

ABDP KISII CASE STUDY

Green Energy Transition and Value Addition in Aquaculture Retail



Case Subject: Victory Self Help Group

Key Facilitator: Aquaculture Business Development Programme (ABDP)

Core Innovation: Solar energy integration, product value addition, and multi-tier market linkages

1. The Challenge & Strategic Pivot

Initially operating as a standard fish trading group handling omena, tilapia, and catfish, the enterprise faced systemic growth barriers, most notably prohibitive electricity overheads driven by cold-chain preservation (freezers) and processing equipment (fryers).

In 2025, upon securing a **KES 450,000** co-investment grant from ABDP, the group made a strategic decision to bypass grid-dependency. They allocated **KES 350,000** (approx. 78% of the grant) toward an off-grid solar power infrastructure. This structural investment successfully neutralized their primary operational liability (electricity costs), stabilizing their cold chain and establishing an efficient, high-margin processing hub.

2. Key Best Practices Demonstrated

I. Advanced Downstream Value Addition

Instead of selling low-margin primary commodities, Victory Self Help Group maximizes its profit margins per kilogram through aggressive product processing and diversification. Their current inventory includes:

- ♦ **Ready-to-Eat Products:** Fried fish, fish balls, and fish samosas.
- ♦ **Premium Cut Products:** Fresh fish fillets and dressed fresh fish.

II. Capacity-Driven Operational Scaling

The group's transition from a micro-trader to an employer was systematically de-risked by comprehensive capacity building. In 2022, members graduated from the Start and Improve Your Business (SIYB) program. This institutional training in entrepreneurship, record keeping, and business management provided the administrative foundation necessary to expand their workforce from 2 to 5 full-time employees once the solar infrastructure was deployed.

III. Dynamic Market Linkages & Value Chain Anchoring

Victory Self Help Group does not operate in isolation; it acts as a reliable market anchor for the regional aquaculture ecosystem:

- ♦ **Upstream Sourcing:** Sources raw fish directly from local smallholder farmers, stabilizing local farm-gate prices.
- ♦ **B2B Youth Support:** Stabilizes the local youth economy by providing a guaranteed, regular off-take market to two youth-run fish depots.

- ♦ **Diversified Commercial Off-take:** Mitigates market volatility by balancing individual retail buyers with high-volume institutional clients, notably securing structured government tenders such as supplying the Kisii Agricultural Training Centre alongside regional hotels.

3. Commercial Impact and Output Metrics

- ♦ **Weekly Sales Volume:** Moves 700 kg of fish during peak demand periods, maintaining a robust baseline of 300 kg during off-peak weeks.
- ♦ **Employment Multiplier:** Achieved a 150% growth in direct job creation (scaling from 2 to 5 active employees).
- ♦ **Export Proof-of-Concept:** Successfully tested international logistics and compliance frameworks by fulfilling fried fish export orders to Germany.

4. Key Takeaways for Replication

1. **Prioritize CapEx that Lowers OpEx:** For rural agri-businesses, dedicating grant capital to green energy infrastructure yields a permanent reduction in monthly operating expenses, rapidly improving long-term business viability.
2. **Move Up the Value Chain:** Processing raw fish into specialized items (fillets, samosas, balls) allows smallholder groups to capture higher urban and institutional profit margins.
3. **Anchor the Local Economy:** Integrating local smallholders and youth depots into the supply chain secures a consistent supply of raw materials while building regional ecosystem resilience.