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Author: Mosenene, Letla

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An Interview with Letla Mosenene, an Advisor to Farmer Innovators in Lesotho

Gudrun Schwilch (MRD): Could you tell us something about yourself? How did you become involved in Soil and Water Conservation (SWC) in Lesotho?

Letla Mosenene: I was born in Quthing, in southern Lesotho, and educated in Sierra Leone (before the devastating war) and the United States, where I studied science education and forestry. After returning from the United States, I developed an interest in agroforestry and went to Kenya for a 3-week introductory course offered by the International Center for Research and Agroforestry (ICRAF). The course offered many methods of integrating production systems with SWC efforts in a holistic way. In 1990, my entire perspective on forestry was affected when I was assigned by the Lesotho government to join the SWC and Agroforestry Program (SWCAP), which is funded by the International Fund for Agricultural Development (IFAD). The program was mandated to implement SWC as well as agroforestry. I was assigned to lead the agroforestry component, which I did for 7–8 years.

What is the current situation of SWC in Lesotho?

Very bad, although most gullies have stabilized and have therefore ceased to grow. Among the diverse factors responsible, I think the most important is the topography. Lesotho is located at 1500 m in the lowlands. There is quite an abrupt rise to 3000 m. The country is essentially very mountainous (60%), with steep slopes in many parts. Rainfall is characterized by short and intense storm events, falling on sparsely vegetated rangelands and fields. Some SWCAP activities focused on gully reclamation and measures to prevent soil erosion such as contour bunds, reconstruction, and maintenance. Maintenance of these bunds was neglected for some time; often they were very narrow because they were perceived as reducing the growing area for crops. This reduction in size rendered them less effective. In 1990, SWCAP was mandated to develop and/or adapt techniques and technologies to reduce soil erosion and make agriculture productive again.

What policies, strategies, and practices have been recommended to mitigate the situation you describe?

Programs to fight soil erosion in Lesotho are launched periodically. A massive terrace construction campaign was launched in the 1930s; in the 1970s and 1980s, there were efforts to classify the soils and determine their suitability for various uses. In later years, SWC measures were integrated into crop farming in what was referred to as "conservation farming". There was greater recognition that farmers would be motivated to conserve water and soil in order to improve their productivity. Several projects were undertaken using this new approach, including SWCAP. SWC was characterized by getting rid of excessive water from the fields, but with the frequent droughts, it seems to me that we should be doing the opposite. The farmers are really suffering. The *1998 State of the Environment Report* shows that agricultural land, including rangeland, is disappearing very fast and that soil fertility is extremely low. That is why the Machobane Farming System (MFS) seems to present viable options.

You have described MFS for WOCAT (World Overview of Conservation Approaches and Technologies) as well as for other programs (eg, Promoting Farmer Innovation, PFI). What is MFS and what makes it so special?

Actually, I came across MFS years ago in an in-flight travel magazine of the then Lesotho Airways. That was in 1988, when I was a dedicated forester teaching at the Forestry Department of the local Agricultural College. The article did not really strike a chord, except to expose me to a Mosotho man who was a real resource for Lesotho. It seemed that his efforts had been variously thwarted and he had eventually resigned himself to leading a quiet life. It was not until 3 years later that I

FIGURE 1 Letla Mosenene in a fruit orchard in Lesotho. (Photo by Will Critchley)

FIGURE 2 The Machobane Farming System promotes diversity of crops, a side effect of which is to improve poor people's diets and thus contribute to improved health management of HIV positive people. (Photo courtesy of Helvetas Lesotho)

thought of this man again. At that time, I was responsible for implementing the SWCAP Agroforestry Project. Nineteen ninety-one was an extremely dry year, and agroforestry requires that trees be planted with crops and/or on rangelands. Asking farmers to work with me then was one of the most embarrassing moments of my career. The farmers wanted to produce food, not trees. Food security was most threatened at that time. As luck would have it, I came across James Jacob Machobane himself, who was then less enthusiastic about reintroducing his system. I decided to study the system since its elements of intercropping suited those of agroforestry, and I thought I could use it as an introductory package. A trial with 20 farmers was initiated. After 4 months it was obvious that the system had potential. It was performing extremely well during some of the toughest periods for agricultural production in Lesotho.

MFS (named after its developer) is basically an intensive, sustainable, low external input cropping system. A wide range of crops is grown, as opposed to the monocropping of maize seen in much of Lesotho. Interplanting and relay planting are practiced, to make intensive use of the land, ensure a harvest throughout the year, and spread risk. Planting starts in winter, with wheat and peas, followed by potatoes in July–August. Summer crops such as maize, beans, pumpkin, sorghum, and even watermelon and groundnuts are then intercropped. In November–December, the wheat and peas are removed, and potatoes are almost ready for harvesting. Then the cycle begins with wheat and peas again. To support such intensive use of land that is infertile in most cases, the farmers are encouraged to apply farmyard manure and ash in various ratios, depending on soil type and condition. The work is laborious but not intensive. However, those who have adopted the system can justify their participation in terms of self-reliance and food security as well as financial achievements to some extent. MFS applied on 1 acre (0.4 ha) makes it possible to feed a family of 5, send the children to school, invest, and feel generally successful about one's life.

Yet, it is not the technical aspects of MFS that are the most interesting or important lessons for those outside Lesotho. It is the confidence Machobane had in the land when others gave up and the way he experimented until he found a system that worked "come hail, come drought." Above all, it is the way that he then dedicated himself to imbuing others with the same spirit, the same sense of self-reliance, and the same positive attitude.

I also observed that women felt more affinity with the system (more than 50% in the 1st year, 1991), perhaps because food security was ensured. Consequently, I came to consider women and men who participated in the system as primary and secondary farmers; the former as adopters and the latter as their supporters. Men were skeptical, because there was no fancy machinery or expensive inputs; they did not regard the system as anything that warranted their attention. But they began to eat well and sell some excess production solely from potato yields.

Could you tell us a bit more about the role of women in SWC in Lesotho? Did it make a difference that you as a woman were working with women, and did you meet any obstacles working in a male-dominated field?

Women have always played an important role in SWC in Lesotho, even during the period of implementing structural measures to combat erosion in earlier times. This is partly because they were de facto farm managers in the absence of their husbands. Although I cannot produce figures, in Lesotho women are usually the first adopters of new ideas and technolo-

gies. These days, working with MFS, they are even more powerful because the system allows them to be involved. The techniques are simple and less automated or mechanized. Of course, I always found it easier to talk to women about MFS or any other SWC matters than to men. They are more practical and always willing to try something new. Men are very often drawn in by their wives; hence, primary farmers in Lesotho are mostly women. Of course as a woman, it is always difficult to work with men; it is a matter of attitude, even in Lesotho, where women are relatively well educated and free to pursue their dreams.

What kind of farmers are adopting MFS, and who is supporting it?

Mostly poor farmers. Some had even almost given up trying to farm and were also slowly adopting the system. A lot of redundant mine workers are also entering the system. The influx is not large, due to the perceived hard work involved. The positive thing is that once people join, it is hard to ignore the difference the system makes in their lives. Of course there are dropouts, but they too return to practice after 2–3 years.

The system seems to be gaining more recognition from external partners in development than from institutions in Lesotho. It was supported by SWCAP, which sponsored its reintroduction in the early 1990s, and is now heavily supported by Helvetas Lesotho, a Swiss association for international cooperation. In fact, their Natural Resources Program in Lesotho was implemented with reference to this system. The Ministry of Agriculture is gradually increasing its support for MFS.

Everybody is talking about sustainable development and poverty alleviation strategies; does MFS have a role in this area?

Definitely. There is nothing more sustainable than self-reliance, which is taught by this system. In terms of direct benefits, the system has proved that the households practicing it have good diets, can send their children to school, buy household goods without much trouble, and so on. In the fields, the soil is maintained and soil and water erosion reduced to negligible amounts in the long term while productivity is maintained. I strongly believe that MFS can eradicate—not reduce, but eradicate—poverty within a maximum of 5 years.

WOCAT aims to make experiences in SWC (such as MFS) available worldwide. What is your involvement in WOCAT?

By 1995, I had spent a few years working with MFS. This initiative was recognized by the Free University of Amsterdam, who were then IFAD consultants on SWCAP as I mentioned earlier. When they held a workshop at Magoobaskloof, South Africa, in that year, I was invited to present SWCAP's achievements on conservation farming. Instead, I made a presentation on MFS because it was so different from anything anyone else was presenting. I thought building on traditions stood a chance at WOCAT, and it did.

WOCAT is important because it is broad and incorporates experiences from very different places. Most important for me is the synthesis it makes of these experiences to allow different people and countries to adapt and adopt. Technologically, it will be important to maintain the current focus, although I think in Lesotho water will need more and more attention.

What is your agenda now with MFS?

As soon as I recognized its potential, we enlisted a group of its advocates. Under the leadership of Clark Tibbits, we encouraged Machobane to register the system as a nonprofit, nondenominational, nongovernmental organization named after the designer: Machobane Agricultural Development Foundation (MADF). I now tend to look at farming in a holistic sense, and I know that it can work. I am also studying the philosophical basis of the system. After 10 years of implementing the cropping pattern, I am still learning about MFS.

Letla Mosenene is currently a Technical Advisor for the Namibian Finland Forestry Programme for Participatory Integrated Forestry Management. She works mainly in the fields of community-based natural resource management and capacity building (training), with a mandate to help refine approaches in these areas. At the time of the interview she was working for Helvetas, Lesotho, an NGO involved in various community-based development activities.

She was interviewed by Gudrun Schwilch, WOCAT assistant for database development, publications, and coordination at the Centre for Development and Environment (CDE), in May 2001. Helvetas Lesotho (helvetas@lesoff.co.za) and MADF (machobane@leo.co.ls) can be contacted for further information. Helvetas Lesotho promotes MFS as an innovative form of sustainable management of natural resources, allowing farmers to achieve food security and poverty alleviation with very little resources. *Ed.*