

## **The use of gill nets at the small-scale experimental fishery project at Vanderkloof Dam by Qurban Rouhani**

The use of gill nets in Vanderkloof Dam, and their use in general by inland small-scale fishers, has stirred significant emotions and concerns amongst the recreational anglers. Articles and postings on social media have referred to gill nets as “walls of death” and other similar adjectives. I have seen how gill nets used in many fisheries across Africa result in the decline of fish stocks. And, surprisingly to many, I would agree that gill nets could be destructive! However, I also understand that that the impact of gill nets alone is not a valid argument to ban gill nets altogether especially in relation to this experimental project.

Fisheries management is a complex issue, and therefore reducing it to the level that gill nets are “bad” and maybe using a rod and line only is “good”, is being too simplistic. The reality is that fishing gear is just one component of a complex set of tools, mechanisms and parameters that can deliver a well-managed fishery. This realisation, called the ecosystem approach (that could be defined as “the application of ecological, economic, and social information, options and constraints to achieve social benefits within a defined geographical area, and over a specified period” (Lackey 1999), was also a journey that fisheries scientists themselves had to take. In Vanderkloof, even though what is underway is an experimental fishery project. It has the elements of an ecosystem approach. The use of the gill nets is strictly managed, in that it is only used within approx 10km from the dam wall (bearing in mind that the dam is approx. 80km in length). The nets sizes are regulated, there are limits of how many largemouth yellowfish (20 maximum) can be harvested per month after which the use of nets would be retired for that month. To date the project has always been well below that number. The project is also working closely with the provincial environmental departments, civil society, stakeholders (recreational fishing associations) and even the local community to understand how to ensure compliance and how to develop and manage a small scale fishery that is both biologically and socio-economically sustainable. The final decision will depend on the experimental phase results (this will be unpacked in further articles).

Fisheries scientists now realise that managing the biological part of the fishery cannot be divorced from the human element, which comes with complex social, economic, political and cultural drivers as well. So this is not just about one issue, but rather the interactions between a number of issues, and how to manage and balance diverse interests and needs.

To illustrate this point, almost all marine fisheries worldwide are in trouble through overfishing. The most common method used by the commercial sector is trawling, as it is cost effective for the operators. So, do we ban trawling or do we put in place measures to better manage how trawlers operate, and in that process recognize that the issue is not the gear *per se*, but rather how, where and when it is used (which brings in the human element)?

Another example, closer to recreational anglers, is the decline of line fish species targeted by recreational anglers along our coastline. We have witnessed that with just a rod and line, line fish species along our coastline have declined. Again one may ask, is the issue the gear, or rather how the resource is being managed (again the human element)?

The point of this article is not to make an argument for or against gill nets, or any other gear for that matter, but rather to highlight that fisheries management cannot be reduced to simple sound bites or rhetoric. The ecosystems approach in fisheries compels us all to take a broader integrated look, include the human element, balance the needs of various stakeholders and role players and then, through a process of consultation and consensus, reach agreements that allow for sustainable and equitable use of the fisheries resource. In essence, it is an exercise in democracy and sustainable development.

In this democratic process, it would be relevant that recreational anglers also recognise the needs and aspirations of small-scale fishers, not through the prism of a recreational angler, but rather through the eyes of a small scale fisher.

Worldwide small-scale fishers tend to be marginalised, disenfranchised and poor. By and large they are fishing, not to be rich, but to sustain a livelihood. Surely they are entitled to use a fishing method that is cost effective, sustainable and that they

do not have to spend a lot of energy and resources to catch their fish? Within this construct the various role players and stakeholders, such as government environmental agencies and civil society also need to play their part in ensuring that all users of the resource adhere to conditions required to ensure the sustainability of the fishery.

Arguments are being made on social media that have already concluded that government will not be able to regulate small-scale fisheries, and that the type of gear that small-scale fishers can use must now be limited or set. This is not a wise or moral argument, let alone a legal one. How does one effectively “punish” small-scale fishers and researchers because a third party may or may not perform their legislated functions? The answer must surely be better cooperation by all parties to incentivise and encourage compliance. This has not been part of the discourse to date.

The recreational angling sector is valuable to the economy of the country, it must be supported and allowed to grow and develop. The same is true for small-scale fishers; they too must be provided with the opportunity and space to grow and develop lawfully and with dignity. There is a wide path ahead for recreational anglers and small-scale fishers to engage with each other in a way that is constructive, respectful and mutually beneficial that will allow for them both to share the important fisheries resources of South Africa sustainably. Equally, there exists another path that is confrontational and divisive and will not achieve this outcome.

There is a choice to be made, and its consequences will be long lasting.

## **References**

Lackey, R.T. 1999. Radically contested assertions in ecosystem management. *Journal of Sustainable Forestry*, 9(1):21-34