Energy Transition in Fisheries Value Chain - The Gambia

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Introduction

- **The Gambia is located in Northwest Africa, along the River Gambia**
- **It is surrounded on three sides by Senegal one side by the Atlantic coast**
- **Atlantic Ocean coastline of about 80 km**
- **EEZ of 3,855 km2**

- Fisheries sector supports food security, employment and exports in The Gambia it contributes about more than 12% of National GDP
- However, the sector depends heavily on inefficient and unsustainable energy sources
- This presentation highlights ongoing efforts to transition to cleaner energy systems


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Farafenni
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BANJUL
Serekunda
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Gambia
Gambia
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unnamed elevation
Brikama
Gunjur
SENEGAL
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16
15
14
13

Understanding Energy Transition

- Energy transition refers to shifting from fuelwood and fossil fuels
- Towards renewable energy and energy-efficient technologies
- This transformation is applied across fishing, landing, processing and distribution in the Gambia

Energy Use Across the Value Chain

- Fishing operations in the Gambia rely on petrol and diesel engines
- Fish processing is dominated by fuelwood-based smoking
- Cold storage and ice production depend heavily on electricity
- Water supply systems require energy for pumping and distribution

Key Challenges

- High cost of fuel affects profitability of fishers
- Heavy reliance on fuelwood contributes to deforestation
- Limited cold chain leads to post-harvest losses
- Access to modern energy technologies remains constrained

PROREFISH Programme

- The PROREFISH project is supporting climate-resilient fisheries infrastructure in The Gambia
- It is investing in modern landing sites, processing facilities and renewable energy systems
- The project directly supports energy transition in multiple nodes of the value chain

Landing Site Modernization

- At Banjul landing site, the project shall install a cold room and a 20-ton ice plant
- Fish handling sheds and waste treatment systems are improving efficiency
- These facilities reduce post-harvest losses and improve energy use efficiency

Deployment of Renewable Energy

- The project is installing solar-powered water systems in Brufut, Tanji, Sanyang and Kartong
- These systems include boreholes, storage tanks, solar panels and pumps
- This reduces dependence on diesel-powered water systems

Improved Fish Processing Technologies

- The project has installed multiple improved smoking units using the FTT technology
- At least three improved smoking ovens have been installed at sites such as Brufut and Tanji
- Solar fish dryers have also been introduced to reduce reliance on fuelwood

Infrastructure Enhancements

- Floating pontoons are to be installed in Banjul, Kartong and Bintang to improve landing efficiency
- Gear stores, net mending sheds and community centers have been developed
- These improvements enhance operational efficiency and reduce energy waste

Aquaculture Development

- The project has supported the operationalization of the Jahally aquaculture center
- Fish feed mills in Jahally and Kuloro are now operational
- These developments promote more controlled and energy-efficient fish production systems

Institutional Partnerships

- The programme is implemented with support from international partners including UNIDO
- Strong project management, monitoring and reporting systems are in place
- This ensures accountability and sustainability of interventions

Gender Dimension

- Women play a key role in fish processing activities
- Improved smoking technologies reduce exposure to smoke and heat
- This improves health conditions and productivity for women processors
- Establishment of the Fisheries Gender Desk in the Gambia

Environmental Benefits

- Reduced fuelwood use helps combat deforestation
- Cleaner technologies reduce greenhouse gas emissions
- Improved infrastructure enhances climate resilience

Key Gaps

- There is a need to scale up pilot interventions nationwide
- Sustainable financing mechanisms are required
- Capacity building is needed for maintenance and operation of new systems

Recommendations

- Scale up solar-powered infrastructure across landing sites
- Promote adoption of energy-efficient fishing engines
- Strengthen public-private partnerships in the sector
- Integrate energy transition into national fisheries policies

Way Forward

- Enhance regional collaboration through ATLAFCO
- Promote knowledge sharing among member states
- Mobilize funding for large-scale energy transition initiatives

Conclusion

- The Gambia has made significant progress in energy transition within fisheries
- Projects like PROREFISH demonstrate practical solutions
- Scaling these efforts is essential for sustainable fisheries development

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