

Socio-economic analysis of the results of implementing a rights-based management system in a small-scale fishery in the Gulf of California: the gulf curvina

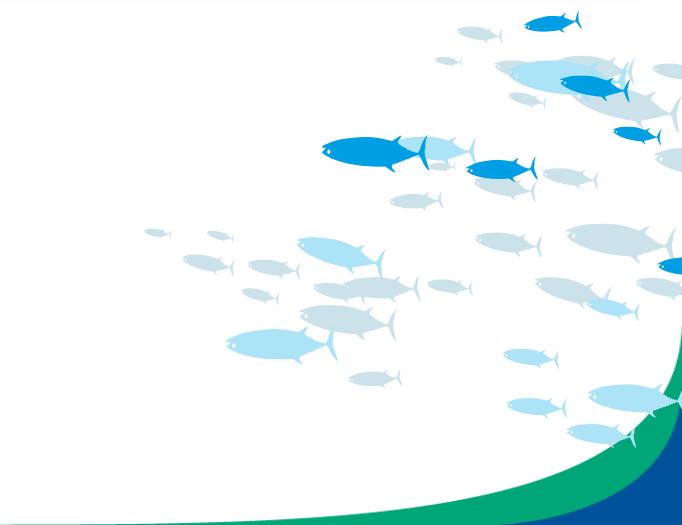
NAAFE Forum 2017

La Paz, BCS

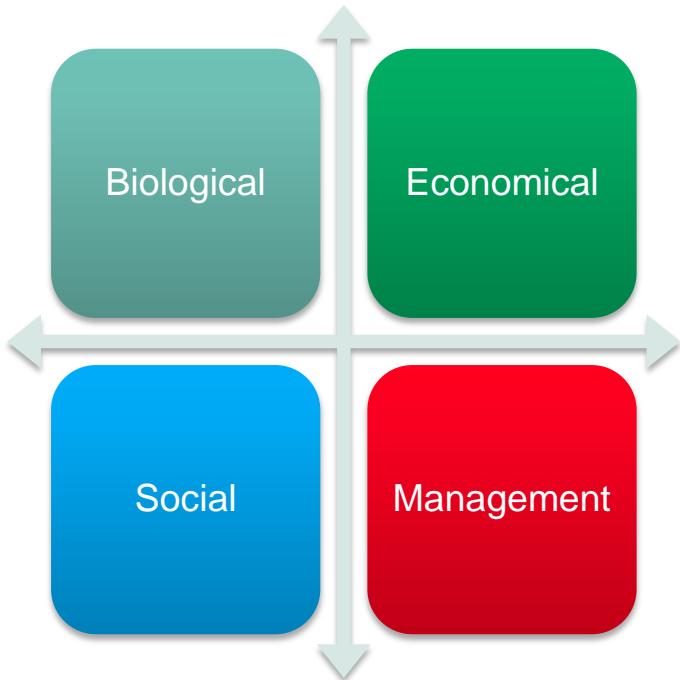
Ortiz-Rodríguez R; Yee-Sánchez, S; Fraire-Cervantes, J; Olivares-Bañuelos NC; Licón-González, H; Rodríguez-Harker, L.

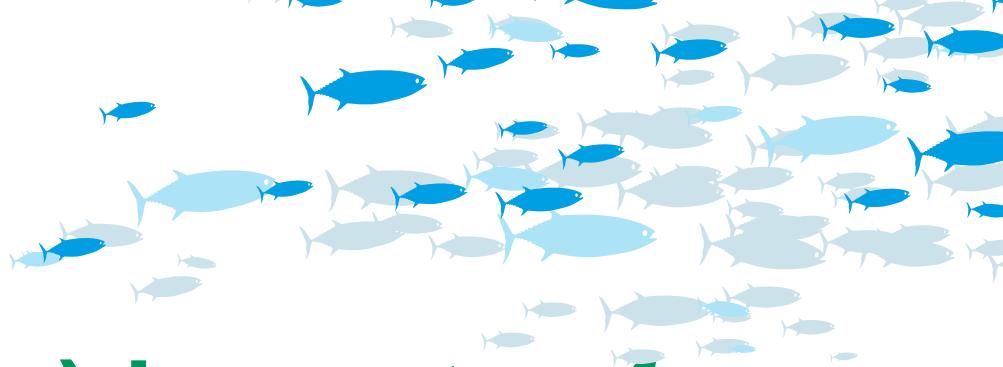
About gulf curvina

- Upper Gulf of California (Aggregation)
- 4 communities (Cucapah)
- Feb-May (Spring/Lent)
- Since 2012, RBM
- + 4K MT, 14.7 pesos/kilo
- TAC allocated to 739 authorized pangas
- Curvina Regional Committee (Governance)
- Vaquita, Totoaba, MPAs, etc.



RBM goals





Some (economic) impacts of catch shares in gulf curvina

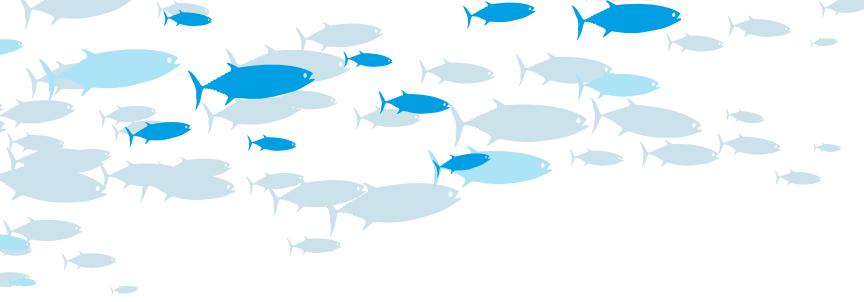
Gulf Curvina Fishery Anual Performance

| Variable (source) | Before catchshares management | | | | | | With catchshares management | | | | |
|---------------------------------------|-------------------------------|-----------|-----------|-----------|-----------|--------------------------|--------------------------------------|-------------------------|--|-------------------------|--|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015* | 2016* |
| Management plan | | | | | | | Published | | | | |
| Catch limit (1) | | | | | | | 2,300 Ton | 2,700 Ton | 3,539 Ton | 3,790 Ton | 3,602 Ton |
| Swim bladder "buche" limit (1) | | | | | | | | | 81 Ton | 80 Ton | 90 Ton |
| Vessel individual quota (1,2) | | | | | | | | 5.27 Ton | 5.72 Ton | 5.10 Ton | 5.10 Ton |
| Landings (3) | 707 Ton | 4,207 Ton | 4,573 Ton | 4,914 Ton | 5,930 Ton | 4,373 Ton | 2,583 Ton | 4,001 Ton | 3,524 Ton | 4,583 Ton | 4,463 Ton |
| Ex vessel price (4) | N/A | N/A | N/A | N/A | N/A | \$10.70 pesos/kilo | \$17.91 pesos/kilo | \$14.55 pesos/kilo | \$13.12 pesos/kilo | \$11.37 pesos/kilo | \$12.41 pesos/kilo |
| "Buche" price (4) | N/A | N/A | N/A | N/A | N/A | \$100.00 pesos/kilo | \$153.66 pesos/kilo** | \$162.08 pesos/kilo** | \$214.83 pesos/kilo** | \$272.22 pesos/kilo** | \$477.63 pesos/kilo** |
| Gross incomes (4) | N/A | N/A | N/A | N/A | N/A | \$100,173.50 pesos/panga | \$90,612.47 pesos/panga | \$88,705.49 pesos/panga | \$91,589.69 pesos/panga | \$84,080.69 pesos/panga | \$121,499.08 pesos/panga |
| Number of curvina fishing permits (2) | N/A | N/A | N/A | N/A | N/A | N/A | | 512 | 682 | 682 | 721 |
| Community monitoring | | | | | | 16 monitors in GSC | Monitoring in GSC, CCP pilot program | 29 monitors in GSC | Monitoring in GSC, SF | Monitoring in GSC, SF | 52 monitors in all 4 fishery communities |
| Governance bodies | | | | | | Grupo Técnico Curvina | Comité Consultivo Multi-actor | | Formalization of Comité Consultivo Multi-actor | | |
| Fishing days (5) | N/A | N/A | N/A | N/A | N/A | ~ 30 | ~20 | ~20 | ~20 | ~20 | ~20 |

Information sources:

- 1) DOF: Diario Oficial de la Federación
- 2) Fishing permits specifications
- 3) Landings reported by CONAPESCA offices in BC and Son
- 4) Economic overview surveys, Golfo de Santa Clara, EDF de México
- 5) Community Monitoring Program

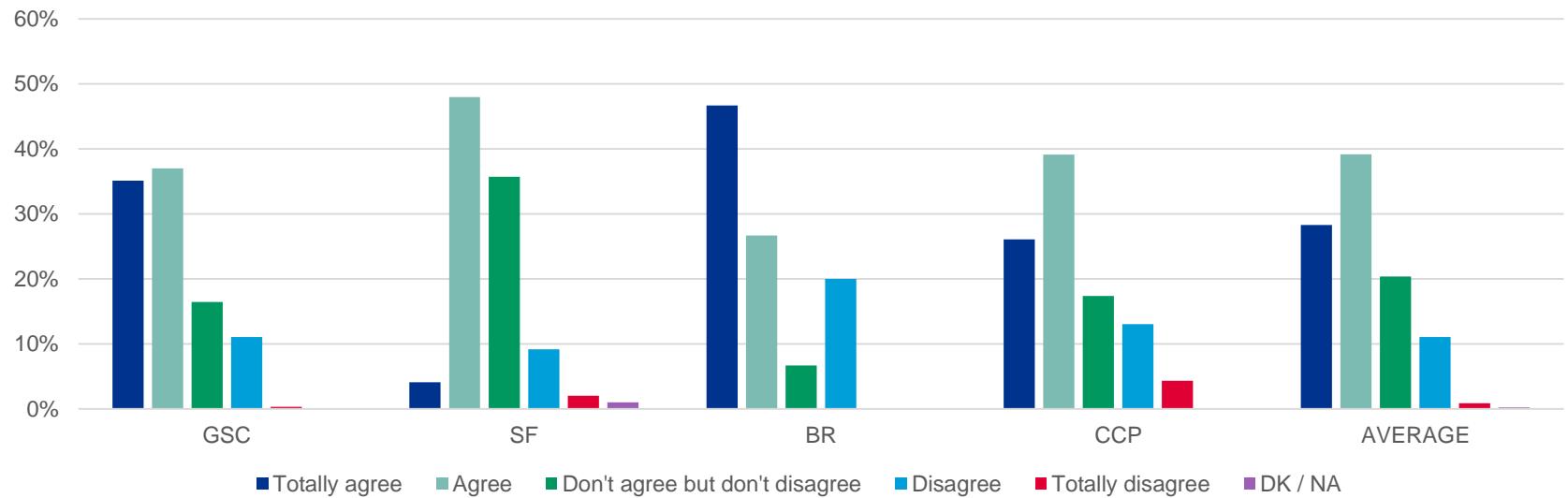
* In 2015 and 2016 fishing seasons, the Cuerpo ñ were exempt from quota limit



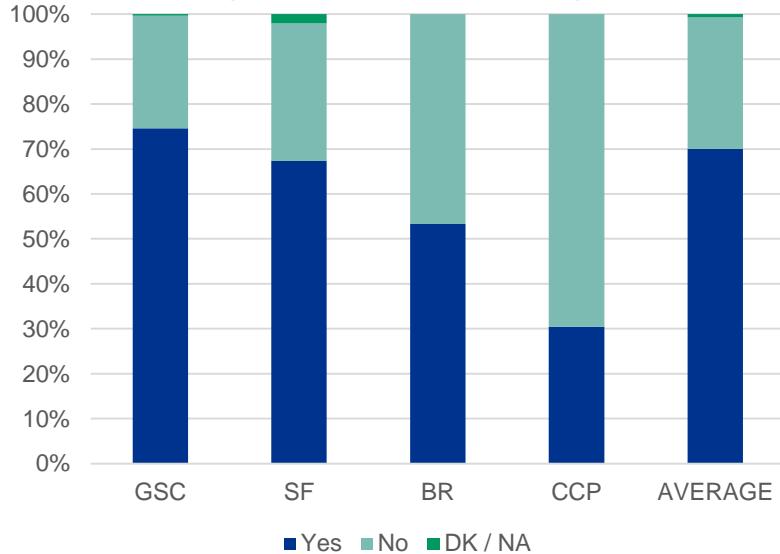
Stakeholders perceptions

Gulf curvina line base surveys 2016

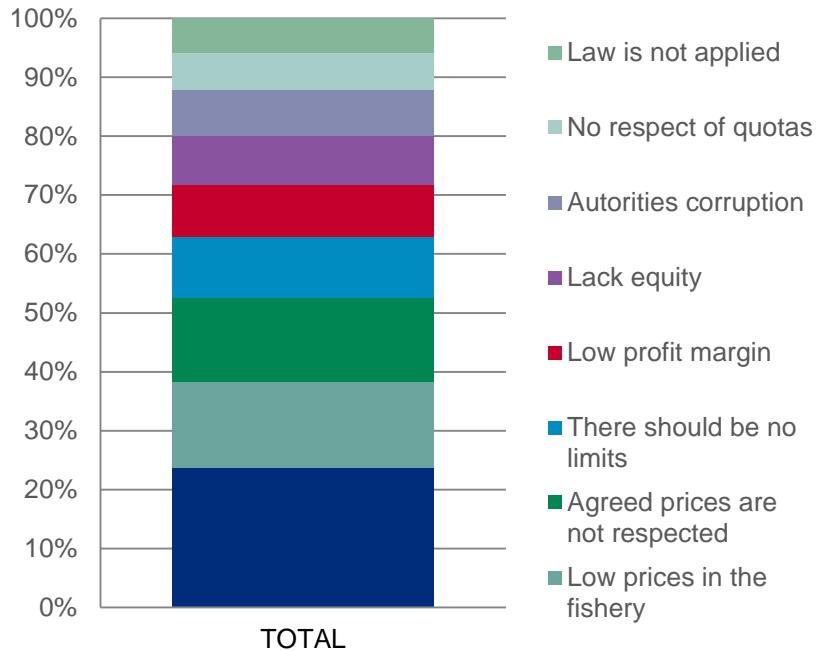
"In my community fishing is an economic activity that allows me to earn enough to have a good standard of living"



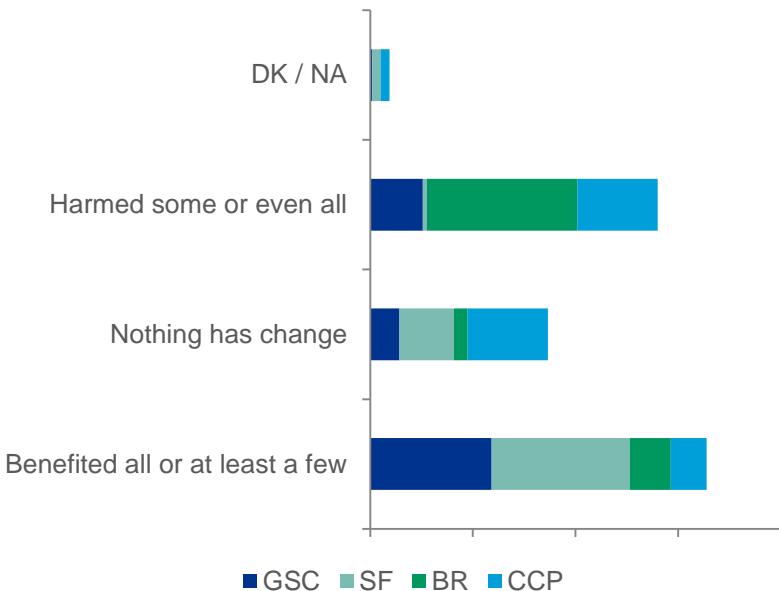
Do you agree with a limit to the total catch of curvina and that each panga also has a fishing limit?



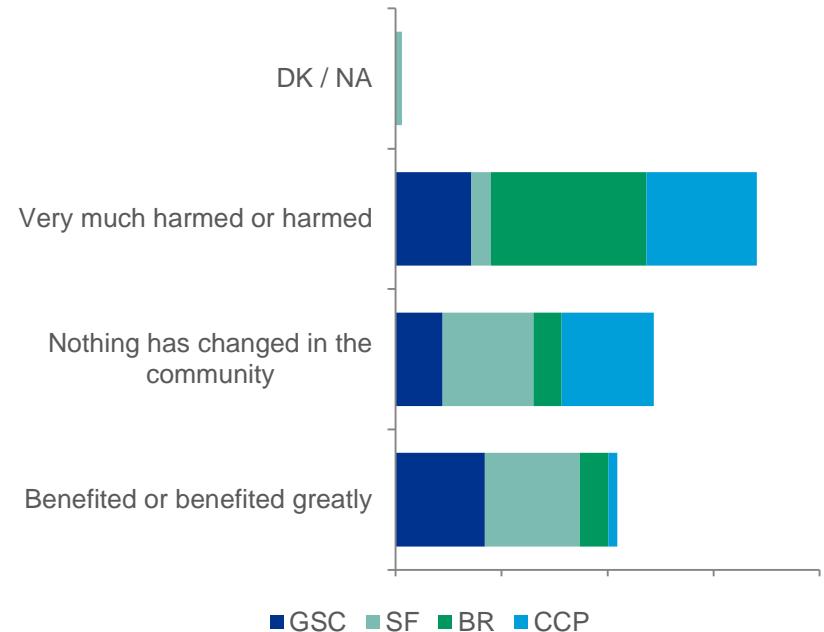
Why do not you agree?



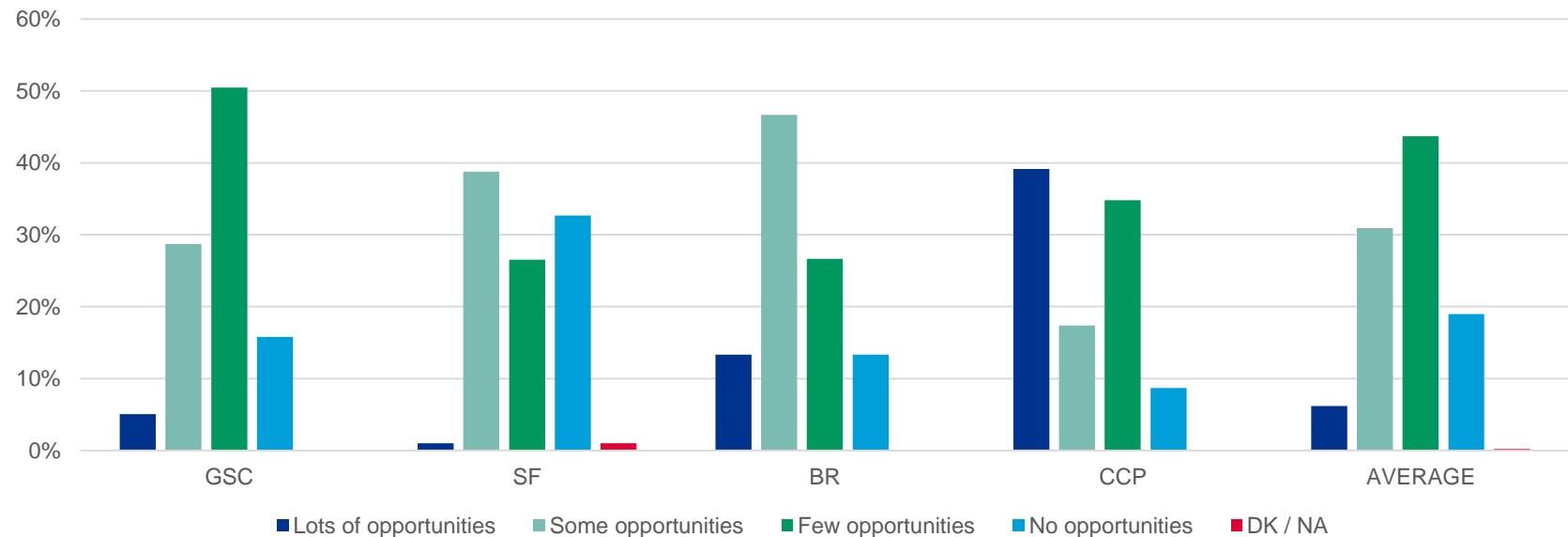
Curvina catch shares program in your community has?



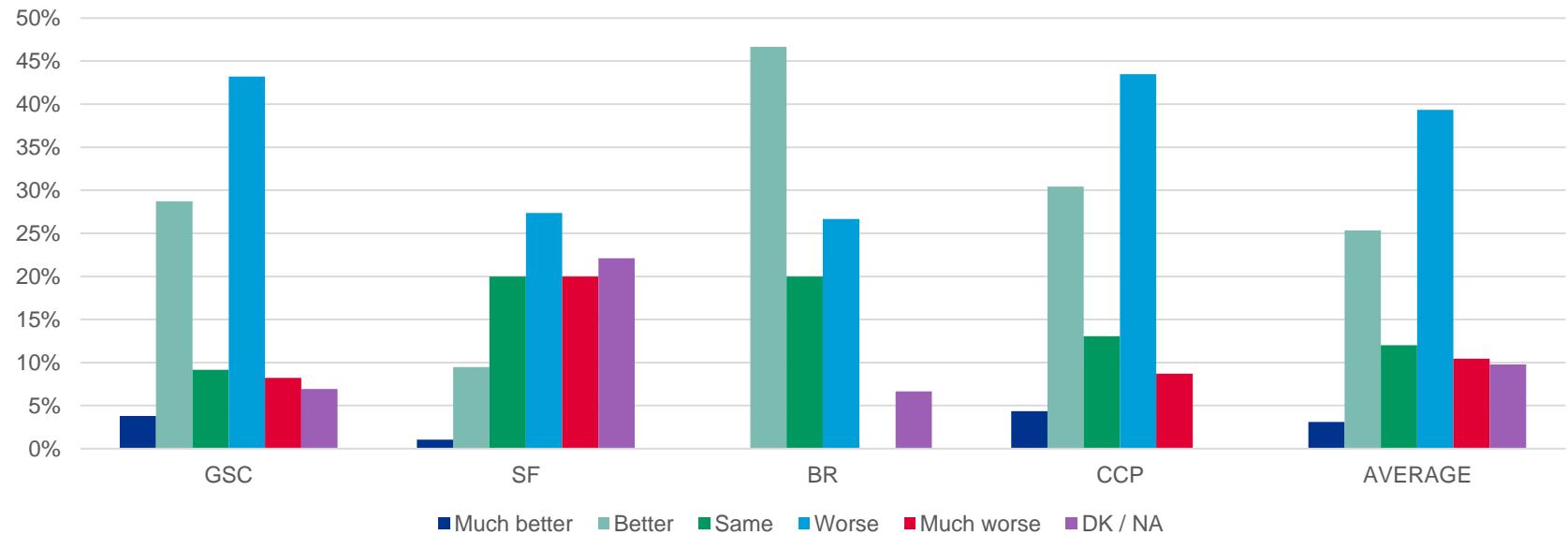
To you catch shares has?



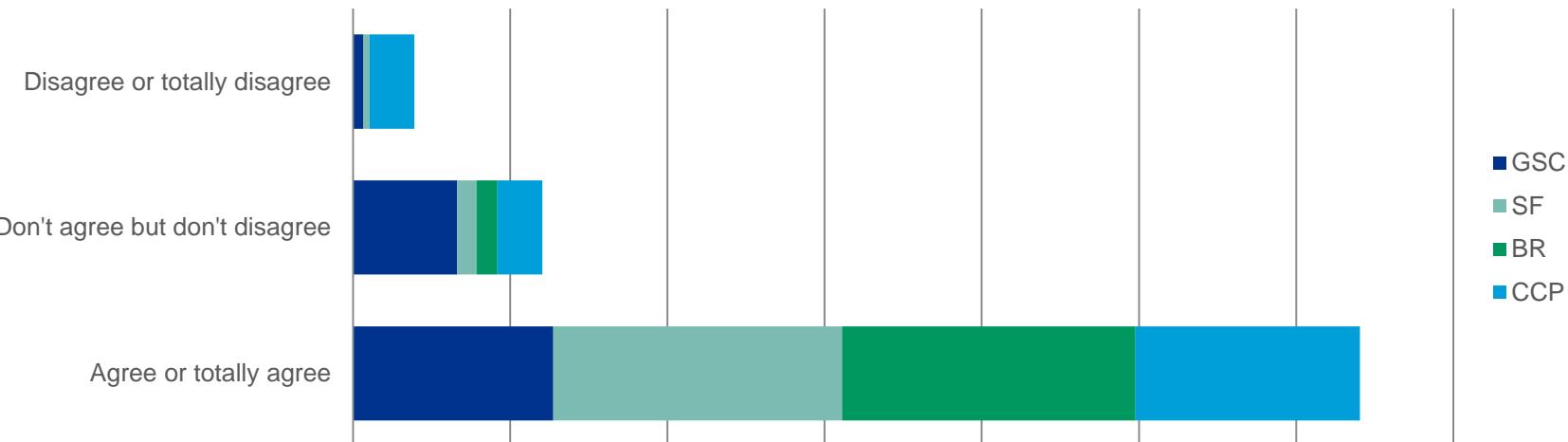
Development opportunities for the young in local fisheries



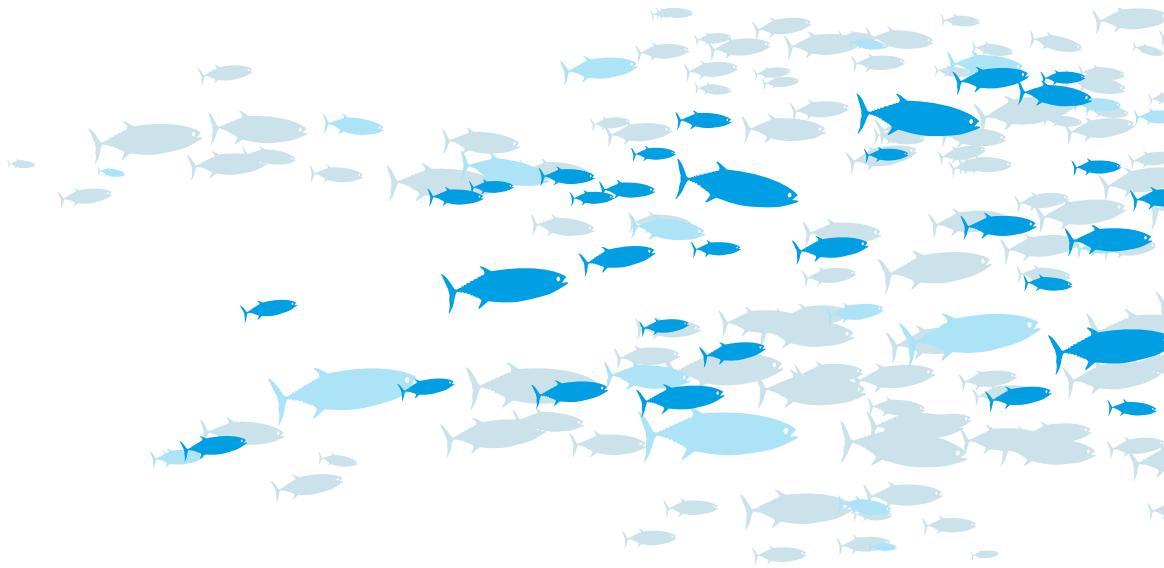
How will be the future for fishing in your community?



"Thanks to the participation of fishermen, authorities and environmental and social organizations, we have improved the way that Curvina fishery is managed in my community"



Challenges

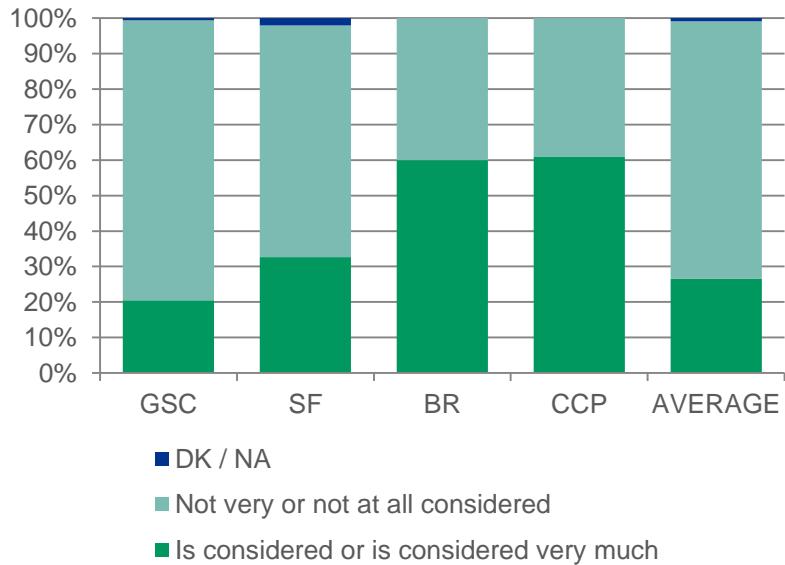


Do you know how quota or fishing limit is determined?



- Improve knowledge

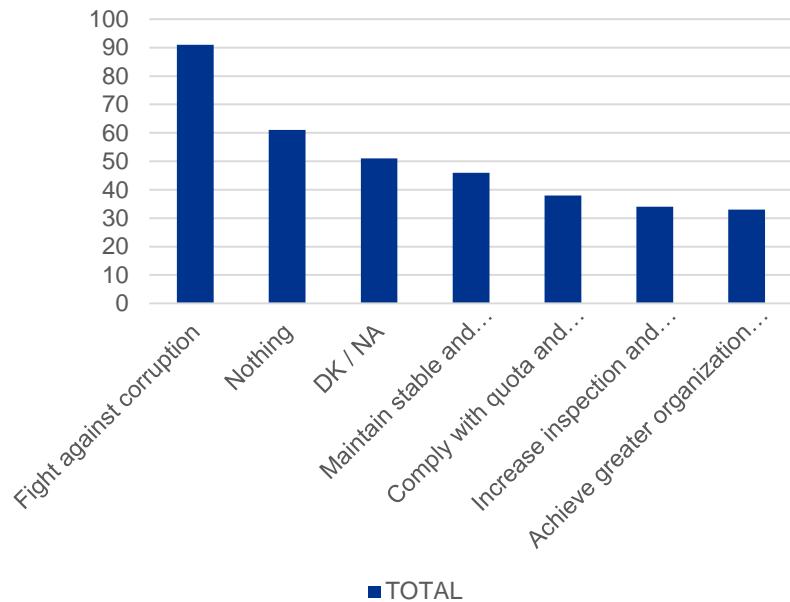
How much is considered the opinion of stakeholders for management decision making?



- Improve knowledge
- Stakeholders opinion in management decisions

Curvina management: 7.8 average

What needs to be done in your community to reach 10?



- Improve knowledge
- Stakeholders opinion in management decisions
- ~~Corruption, price stability and competitiveness, compliance, effective inspection and surveillance, fishermen organization~~

Conclusions

- Participation in management decisions is key!
- Outreach to all community members to ensure they know and understand benefit
- Agreements within sector are not broadly communicated
- Information!!



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Encontrando soluciones que funcionan



Encontrando soluciones que funcionan

Programa de Manejo Compartido

| METAS | Objetivos | Indicadores |
|------------------|---|--|
| Biológico | Aumentar conocimiento sobre la pesquería Aumentar productividad Conservar hábitats clave Eliminar sobreexplotación Reducir captura incidental Restaurar stocks | Salud del stock |
| Económico | Apoyar empleo (estable y duradero) Promoción de ciertos sectores Promover viabilidad económica Reducir sobrecapitalización | Rentabilidad de la actividad |
| Manejo | Fortalecer gobernanza local Reducción de gastos administrativos y de manejo | Organización alrededor de los recursos |
| Social | Garantizar acceso a pescadores locales Impulsar justa distribución de beneficios Limitar consolidación y concentración Promoción de ciertos sectores Protección de grupos específicos (jóvenes, indígenas, mujeres) |  Conservación de una estructura tradicional Encontrando soluciones que funcionan |