# Using Mohlopi tree roots to make caffeine-free coffee in Limpopo Province, South Africa By Ernest Letsoalo, Richard Chuene and Believe Hlahla.



Re Fentje members with their packaged Mohlopi coffee product.

Credit: R Chuene

The group Re Fentje Agriculture and Projects was established in 2019, and is composed of 20 small-scale farmers (16 women and 4 men), of which two are youths. The name Re Fentje means "We are victorious". The group is located in Lebowakgomo in Lepelle-Nkumpi Municipality in Limpopo Province in the northern part of South Africa.

Mohlopi (Boscia albitrunca) has been used for as long as people have lived in this area, mainly for making porridge during periods of famine, to replace maize meal, which is normally used for porridge. The story of the Mohlopi tree is documented in a book by H.P. Maredi (1969): "Tlala ya mohlopi", loosely translated as "Hunger for Mohlopi" or "Hunger that made people resort to the Mohlopi tree". According to Maredi, this tree is commonly known as a "tree of life" or "tree that oozes life".

The Re Fentje group wanted to be actively involved in organic farming. Because they could not secure land for this, they resorted to using their indigenous knowledge (IK) to build a

business based on products from local wild plants. When group members were attending a training session on organic farming, it occurred to them that they could use their IK to create many products, and the idea of making coffee using Mohlopi tree roots resonated within the members' hearts.

# Discovery of local innovation

This initiative was discovered by the for Rural Community Empowerment (CRCE) at the University of Limpopo when it was involved in a number of field visits to identify local innovators who are actively innovating within the food system or addressing any other societal challenge by relying on local resources and IK. Mr Kadiaka, the former secretary of the Eastern and Southern Africa Small-Scale Farmers Forum in South Africa (ESAFF SA), had arranged for staff from CRCE to visit this group because he wanted the Re Fentje members to join ESAFF SA in the Lepelle-Nkumpi Municipality.

The CRCE used this opportunity to revive the Prolinnova-SA multistakeholder platform and activities in Limpopo Province. This initiative, through a local partnership with the Limpopo Department of Agriculture and Rural Development (DARD), will also ensure that local innovations are documented, further developed and spread through exposure in various local and international platforms. Making Mohlopi coffee is one of the local innovations that the Limpopo Task Team of Prolinnova-SA would like to use to start mobilising researchers, extension workers and academics, with the Re Fentje members playing the leading role. This initiative has been visited twice, first by CRCE to learn about the Re Fentje group and its plans, and then by the Limpopo Task Team together with the Prolinnova Subregional Coordinator for Eastern and Southern Africa, Jacob Wanyama.

## Making Mohlopi coffee

To start the process of developing *Mohlopi* coffee, the Re Fentje members approached the local headman, who then introduced them to the chief to obtain approval for harvesting the plant material in the wild. The group then went to different local authorities and obtained a permit for harvesting Mohlopi roots. When harvesting, the group takes from one side of the root system only and marks it to avoid overexploitation. The roots are cut some distance from the tree trunk and Vaseline is applied to the cut edges to protect them and stimulate the roots to regrow. The next harvest, which is 2-3 years after the first due to the availability of Mohlopi in the area, is done on the other side of the root system.

The harvested roots are washed, chopped into small pieces and spread out in an open space to dry. It takes 3-4 days during summer and a week or more during winter for the material to dry completely. After drying, the chopped roots are ground and put in a big threelegged pot that has been smeared with olive oil on the inside. The ground root is fried and then packaged without adding anything.

A representative of the group took a sample of the coffee for laboratory analysis at the Limpopo Agro-Food Technology Station based at the University of Limpopo. A detailed laboratory analysis of the *Mohlopi* coffee is available on request from the Re Fentje group members. Since the analysis, the coffee is now officially packaged, labelled and sold locally. Through sales of the coffee, the group managed to purchase 10 hectares of land to start cultivating *Mohlopi* plus a grinding machine to make their work easier.

Several benefits of the coffee – mostly health-related and due to the fact that it does not contain caffeine – are highlighted by the Re Fentje members, based on the testimonies of their customers, some of whom are members of the group. The members see their coffee-making initiative as a contribution to creating employment as well as creating awareness about the importance of IK among local community members, especially the youth.

#### **Creating opportunities for interaction**

The group members have been interacting with several stakeholders, including AgriSeta (a government body that supports training in agriculture) and the University of Limpopo about administrative and technical issues related to their local innovation. The Limpopo Task Team of Prolinnova-SA plans to facilitate interactions between Re Fentje group members and university researchers in investigating other uses of plant material from the Mohlopi tree. Since the group members plan to domesticate Mohlopi and grow it on the land they have secured, the research would also inform the requirements for the domestication of wild plants in order to address concerns about sustainability. During the second visit by the Limpopo Task Team, it was suggested by Mr Kadiaka that other parts of the plant, such as leaves and fruit, be taken to University of Limpopo for analysis to explore other potential uses, but this is still to be pursued.

# Challenges faced by the Re Fentje group

Despite the progress made to date, the group still faces a number of challenges. Firstly, they have neither secure nor

exclusive rights to the trees that occur naturally in the area. Also, since they harvest from different locations in large quantities, they face high transport costs. They do not have access to a suitable place for processing the coffee and they lack the funds required to develop the 10 ha of land that they have secured. To be able to access formal markets, they would also need to register a bar code for the product. This will require the engagement of an appropriate advisor. The local universities and the DARD, as part of the Prolinnova platform in Limpopo Province, will

need to work with the group members and other actors to address these challenges in order to ensure the future of the *Mohlopi* coffee initiative. By working together, the multistakeholder Limpopo Prolinnova platform can support the Re Fentje members to reach their goal of securing a global market for their products.

### Reference

Maredi HP. 1969. Tlala ya mohlopi. Van Schaik, Pretoria (in the Niger-Kordofanian language).



Chairperson of the Re Fentje group, Modikanalo Annah Mokoena, with a harvested Mohlopi root.

\*Credit: Re Fentje member\*