



Enhancing the value chain of poultry production by using solar energy in Ethiopia

Mezgebu Aynalem, Debre Markos University

Introduction

- Ethiopian indigenous chicken population is estimated to be 40.6 million.
- 96% are non commercially raised chicken.
- In Ethiopia, generally, the chicken rearing system is characterized by extensive scavenging management, and no immunization programs, the industry is still in its infancy

Problem Statement

- Main problems of poultry production in rural areas are electricity, market linkage, high production costs and poor management practices
- Electricity is not able to address supply in rural areas

Solution approach: Solar energy

- it provides light, heat and ventilation
- Energy supplying of rural areas improves mobility and increases chicken production



Strengths Weaknesses Preferred by the market High Production Cost Willingness of the target community Poor Management Practices Poor linkages among actors High Price of chicken Lack of using technology **Opportunities** Threats High Demand Energy and other logistics Chickens are consumed mostly during ♣ Inefficient Value Chain System holidays Disease outbreaks (birdflue, ranikhet) high cost of feed

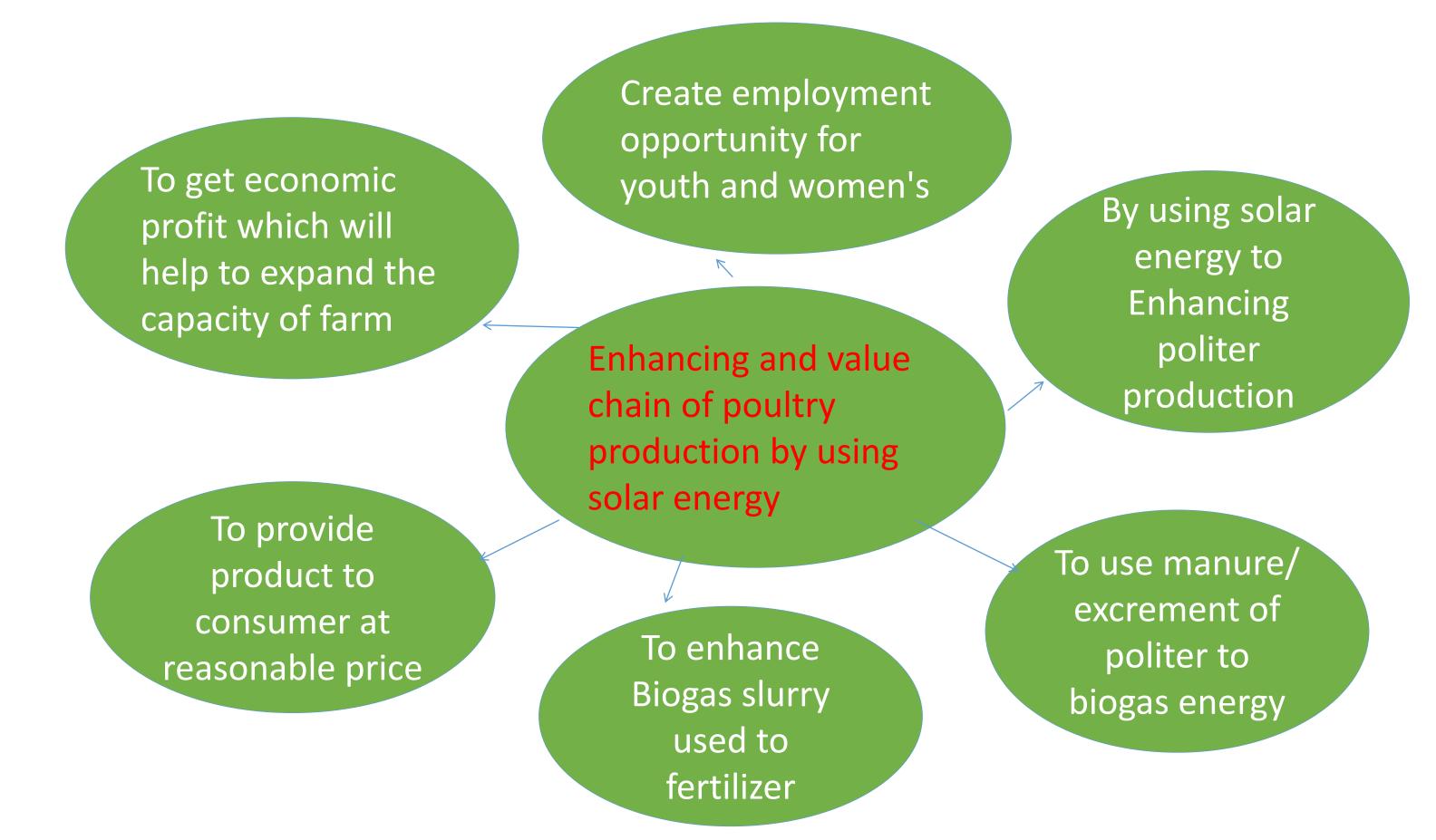
Key Tasks

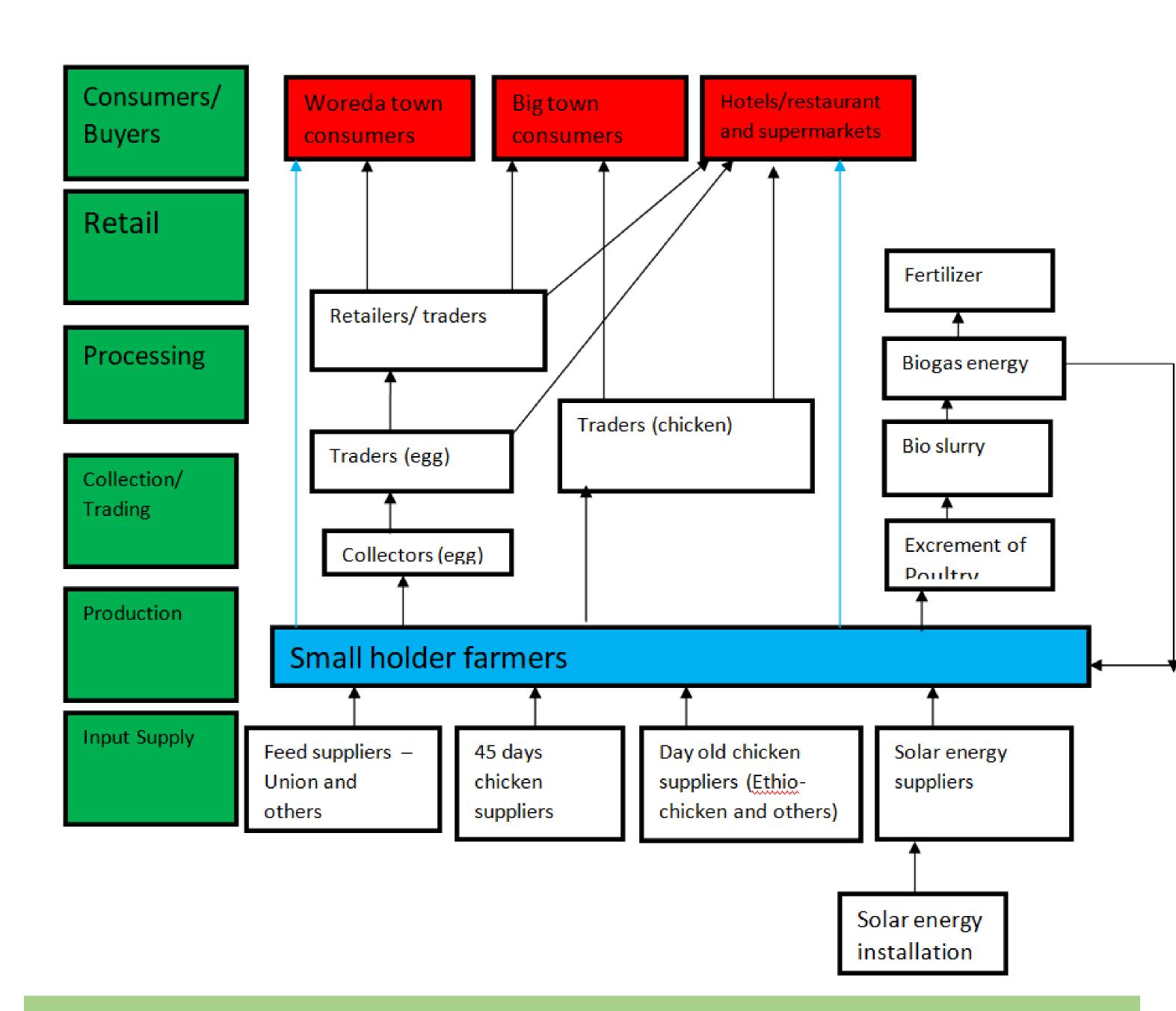
- Conducting discussion and awareness creation with different stakeholders at different level directly or indirectly involved on Poultry production project implementation.
- Give training about preparation of Poultry farm and biogas energy
- Create awareness to Enhancing Poultry production by using solar energy
- Share the experience to the project stakeholders and other farmers through field days and workshop.
- Monitor and evaluate the overall progress of the project
- Design and implement exit strategy to sustain cultivation and market integration.

contact details: Mezgebu Aynalem, Debre Markos University

e-mail: mezgebu12aynalem@gmail.com Cellphone: +251 9 371 365 52

Objectives





Expected Outcomes

- **Gender:** good source of income for women and contribution in family protein source for the poor households.
- Environment: contribution to ecosystem nutrient cycling and using manure of poultry for biogas energy production
- Governance: income, nutrition and food security
- Opportunity created to the target community
- Poultry production and productivity of smallholder farmers increased
- Value Added on the community service and income generating activities of the small holder farmer.
- Enhanced adoption and adaptation of different Biogas slurry is used for fertilizer
- Improved awareness in smallholders on solar energy