

Eritrea: Date Palm Plantations

Progressing to Semi-Commercial Stage



The Ministry of Agriculture (MoA) is promoting date palm plantations in different parts of the country since 2003. To date, it has distributed more than 20,000 seedlings.

Began in 2016, the date palm production project has involved the production of seedlings through tissue culture and suckers. It has also included different training programs and workshops, along with awareness raising campaigns for farmers and other institutions throughout the country. Invariably, it has been received with great enthusiasm and encouraged more farmers to take up date palm farming.

According to Mr. Mussie Fekadu, Head of the Biotechnology Unit at the National Agricultural Research Institute (NARI) and the National project coordinator of date palm production, the project hopes to reach a satisfactory level of production within five years. In order to achieve this goal, the MoA, in cooperation with various development partners, has organized regular theoretical and practical capacity-building programs. As a result, researchers at NARI have been able to multiply the date palm through embryogenesis.

Mr. Mussie added that the capacity-building programs were pioneered by Dr. Abdallah Ben Abdallah, who serves as a consultant with the FAO and is a highly-regarded date palm expert.

The main sites of the project are the Northern and Southern Red Sea regions (NRS and SRS). Plantation of date palms began in 2017 with 2000 quality seedlings imported through the assistance of the FAO. The seedlings planted in Foro, Afabet, Shieb, Massawa, Gahtelay (all located in the NRS region) are progressing well. Besides, seedlings were distributed to farmers in the SRS region, with the beneficiaries similarly making the project a success in their areas. So far, Arata, Assab, Southern, and Northern Danakalia areas are involved in the project.



Mr. Mussie Fekadu

Mr. Mussie noted that since the project was launched, more than 600 farmers and extension workers have benefited from theoretical and practical training programs. In addition to households, the project has secured the participation of institutional and semi-commercial enterprises. Overall, a total of 20,575 date palms were cultivated in the NRS and SRS regions.

According to Mr. Mussie, date palm cultivation offers many potential benefits. The propagation of date palm using tissue culture techniques can help increase production of high quality and healthy plants across large parts of the country in a shorter period of time.

He added that micro-propagation of date palms has been carried out at NARI's tissue culture laboratory through somatic embryogenesis. The explants have

been propagated through callus, embryo multiplication, shooting, and rooting stages. This technique usually takes 27 to 29 months to complete the process from shoot tip to plantlets of date palm. Parallel to this, in the last four years more than 5,700 vitro-plants of date palm, from nine international varieties, were introduced, hardened, and distributed to local farmers.

The MoA, with the support of the FAO and IFAD, acquired the vitro-plants from a leading tissue culture laboratory in Dubai. To ensure hardening, they were kept in a nursery in Massawa for at least six months before transplanting.

Members of the public relations team of the MoA recently visited different project sites and conducted interviews with beneficiaries and experts in the NRS and SRS regions.

Date Palm Production in the Northern Red Sea Region



Mr. Daniel Kesete

According to Mr. Daniel Kesete, Head of the Horticulture Unit in the NRS region, the cultivation of date palm in the region began in 1996, led by two exemplary farmers: Mr. Abdallah Swalah from Sheeb and Mr. Melake Gebrekrstos from Dogoli.

Mr. Daniel gave some background, explaining, “Initially, production started with seedlings prepared from date palm seeds. Subsequently, the Ministry of Agriculture brought seedlings from abroad in 1999. Not long after, the newly-introduced varieties were distributed to beneficiaries. Unfortunately, due to different challenges, the initiative didn’t find great success until 2017.”

He noted that in 2017, the MoA revitalized date palm cultivation by carrying out successful capacity-building programs, importing high quality seedlings, and promoting production through tissue culture and offshoots.

According to Mr. Daniel, 11,745 date palms are planted in the region, spread across five sub-zones: about 1059 trees in Gindae; more than 704 trees in Shieb; 511 in Afabet; 285 in Foro; and 9186 in Massawa.

Thanks to the regular training programs, local farmers have been able to better understand cultivation, propagation and pollination systems, and benefit from higher levels of production.

Adding a further point of encouragement, Mr. Daniel explained that there are plans to expand date palm production to more areas in the region, including both coastal and inland areas.



Date Palm Cultivation at Household Level

Mr. Abraham Tesfamariam, an urban gardener, lives in Massawa. He has two date palm trees on his land, with the seedlings being provided by the MoA in January 2021. Importantly, he has benefited from technical guidance offered by experts in the region and, although still early, his plants are in good condition.

Mr. Abraham believes that date palms offer a range of economic, environmental, and aesthetic benefits, and he looks forward to more training from the MoA so that he can better manage his date palm trees.

Ms. Brhana Okube, who resides in Massawa, also received two date palm seedlings from the MoA in January 2021.



Ms. Brhana Okube

Her plants, like Mr. Abraham's, are in satisfactory condition, and she has made regular use of follow-ups and valuable information from the experts of the region. According to her, the MoA's support has been extremely useful and helped her to acquire greater understanding of cultivation, propagation and pollination.

Notably, a group of 10 veteran fighters, all of whom are employed in a bakery in Massawa, came together to plant seven date palm trees in January 2021.



Ms. Tsigereda Gaim

According to Ms. Tsigereda Gaim, one of the group's members, the group had already been involved in planting trees around their homes, mainly for shade.

After hearing about the importance and many benefits of date palms, the group wanted to try them out.

“We received seedlings from the MoA nursery and replaced all of the trees planted earlier,” Ms. Tsigereda explained, before adding, “Currently, the growth of the date palm trees is promising.”

Other members of the group expressed their appreciation for the extensive support provided by the MoA and noted their desire for more training or learning opportunities.

Institutional Initiatives Massawa Airport

The Massawa Airport began planting date palms in 2003, both for wind break and aesthetic purposes. In 2017, with the help of the MoA, it began to focus on mass cultivation.



Mr. Salah Ahmed

Mr. Salah Ahmed, who manages the airport’s farm, described how date palms have become more significant. “Prior to 2017, we did not have enough knowledge about production and the trees bore no fruit.

However, since 2017, when we began to get guidance and support from the MoA, things have been much better. We have been able to pollinate all the trees and started harvesting around four years ago. In 2020, 260 trees began to bear fruits, while in 2021 that increased to 371 trees. Generally, we receive anywhere between 80 to 300 kilograms of fruits from each tree.”

In total, the airport has about 1300 date palm trees, while 31 staff members have participated in various training programs.

Semi-Commercial Date Palm Production



Mr. Abdallah Swalah

Mr. Abdallah Swalah is a semi-commercial farmer based in Sheeb (NRS region). He is well-known in the region for his long history of date palm farming, which dates back to 1994.

At present, he has 520 date palm trees, with 270 date palm trees being propagated through tissue culture. On average, he harvests about 150 kilograms of fruit per tree.

For Mr. Abdallah, backing from the government and MoA has been important. Over the years he participated in many training workshops and also received economic and material support. Part of what makes Mr. Abdallah's story so positive is that date palm farming has provided him a sustainable means of income and allowed him to settle down (previously he was part of the nomadic community).

Eritrean Crop and Livestock Corporation (ECLC)

Mr. Adem Osman, an agricultural expert from the ECLC's NRS region Gahtelay branch, explained that they started planting date palm trees in 2017 with 345 trees of 9 varieties provided by the MoA.

He said that the trees are in good condition and that the ECLC has also started to propagate through offshoots on its own. As a result, the ECLC branch is now producing around 300 seedlings using offshoots.



Mr. Adem Osman

Mr. Adem expressed his appreciation for support of the MoA, explaining, “The role of the MoA has been very positive. Everything we have achieved so far is because of their guidance, support, and technical advice.

The skills we have developed, especially in relation to date palm management, have helped us ensure the plants reach the harvesting stage.”He also pointed out that since Gahtelay is a very favourable area for date palms, the government should aim to increase farming and production throughout the region.



Mr. Abdu Hamid Gebir Idris

The Public Relations staff of the MoA also visited Mr. Abdu Hamid Gebir Idris, a date palm farmer in Hitmlo (a sub-region of Massawa), who received around 400 date palm seedlings from the MoA in 2017.

Although his experience was mainly with farming vegetables, he enthusiastically took up date palm farming. With 1700 date palm trees spread across

16 hectares of land, he looks forward to a positive future. “My trees have started bearing fruits. However, since it is still the first year of production, I expect more in the years to come,” Mr. Abdu stated.



Mr. Tesfamichael Teklemichael

Mr. Tesfamichael Teklemichael is another farmer, hailing from Demas (sub-region of Ghindae). Before getting involved in the date palm project, he was producing vegetables, such as tomatoes and red peppers.

However, because many others farmers were producing the same things as he was, the prices went down. He went to the MoA for guidance and in response experts recommended that investing in date palm trees could provide him benefits. After successfully applying for investment support from the MoA headquarters, he received 550 tree seedlings, along with theoretical and practical training for both farming and marketing.

Mr. Tesfamichael has been quite successful thus far and is appreciative of the backing provided by the MoA. “The plants are still young and I am following proper management practices with the help of experts. I want to be an example to others in my region and satisfy the demand of the surrounding areas or even beyond. Lastly, I would like to thank the MoA, particularly for its active role in supporting farmers like me,” he said.

Southern Red Sea

Since the SRS region is conducive for date palm trees, the government has made many efforts to introduce date palms in the area.



Mr. Mohammed Abdurrahman

Mr. Mohammed Abdurrahman, Head of the Crop Development Division in the region, explained that date palm plantation started in the region in 2006.

But it was only after 2014 when the number of cultivated date palms really began to climb. At present, there are around 200 date palm farmers across the region, with a total of 8,830 date palm trees at various stages of growth. (Farmers in the region possess between 20 to 700 date palm trees depending on their production capacity and area.)

According to Mr. Mohammed

A total of 8830 date palms are planted in the region, spreading across four Sub regions; mainly sub regions Araeta 200 date palms; Assab 1500 date palms, southern Denkalia 1500 date palms; Central Denkalia 630 date palms & Government institutions 5000 date palms.

Notably, in Assab, many households have begun to plant date palm, lemon, and guava trees. According to Mr. Mohammad, with date palm produce fetching great prices in local markets, there has been an increase in demand for date palm seedlings among local farmers.

Mr. Ahmed Kasim, from Mankaekae (sub-region of Assab), was a fisherman before joining the date palm project in 2000. He now has 400 trees – a huge



Mr. Ahmed Kasim

increase from the 12 that he began with. Some of the trees he first planted have begun bearing fruit and provide between 50 to 150 kilograms each. Underneath his date palm trees, he plants seasonal crops, like watermelons, tomatoes, potatoes, and okra.



Like other farmers, Mr. Ahmed has benefited from MoA workshops and training programs. Beyond mastering general management practices, he is able to carry out pollination and also identify differences between male and female trees. Based on the successes that he has achieved so far, he plans to expand his farm to around 1000 trees.

“I love date palm trees because they have helped transform my life. I went from an ordinary fisherman to a semi-commercial farmer,” Mr. Ahmed shared, before

adding, “I encourage all farmers in the region to consider planting date palms because our area is particularly suitable.”



Another former fisherman who made a positive transition to date palm farming is Mr. Yosuf Ahmed. Residing in Abo village (sub-region of Southern Dankalia), he began date palm production in 2002 and went from 15 trees to around 250 now. He also farms other items, such as peppers, potatoes, tomatoes, cotton, sorghum, and grass, and even distributes seedlings to other farmers.



Mr. Yosuf Ahmed

Mr. Yosuf has benefited greatly from MoA support, increasing his understanding of date palm management. He now implements a range of date palm agronomic practices, including pollination, propagation, and preparation of seedlings from offshoots.

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