Women’s empowerment through improved seaweed farming technology

The story of Sea PoWer in Zanzibar

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Seaweed producers
Tubular nets
To replace pegs and ropes
Challenges to traditional peg and rope seaweed farming in Zanzibar

• Effect of climate change
  → “Ice-ice” disease
  → Low productivity, low prices
• Seaweed breakage
• Appalling working conditions for women
Advantages of deep water tubular nets

• Tubular nets made out of local fishing nets
• Seaweed “planted” in nets = minimal breakage
• In deep water: fewer environmental variations
  → Cottonii grows better
  → Less damage to seagrass beds
  → Fish aggregating device
• Alleviates hardship: women stay fewer hours in seawater, no stings, no cuts, loads in boats
BUT: Gender issues!

- Women do not know how to swim or dive
- Boat handling is traditionally a man’s job
- Women’s subordinate position in society
Dissecting “Power”

Changing underlying resources and influence to challenge constraints

Increasing solidarity to challenge underlying assumptions

Increasing awareness and desire to change

Increasing individual capacity and opportunities for access

Luttrell et al. 2009, Rowlands 1997
The Sea PoWer approach:
innovation *cum* empowerment

Building women’s capacity

Constructing nets
Safe sea faring skills (next: diving and swimming)
Boat handling skills with men
Building women’s capacity
Record keeping of group activities
Monitoring seaweed growth
Building social capital

Working together as a group
Demonstration and learning across women’s groups
Harnessing other benefits

Construction of basket traps to catch fish
Engaging with seaweed buyers and other community buyers
Awareness raising and progressive challenging of gender norms
Benefits and intention to continue

Theory of Planned Behavior extended to include women’s empowerment

1. sense of self-worth;
2. right to have and to determine choices;
3. right to opportunities and resources;
4. right to have the power to control their own lives, both within and outside their home;
5. ability to influence the direction of social change

(after POPIN criteria)

Ajzen 1991
Positive results: Women now report

- 91% have better knowledge on how to farm seaweed
- 91% have become a role model for other women
- 87% have built their social capital
- 83% feel stronger and more important as a woman
- 78% have earned more income for themselves and their families
- 70% have increased their self-esteem
Still work to do...

Percentages of women reporting having the same of...

- Be able to do my things without asking permission
- Receive respect from other men in the community
- Receive respect from my husband
- Be able to say when I don't agree with my husband or the community leader
- Have useful skills (swimming, boat handling)
- Make decisions in my family
- Have permission to do other things than seaweed farming
- Manage the family finances
Conclusions

- **Innovation can expand horizons**: Thanks to a gender-sensitive approach, tubular nets are showing promise for women’s empowerment, livelihoods and the environment.

- → But innovations are not a panacea!
- Beware of dangers of gender-insensitive innovation projects in aquaculture (and fisheries)!!

- Capacity building and engagement with men and community members must be pursued for greater gender equality
- Pay attention to details and monitor women’s involvement and control

The Sea PoWer story carries on…
Get in touch, follow us!

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Thank you for your attention
Empowerment gradients

Women’s Empowerment Framework (Longwe 2002)

Five Gradients:

1. Welfare WHERE THE TRADITIONAL PRODUCERS ARE
2. Access WHERE THE SEA POWER WOMEN STARTED
3. Conscientisation “collective urge to action to remove the discriminatory practices that impede women’s access to resources”
   HOW THE SEA POWER INTERVENTION IS CONCEIVED
4. Mobilisation WHERE WE ARE AT NOW
5. Control OUR GOAL, BEFORE SCALING OUT

Longwe 2002, Choo & Williams 2014
The Sea PoWer team

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Tubular nets

Minimise die-offs and breakages ✔
Overcome environmental variations ✔
Built with locally available materials ✔
Long-lasting and resistant to rough seas ✔
No adverse environmental impacts ✔

Innovation showing promise
Preliminary developments

- Making own nets: short + narrow nets work better
- Productivity: + 40%
- 2\textsuperscript{nd} trial: compares shallower-deeper water
- Wear life jackets in boat.
- Engaging men: relatives
- 1 seaweed buyer engaged.
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Video: ”Making waves: rethinking seaweed farming for women’s empowerment”
https://www.youtube.com/watch?v=Yfk7MJh5jA4&t=7s

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