

# Women documenting their innovations: outcomes of a farmer-led documentation process

compiled by Fetien Abay and Gebrecherkos Gebregiorgis on the basis of texts and photos selected by Medhin GebreEgziabher, Mawcha Gebremedhin and Hawaria Berhe, women innovators in Central Tigray



# Introduction by the Farmer-Led Documentation facilitation team<sup>1</sup>

The pilot Farmer-Led Documentation (FLD) process in Tigray Region was done in three communities, focusing on three women. Two of them are in a Participatory Innovation Development (PID) group supported by the Tigray sub-platform of PROLINNOVA—Ethiopia, whereas the third woman is a locally well-known innovator who is not part of this group. The first two women were selected by the PID group during the course of discussion about FLD. The third woman was selected by the FLD facilitation team The innovations and experiences of the three women were documented — partly by local people, partly by the FLD facilitation team — in the way the women wanted them to be documented, to be shared with other members of their community and beyond. The documentation was guided by the women themselves. This booklet presents the outcomes of this FLD process, which took place in late 2008 and early 2009.

# W/ro Medhin's innovations and experiences

W/ro (Mrs) Medhin GebreEgziabher lives in Maysie village in Tahtay Maychew District. She is a widow and head of the family. Most of her landholding (1 ha) is around her home, where she plants fruits and vegetables primarily for sale. When the FLD facilitation team asked W/ro Medhin to share her experiences and innovations, she started with her horticultural crops.

"I started planting the small vegetables like onions and tomatoes and others with a man from my village. And then I, only by my own effort, expanded it. I planted the trees of fruits like orange, lemon and others that are demanded by the community."

"It is long since my husband died. He died in 1991 and left us with very little and fragmented land. It was a big challenge for me to lead the family, but I am now in a good condition. By working hard with my children, our way of life has been changing. Because the family income increased from the sale of the fruits, vegetables and also honey, my children are now attending school. Most of the farming activities are now done by daily wage labourers, since my children are in school."

Near her place is a small water dam That she and over 30 other households use for irrigating their gardens. It was constructed by local people mobilised by the Village Administration. In

**Figure 1:** Medhin managing her fruit trees and grass species — showing her efforts to gain multiple benefits from various trees and grasses (photos by Mulugeta Kiros)

addition, Medhin has her own shallow hand-dug well, which she uses as a reserve in case the communal one has less water and when it is not her turn to use the dam. She also has a motor that she uses to pump water from the well. "Whether there is water in the dam or not, that's not my bother, because I use my hand-dug well using the water-pumping motor."

<sup>&</sup>lt;sup>1</sup> Fetien Abay, Gebrecherkos Gebregiorgis and Lemlem Hailemichael, assisted by Mulugeta Kiros

"We, the local people here and I, were in a resettlement area [locally called Sefera] and developed new ways of rehabilitating eroded gullies. This eroded gully has been rehabilitated by me, and I am proud of this work because the gully was expanding and destroying the cultivable land."

"My recognised efforts have given me the chance for other environmental rehabilitating activities in my village and Tahtay Maychew District. The District Bureau of Agriculture is a constant customer of my elephant grass [locally called Saeri Harmaz] from my backyard plantation. It is for distribution and planting to protect the gullies. However, when I and my son worked hard to address our poverty, my son had an accident. It was in October 2004, while my son was cutting a tree, his hand was broken. As a consequence, I faced problems in speeding up my developmental activities. I was depressed by my son's accident, and it was a big problem for the household. But, later on, I and he accepted to continue working, though his right hand been paralysed."

### W/ro Mawcha's innovations and experiences

W/ro Mawcha Gebremedhin lives in Bethans village in Adwa District. She is head of her household, and is a well-known hard-working woman recognised by the community and the Village Administration as a local innovator.

"My progress started because of the support provided by the local administrators. It was me who first started to plough and I was benefiting at least my village. The farmers then organised themselves and became members of the extension group. Most of the beneficiaries are females and that is also important to empower themselves at least economically. Now, their livelihood is improving and their rights are also respected."

"In 1984, my husband was taken to a resettlement area in the south-western part of Ethiopia – Wellega. I had no guarantee that the previous regime – the Derg [the government at that time] – would not take me, too. Hence, I left the place, fearing the Derg soldiers and migrated to a nearby place, taking my livestock with me. However, I returned back to my place when the [liberation] fighters took power, but my husband did not do so. However, after my return, it was a hard time for me and my family, because it was a time of famine in Tigray."

It was during this time that she tried to break the established value of the society related to gender roles. In a patriarchal society, women are engaged only in domestic and reproductive activities. But Mawcha defied this and engaged in productive activities. She ploughed her land by herself, using a pair of oxen. This was a radical change in the society.

"I was head of the household. There was no-one in the house who could do the farming activities. I begged many male relatives to till my farm. But no-one volunteered to help me. Hence, the problem forced me to plough my farmland by myself. It was an odd practice for this society. The people came to me and tried to stop me. They considered it a taboo for women to do this kind of work. But I told them that I had no choice. According to our values, also sowing should be done by males; after ploughing, I requested some male relatives to sow the crops. Most of them were not willing; a few of them were ready to do it when the time for sowing was already over. It is at this time that I did it by myself, and things started to move in the way I wanted them to be. Then, I got a very good yield from the crop I planted, which changed my

position and status. People came to me and asked me to lend them some seed. I generously extended my hand. They did not repay me in crops. But instead, they requested me to farm their plots of land on a share-cropping basis. I worked on three household farms of both male and female farmers for share-cropping. However, many people were jealous. They felt it would have a damaging effect on their morale and warned me not to tell others about such an arrangement."

"Although I started it, nowadays many women are following me. They are doing their farming activities by themselves. During the war with the Eritrean government, men went for national military service and women started tilling their farmland by themselves. The women also become beneficiaries of the different extension packages introduced by the [Ethiopian] government."

"My agricultural activities have been expanding. I was able to save money. I used to put the money in my home. But the money (3000 Birr) was stolen from my home. I did not put it in the bank because I was not aware about the importance of banks and had doubts as to whether it is possible to withdraw the money again from the bank. However, later I came to realise that putting money in the bank is better. Now, I started to save my money in the bank."

"Other problems I faced were destruction of my assets by evil-wishers and the problem of health. I was invited to Axum for a farmers' festival, where I was recognised as an outstanding innovator woman and got rewards. But, when I came back home, things were changed and my 38 sheep died. I was sick and bedridden for about five years. But later, because of the help from Mekelle University, particularly Dr Fetien, my health came to a good condition. Then, I re-started my farming activities and regained my previous status."

The first thing she wanted documented was the current challenge she is facing, especially in preserving the many tall indigenous trees she had planted around her home to protect the land from erosion.

"I planted trees in my surroundings and made the trees grow well. However, the trees are now too many and started to compete for water and other resources. The incapable ones are getting dry. To make a balance with the resources, I have cut some of the trees and sold them."

"Despite the supportive government policy, there is a local problem about my rights to use the land. During land distribution, the land I am now using, after having regenerated it, had not been regarded as arable and therefore had not been registered as land for the household. The government declared that: 'If individuals reclaimed land and make it green, they can own it'. I kept the land for planting trees."

In Ethiopia, there is a traditional outdoors maize store called





**Figure 2:** Mawcha with her new indoor storage of maize (a) working and (b) praising God and her efforts in keeping safe (photos by her son Tesfay)

'gotera', which is a closed structure covered by a thatch-grass cone. Similarly W/ro Mawcha used to store her maize outside her house in a tree, as many other people do in her community.

But, one time, the maize was stolen. She then developed a new way of storing maize inside her house. It is an open maize store indoors, on wood laid on top of a wooden stand, in order to prevent dampness. She spread ashes underneath to protect the maize from termites.

She was proud of her innovation, and took the FLD facilitation team inside her home to show how she was storing her maize cobs.

## W/ro Hawaria's innovations and experiences

W/ro Hawaria Berhe is a woman innovator living in Maybrazio village in Tahtay Maychew District. She is married to Ato Weldu, who – like her – is an innovator farmer member of the PID group near Axum in Central Tigray. In most cases, in male-headed households, the wife is dominated and not known in the public sphere. But this is not the case with Hawaria. When the FLD facilitation team reached their home, she came out with her husband to welcome us. She explained their work: "Eight or nine years ago, this was a deep gully, and it was difficult to do farm here. At that time, we had no cultivable land; our land was the gully. As we had no chance to grow crops, it triggered us to rehabilitate the gully."

"I have an innovation of which I am proud, and I planned to show it to you and to get it documented. This [rodent control] was invented jointly with my husband to protect my fruits." It is a mixture of chopped materials from a plant locally called Botiom-Botiom and animal urine.

The second innovation she wanted us to document was a method to reduce the incidence of stem/leaf rust disease locally known as 'humedia'. When she observed her crops had been affected by humedia, she started to think about it and developed protective measures by soaking faba bean (Vica



**Figure 3:** Hawaria showing her anti-rodent medicine and local medicines kept in a traditional cupboard (latter photo by Hawaria)

*faba*) and got more yield as compared to the non-soaked variety. She trained over 50 farmers. One women trainee experimented with soaked and non-soaked bean in two adjacent fields with the same variety of faba bean. In one case, she soaked the seeds in warm water; in the other case, she did not soak the seeds. The former gave higher yield than the latter.

Then, Hawaria took the FLD facilitation team inside her house, saying:

"I have a good innovation there that needs to be photographed. You know, inside the bottles there is a veterinary medicine prepared from plants, mainly agave. I invented it. The farmers have accepted this insecticide rapidly and use it for their animals. My innovation is not worthless; it has a big impact on the local people. Today, if an ox dies, the farmer is losing 2000–3000 Birr<sup>2</sup>. So, by using my medicine, farmers can save such money. That's why they have accepted it

<sup>&</sup>lt;sup>2</sup> 140–210 Euros

quickly, more than any of other medicines introduced by the agricultural experts. The price is also affordable by the local people."

She was also keen to show something else inside her house. It is like a big box made of mud with many partitions. She explained that the partitions are for keeping silkworms in order to produce silk threads. Part of the box was made by her husband and the largest part by her.

"In the town, you can spend a lot of money for such a box. But here, it can be made easily using locally available materials and is also not costly."

Hawaria has been very popular in her village and, through the PROLINNOVA—Ethiopia platform, she had the chance to train over 50



**Figure 4:** Hawaria showing her silkworm box (photo by Mulugeta Kiros)

farmers in her village and 13 farmers outside her village. One of her trainees in a neighbouring village became known as an innovator who makes other local pesticides.

"He is now more popular than me as he has more linkage with regional local practitioners and regional animal health experts."

In addition to the social factor that less recognition is given to women's innovations, this indicates that women have less time to communicate and share their knowledge outside their villages.

### Conclusion

The women selected these photos and agreed that they be compiled in a booklet and shared with others in the community and in schools and be put to wider use. They also want to use the booklet to teach their children and to trace their history of innovation in the future. The farmers were keen to hear the radio broadcast made on the basis of the women's stories, and a couple of the men gave their mobile phone numbers to the radio journalist so that she could inform the community about the time of broadcasting. Links have been made with the Tigray regional radio to arrange broadcasting of the women's stories during the regular rural development radio broadcasts. Women feel their innovations have been taken up slowly as compared to those developed by local men. They believe that dissemination of their innovations and getting the women's achievements more widely known will help to address the issue. The FLD facilitation team recommends that further exchange of experiences should follow in order to increase the recognition given to women innovators.