<th>RETURN ON LABOUR</th>
<th>PROFIT AFTER DEPRECIATION</th>
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<tbody>
<tr>
<td></td>
<td>Average</td>
<td>TOTAL</td>
<td>TOTAL</td>
<td>(Birr)</td>
<td>(%)</td>
<td>(Hours est.)</td>
<td>BIRR/ hour</td>
<td>€/ hour</td>
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<td>104</td>
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Center of expertise

DBU

AAU

Hawasa KC

Web

www.aquaponicsethiopia.com
Inclusiveness

• Engaging
  • Women, low income families and unemployed youth

• All stakeholders are engaged on
  • for future of the technology in context of Ethiopia

• Sustainability of the business models is maintained by developing supply chains and enabling technical and political environment
Discussion issues

- All cost by the producers
- Fingerlings expense by project
- 100% by project
Thank you