



## RESEARCH BRIEF

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# Abalone Conservation in the Presence of Drug Use

## Combatting Poaching by Empowering Local Communities and Targeting Organised Crime

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The illegal exploitation of wild abalone in South African coastal communities has been escalating since 1994, despite increased enforcement. This paper formulates a model of the poacher's decision-making process to explore why poaching has not subsided. What is unique to this model is that the researchers incorporate the specifics of the local South African context, coupling the high value of abalone with the prevalence of both bribery and corruption, and the presence of recreational drugs within local communities. Two context-specific policy measures are proposed to alleviate poaching. The first measure relates to weakening demand for abalone by targeting enforcement at organised crime syndicates. The second measure relates to giving local coastal communities the authority to manage the resources. For community management to be effective in this setting, however, local coastal community members would need to be empowered to deal with organised crime groups. Complementary measures to bring back community patriotism will also be needed, given the tattered social fabric of the local coastal communities.

In a bid to counter illegal harvesting of abalone, the fisheries authority (the Department of Marine and Coastal Management or MCM) has invested significantly more in fisheries compliance since the mid-1990s. Specifically, MCM strengthened law enforcement by creating a specialised unit that focused on marine offenses and increased shoreline patrolling, establishing formal and informal partnerships with other government departments to conduct joint investigations and setting up an Environmental Court primarily to try abalone cases. MCM also instituted measures to minimize corruption – such as increasing the salaries of fishery control officers. In addition to these initiatives, MCM also attempted to decrease fishing by systematically reducing the total allowable catch (TAC). However, these traditional management measures proved relatively ineffective, with abalone poaching remaining widespread.

The nature of poaching has changed over the past few decades. Specifically, the 1994 “abalone war,” which entailed violent confrontations between poachers, police, community members, and commercial divers, has evolved into a highly organised, illegal transnational trading operation involving Chinese organised crime syndicates. In

### Key Points

- Illegal exploitation of abalone has been steadily rising in recent decades.
- This study examines the linkages between abalone poaching, drug use and criminal activity in South African coastal communities.
- General corruption, pervasiveness of drugs, prevalence of bribery and the high value of abalone are possible explanations for rampant poaching.

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particular, research into this topic has revealed that illicit abalone trading evolved to become a significant share of the business of Chinese organised crime. The rapid growth in the illicit trade of abalone in the 1990s is attributed to four main factors. Firstly, the weakness of the South African rand against the U.S. dollar provided a significant incentive to ramp up the export of abalone – which, in addition to having a high value, is priced in dollars. Secondly, an entrenched Chinese organised crime network in South Africa, with illicit trade routes between East Asia and South Africa, was bartering drugs for abalone (more on this in a moment). Thirdly, South Africa was experiencing difficulty with effective border control. Finally, disadvantaged coastal communities became more tolerant of poaching amid their frustration with what they perceived as the slow rate of redistribution of property rights from commercial fishing ventures to disadvantaged (and previously excluded) local communities.

The link between abalone and drug use came to the fore when, in the mid-1990s, players from the Western Cape's gang-based drug trade moved to abalone-rich fishing communities, taking control of huge segments of the abalone market. During this time, large quantities of the chemical ingredients for methaqualone – then the drug of choice in the Cape Flats – were being smuggled into South Africa from East Asia. The dynamics of this illicit barter system were as follows: poachers provided abalone to Western Cape drug dealers in exchange for drugs, these same drug dealers provided the abalone to Chinese organised crime syndicates in exchange for methaqualone, and, finally, the abalone was smuggled out of the country by these same syndicates. In this context, abalone was completely intertwined in the illicit economy in the Western Cape.

The economic theory around compliance with regulations assumes that fishermen base their decision to comply on economic gains, the probability of detection, and the severity of punishment. In this context, the role of law enforcement and deterrence in promoting compliance is widely accepted – for example, the government has provided additional policing resources over the years in an effort to curb escalating poaching levels. However, increased law enforcement alone has not substantially reduced poaching. In this context, this research developed a model of the poacher's decision-making process to explore why increased enforcement has failed to achieve better compliance with the abalone fishery regulations. The model is very specific to the South African context and so consists of two agents: the conservation agency, MCM, which is responsible for protecting the abalone resource through enforcement activities; and the poacher, who divides time between legitimate employment and illegal abalone harvesting.

In addition to the usual factors that would go into a model examining the decision-making processes of poachers – such as how much effort the government is putting into enforcement – the model includes additional factors that help to explain continued abalone poaching in a South African context. These factors include the high value of abalone, corruption in enforcement structures, and the illicit barter of abalone for drugs. The inclusion of these additional factors has enabled us to explain continued abalone poaching in the face of increased effort on the part of the fisheries authority to reduce levels of poaching.

### Conclusions

The paper draws general policy conclusions, such as the need for increased anti-poaching enforcement and higher fines as ways to curb illegal harvesting. However, we also argue for more measures to curb illegal abalone harvesting in the specific South African context. The paper puts forward the role of drugs, general corruption, the prevalence of bribery, and the high value of abalone as possible explanations for why poaching has continued unabated. Two suggestions for dealing with abalone poaching are as follows:

- (1) Create a more effective monitoring and enforcement mechanism by giving local coastal communities the authority to manage the resource. For example, if the government transfers ownership of the abalone resource to coastal communities, all net benefits derived from the resource would accrue to the communities themselves. This would provide an incentive for

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proper management of the resource. However, local communities would need to be empowered to deal with criminal interest groups such as local drug dealers.

(2) Reduce poaching by targeting the factors that drive the demand for abalone. Specifically, target the gangs that are buying abalone from local divers (or exchanging abalone for drugs) and the organised crime syndicates that export abalone out of the country. By reducing the reach of these gangs and syndicates, fisheries authorities would be removing the incentive to poach abalone in the first place, especially since abalone is predominantly poached for resale as opposed to the poacher's own use.

### ABOUT THIS BRIEF

DRB 12-15 is based on "Abalone Conservation in the Presence of Drug Use and Corruption: Combatting Poaching through Empowering Local Communities and Enforcement Measures Targeted at Organised Crime Syndicates," by Edwin Muchapondwa, Kerri Brick, and Martine Visser, November 2012, Efd Discussion Paper 12-15. (The DRB series of research briefs is associated with the Efd Discussion Paper Series.)

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