

# WATER AND THE COMMUNITY

## The salt whisperers – Study shows rural women not benefiting from indigenous knowledge to extract Baleni salt



*Coaxing salt from mud may not be the average South African's everyday skill set. But it's a tradition that's been handed from mother to daughter for generations among a handful of women living near the Baleni hot springs, about half an hour's drive from Giyani in Limpopo Province. Leonie Joubert reports on a Water Research Commission project investigating the value of this indigenous knowledge.*

It's not just the technical knowledge relating to their specific method of salt extraction that they share amongst themselves, though. They also hand down the rituals which they believe will appease the ancestral spirits as they go about the task of mining salt, and they are careful in their induction of inexperienced women into the salt-harvesting guild.

This women-only practice goes back an estimated 1 700 years, and involves a simple but effective process of scraping a crust of salt-laden soil from the dry riverbed during winter months, which is then extracted from the mud by dissolving it in water. The brine is filtered through baskets of mud, and then heated

until the water evaporates, leaving behind pure salt crystals. The women of the Mahumani community, who are guardians of this knowledge and the wetland where they have traditionally mined the salt for generations, either exchange their salt for groceries at nearby markets, or sell it for cash to local traders or traditional healers.

With the recent growth in the high-end market for artisanal culinary products, a bigger commercial opportunity has opened up for Baleni salt. As much as a third of this salt is now going into an external market value chain, where it fetches nearly four times the price of the salt sold locally by women traders. This premium



*A salt miner tends to a xinzhava filter, used to extract brine from salt crust collected from the vicinity of the Baleni hot springs.*

price is based on a markup that's linked with its heritage value. A single commercial salt company now dominates the external value chain into which this product is now being sold.

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However, a recent study of value chains into which the Baleni salt is being sold, shows that the women who are keepers of the knowledge of the salt extraction are not getting maximum benefit from the profits of their efforts or their tradition knowledge skills. A significant portion of the final price that the product fetches once it reaches its urban market, is collected by a series of 'agents' and 'brokers' in the value chain.

"We estimate that there are about 30 women in the Mahumani community who are mining salt from the Baleni wetlands on the Klein Letaba River," reports Prof Edwin Muchapondwa, a resource

economist from the Environmental Policy Research Unit (EPRU) at the University of Cape Town. Prof Muchapondwa headed up the team of four researchers who were commissioned by the WRC in 2016 to do a full value-chain analysis of this small industry.

"The women are harvesting about two tons of salt per year. Those women who are selling their salt locally, are getting about R20 per kilogram. Those who are selling into the more affluent market are getting about R36 per kilogram. But people who are buying this salt are paying R135 per kilogram," says Prof Muchapondwa.

Some of the takings along the value chain must go towards the high cost of getting the product to market, but the women are nevertheless not getting maximum benefit of their knowledge and the exclusivity of their product.

Salt mining in the Baleni wetland usually happens in the winter months, between June and July, and according to the team's findings, the women are collecting between 50 kg and 80 kg of salt usually over a two-week harvesting period. They mostly package that into 500g plastic packets that sell for about R10 a bag at the local market.



"But, since getting into the high-end markets, this salt is now being used by some Michelin chefs. It's being sold in attractive packaging by a specialty salt shop in Amsterdam. It's even been included in the Slow Food's Ark Taste, and profiled at the Terra Madre shows in Turin," notes Prof Muchapondwa. "And yet, our value chain study shows that it's these women's indigenous knowledge that allows their product to fetch a premium. This knowledge, and the technology relating to extracting the salt, belongs to these women, and yet they're not significant beneficiaries of the value chain."

The report recommends that the women could benefit more from their product if they exploit its uniqueness, which is based on the heritage value of how it is mined, and the indigenous knowledge that their community has conserved for so many generations. Recognising its full value might also help them be more assertive in fixing the price of their product. One further way to protect these women miners' livelihoods, and prevent the loss of their knowledge, could be through registering their processing technology and knowledge as their intellectual property.

### **Greater protection for nature's free services**

"The other question that comes through from this study, is the need to protect the natural systems that give us the ecological services that we as communities benefit from," explains Prof Muchapondwa.

The purpose of this study was partly to feature a case study that demonstrates the water-linked goods and services that nature provides society, free of charge.

The salt-laden soils in this wetland provide a free resource to the women of the Mahumani community, but how much can they safely harvest before possibly undermining the healthy function of the wetland that they depend upon for their livelihood? And what is the current state of health of the wetland system from which they are getting the free resource?

According to Prof Muchapondwa, a prospecting exercise done in the 1940s calculated that this hot spring and surrounding wetland has about 2 300 metric tons of salt available for exploitation. This suggests that there is a threshold to how much salt people can mine from here, although Prof Muchapondwa says there is need for further research to gauge the current capacity of production.

"We need greater certainty about the potential yield, which will say something about the extent of the vulnerability of the miners and entrepreneurs who are at the helm of the project."

Like many of the Limpopo Province's rivers, there is a risk that the quality of the water in the Klein Letaba River is poor for human consumption. However, previous testing by the CSIR showed that the sample had 'good elements'.

"The Baleni salt being scraped from the riverbed may contain impurities and toxic substances in concentrated form. We need ongoing assessments of water quality here, and whether the

quality of the salt can be guaranteed for human consumption. In any case, it's important to have special quality control measures introduced upstream to prevent the local salt from being affected," Prof Muchapondwa maintain.

The full report, *Rural development and the governability of water-linked ecosystems in transitioning economies: The Market Value Chains of Baleni Salt in Limpopo* by Prof Edwin Muchapondwa, Felix Chidavaenzi, Herbert Ntuli and Barbara Nompumelelo Tapela will be available from the WRC later this year.