

Context

- South Africa issued long-term fishing rights (2006 to 2020) for most commercial species
 Long-term rights a form of Rights Based Management (RBM) approach
- Has committed itself to introducing an Ecosystems Approach to Fisheries (EAF)

RBM within an EAF

- Efficacy RBM on EAF objectives
- Study uses small pelagics sector study case.

Conceptual framework for study

- Key performance indicators of RBM:
 (transformation; investment in
 infrastructure; job creation; reduction of by catch; economic viability; environmental
 sustainability; management stability)
- General EAF framework as adapted to South Africa (ecological wellbeing; human wellbeing; and ability to achieve)

Small pelagics

- Based on exploitation of sardine (Sardinops sagax) and anchovy (Engraulus encrasicolus), with associated by-catch for red eye round herring (Etrumeus whiteheadii) and cape horsemackerel (Trachurus trachurus)
- Sector is biggest in terms of landed volume and only second to hake in terms value of landed catch
- Sardine is mostly canned while anchovy is reduced to fishmeal, fish oil and fish paste
- Sector is managed using Operational Management Procedures (OMPs)
- 109 entities had been awarded long-term rights

Study approach

- Study conducted on West Coast in 2010 11
- Categories of stakeholders interviewed: vessel skippers & crew members; rights holders; and DAFF: branch Fisheries officials
- Findings are presented under specific themes below

Bundling of rights by processing factories

- Historically, quotas were issued to factories and catching rights to vessel owners (usually skipper owners)
- One condition under long-term rights is need for rights holders to demonstrate commitment to through investment. Most factories bought their own vessels
- Factories able to bundle quota, catching & processing right
- Due to increased lack of viable catching contracts with factories most independent vessels owners left industry
- Those that remain without vessels work for the factories as independent skippers

Structure of employment and employee benefits

- Employment and pay structure remain the same under long-term rights
 - Skipper recruits his own crew even when contracted to fish using a factory vessel.
 - ➤ Factory has no contractual obligations to the crew members
 - ➤ Skippers and crew members paid based proportion of value of catch (fishmeal for anchovy & raw fish price for sardine)

MPAs, island closures & consideration of birds and marine mammals in TAC

- EAF requires consideration of other organisms in marine environment.
 - ➤ Allocating food for other organisms (birds, seals, etc.) when determining TAC
 - ➤ Perimeter Island enclosures and establishment of MPAs where purse seining is prohibited
 - ➤ Increased competition with increasing seal populations and dumping/ high grading

Decline in Operational Vessels

- Number of active vessels have declined by about a third (independent vessel owners leaving & upgrade to new bigger more fuel efficient RSW vessels)
- Increased use of mechanized vessels and fewer vessels has resulted in loss of jobs for skippers and crew members.

Stewardship of resource and sector

- Scientific Working Group & Resource Management Working Group - formal governance structures
- Each zone has a Sea Management Committee composed of stakeholders in the area.
- System of random placement of observers on vvessels to collect (mainly) biological data

Efficacy of RBM within an EAF

- Has RBM system resulted in increased 'ecological wellbeing', 'human wellbeing' and 'ability to achieve'
- In other words, has RBM increased potency for achieving EAF objectives?

Bargaining position of vessel workers

- As most of sardine is canned and all anchovy is reduced, processing right is the key and controlling deterministic right.
- Bundling of rights, increased vessel ownership and/or upgrades by factories has strengthened their negotiating position vs. skippers and the crew, independent vessel owners and independent quota holders
- In particular, processing right gives factories great leverage for negotiating price of delivered catch.
 - Skippers, crew members, independent vessel owners and independent quota holders believe that the new rights holding system has greatly disadvantaged them. Overall the current structure and system of rights allocation and holding under RBM has reduced their benefits, thereby negatively affecting the 'human wellbeing' objective under EAF.

Security of employment

- RBM has not changed historical organization of catching sector based on casual employment
- Use of benefit sharing system continues
- Practices militate against unionisation and are against LRA & BCE
- Insecurity of employment for crew members increases tendencies for infringing closed areas and high grading/dumping.
 - *RBM management could have exacerbated insecurity of employment and increased the likelihood of negative fishing practices to the detriment of the resource, thus having negative effects on both 'ecological wellbeing' and 'human wellbeing' EAF objectives.

Community benefits

- Community benefits mostly indirect as dependents or through multiplier effects through those employed in the sector
- Vessels upgrades and vessel number reductions for increased efficiency have resulted decline in employment
- Strive for increased efficiency extends to factories.
 Most have reduced working hours by 50% reduction in working hours
 - While sector might have become more operationally efficient, the impact on low level workers has been negative, thereby contradicting the EAF 'human wellbeing' objective.

Fishing pressure and variability

- Introduction of RBM has not necessarily resulted in stamping out the 'race for fish'
- Practices of under-reporting to increase profitability still prevalent
- Skippers strongly believe fishing pressure is a key factor to both variability and geographic shift
 - These practices have negative effect on EAF's 'ecological wellbeing'.

High grading

- RBM has not solved problem of high grading (dumping) – a practice it was supposed to reduce
- Practice is economically efficient since skippers and rights holders aim at landing size and quality of fish that will maximize profits
 - By-catch limits, temporary area closures, island perimeter closures and MPAs, as part of EAF, force skippers to go fishing further away from their bases thereby increasing operational costs, an aspect RBM intends to reduce

Balancing needs of fishers and other organisms

- Within an EAF, other marine organisms have been given greater recognition and protection
- Rights holders have had to understand and accept this need for a balanced approach when setting the TAC and specific geographic areas are closed off from fishing, as part of EAF.
- Key to this increased acceptance has been consultative decision making within the formal governance structures
 - EAF has increased awareness of existing competition for fish between fishers and natural organisms. Even then fora exist for discussing, finding solutions and operationalising action for these problems under RBM thereby having positive effect on 'ability to achieve'.

Inclusion of socio-economic objectives in OMP

- Although the views and inputs of stakeholders are supposed to be advisory, they carry weight since they are based on-the-ground and up-to-date knowledge of fishery
- General view among most rights holders and fishers is that government is very responsive to their views and interests
 - ❖ Key concern under current system is that socioeconomic and management issues of other sectors are not adequately included OMP since this remains a tool that only uses biological and ecological inputs thereby having negative effect on 'ability to achieve'.

