Appendix 1

Photo documentation of research data collection

Viewing ponds with Sekenende Female member

Ponds viewing at one of the ponds at Renco Mine

Fish harvest at Topora

Harvested fish at one of the cooperatives

Questionnaire

Name of Cooperative.....

Section A: Demographic Information

1. **Gender:**
   a. [] Male
   b. [] Female
2. **Age (Years):** _____
3. **Marital Status:** (Please select only one)
   a. [] Single
   b. [] Married
   c. [] Divorced
   d. [] Widowed
4. **Highest Educational Qualification:** (Please select only one)
   a. [] Primary Certificate
   b. [] Secondary Certificate
   c. [] Tertiary Education
   d. [] Never Attended School
5. **Household Size (Number of People):** _____
6. **Are you the Head of Household?** [] Yes No []
7. Years of Membership _____

Section B: Decision-Making Power

1. Are you consulted when the cooperative makes decisions about the quantity of aquaculture products to harvest? [] Yes No []
2. I influence decisions regarding the type of feed or other inputs (e.g., fingerlings, equipment) purchased by the cooperative
   5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)
3. Do you have a say in deciding when to sell the aquaculture products?
   [] Yes No []
4. Are you involved in decisions related to the pricing and marketing of products? [] Yes No []
5. **Traditional gender norms affect decision-making dynamics in agricultural development**
   5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

6.I feel empowered in making decisions regarding aquaculture practices within the cooperative (Please circle one)

5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

Section C: Access to Income and Control

1. What is your primary income
2. Do you have a say in how the income from aquaculture is spent for household needs? [] Yes No []
3. **Does income from aquaculture cater to all your household expenses?** [] Yes No []
4. **Income changed since joining the cooperative?**
   5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)
5. **How much income do you earn from aquaculture per month?** (Please specify) _____
6. **Do you think membership in the cooperative has improved women's financial independence?** [] Yes No []
7. **Who primarily benefits from profit-sharing in cooperative activities?** (Please select one)
   a. [] Men only
   b. [] Women only
   c. [] Both men and women

Section D: Access to Resources

1. **Do you have access to credit/loans?** [] Yes No []
2. **Do you own livestock?** [] Yes No []
3. **If yes, what is the primary source of your livestock?** (e.g., inheritance, purchase) _____
4. **Do you own land?** [] Yes No []
5. **If yes, what is the primary source of your land?** (e.g., inheritance, purchase, lease) _____
6. **Do you believe that women in your aquaculture cooperative have equal access to resources as men?** [] Yes No []
7. Cultural norms and societal structures influence access to resources

5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

Section E: Leadership and Participation

1. **Are you a committee member in the cooperative?** [] Yes No []

2.Do you have the knowledge and skills to contribute tome the growth of the cooperative

[] Yes No []

3.q-Women are effective leaders (Please circle one)

5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

2. **Participation in the cooperative improved women's social status in the community** (Please circle one)

5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

3. **Men support women's participation in cooperative activities** (Please circle one)

5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

4. **Cooperative respects the opinions of both genders equally** (Please circle one)

5 (Strongly agree) 4 (Agree) 3 (Neutral) 2 (Disagree) 1 (Strongly disagree)

5. **Do you feel that members have equal opportunities to become leaders in the cooperative?** [] Yes No []
6. **Have you attended any training programs related to aquaculture?** [] Yes No []

Section F: Time Allocation

1. **On average, how many hours per day do you spend on each of the following activities?** (Please specify)
   a. Household chores: _____ hours/day
   b. Cooperative activities: _____ hours/day
   c. Agricultural activities (non-aquaculture): _____ hours/day
   d. Do you have time for leisure activities [] Yes No []
   e. If yes, how many hours per day _____

Section G

1. **Challenges that hinder the growth of the Cooperative.....**

.....
.....
.....