**Proposal for a master thesis**

**Master Programme Infrastructure and Environmental Engineering 2025/26**

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| **Title** |
| Master Thesis Proposal 6: Designing a Social Enterprise Model for Tumaini Open School – Integrating Sustainable Farming, Vocational Training, and Income-Generating Strategies. |
| Description background and problem description, app. 150-500 words |
| **Background:** Tumaini Open School in Tabora, Tanzania, offers education and support to adolescent mothers. However, sustaining daily operations, including meals, water, and infrastructure, requires long-term financial solutions. With limited external funding, the school seeks self-reliance through sustainable farming and vocational programs.  **Aim:** To develop a viable, replicable business model for Tumaini Open School by leveraging sustainable agriculture, vocational training, and local enterprise, informed by successful NGO precedents.  **Objectives:**   * Evaluate current agricultural productivity and identify potential for scale-up (e.g., increasing from 3 acres, improving irrigation access). * Design a crop and livestock model that meets internal demand (maize, beans, vegetables) and generates marketable surplus. * Incorporate vocational training (tailoring, farming, plumbing, IT) into revenue-generating activities with measurable outcomes. * Identify additional small-scale enterprise opportunities (e.g., poultry farming, textile products, solar phone charging). * Study precedents from successful NGO-run schools and community enterprises in East Africa. * Develop a financial plan including CAPEX/OPEX, break-even points, risk management, and reinvestment strategies.   **Methodology:** Field data collection, market analysis, stakeholder interviews, economic modeling, and literature review of NGO case studies. A feasibility matrix will guide prioritization of strategies.  **Expected Outcomes:** A scalable business plan with projections on income vs. expenses, clear roles for students and staff in enterprise operations, and a sustainability roadmap that could reduce financial dependency on donors within 5–7 years. |
| **Literature suggestions** |
| Suggestion: |
| **Special prerequisites** e.g. courses |
| The master thesis will require that you visit Tanzania for three months in order to conduct field work. Funding for your field studies can be applied for via the link below:   1. [Nils Rud Olson minnesfond (chalmers.se)](https://www.chalmers.se/utbildning/studera-hos-oss/studentliv/stipendier-for-studenter/nils-rud-olson-minnesfond/) 2. [The Global Mentorship Program (chalmers.se)](https://www.chalmers.se/en/education/study-at-chalmers/student-life/scholarships-for-enrolled-students/the-global-mentorship-program/) |
| **Specific timeframe** (start date-end date, if needed) |
| Starting from the beginning of 2026 until the end of the academic year. |
| **Supervisors** (name, email) |
| Unkown |
| **Examiner** (name, email) |
| Unkown |
| **Other information** |
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