



Eritrea's Agricultural Sector Major Achievements of 34 Years

Since Eritrea's independence in 1991, the agricultural sector of Eritrea has steadily improved despite challenges at both national and international levels. This document highlights the developments and current status of the agricultural sector over the past 34 years.

Agricultural Research

Over the past 34 years, the Ministry of Agriculture (MoA), through its National Agricultural Research Institute (NARI) has played a significant role in enhancing crop productivity. According to MoA reports, NARI has made major investments in conserving genetic resources, collecting and storing over 6,000 accessions from 160 seed varieties.

In the field of seed improvement, NARI has been operating from seven research sites—Halhale, Gahtelay, Shieb, Akurdet, Shambuko, Hagaz, and Golij—since 1997. These efforts have resulted in the development of 45 improved crop varieties of wheat, barley, sorghum, millet, maize, sunflower, and pulses. These high-yielding seeds—capable of doubling production—were distributed to farmers. In addition, 34 vegetable varieties and 36 fruit varieties have been developed and distributed to farmers. Moreover, to provide farmers with improved quality seed and



disease-resistant varieties, research is ongoing to strengthen tissue culture methods.

In natural resources research, over 15,000 soil samples, 480 water tests, 1,700 crop-related tests, and 160 fertilizer tests were conducted at the institute's laboratory.

In livestock research, over 260 green fodder types have been studied, and high-performing varieties were multiplied and distributed to farmers. Several studies on improving animal breeds have also been conducted.

Soil and Water Conservation and Dam Construction

Soil and water conservation remains top priority in Eritrea. Since independence, the Eritrean government has constructed numerous water reservoirs. In 1991, Eritrea had around 130 dams. Today, that number has increased by six-fold to approximately 840 dams through the government's efforts and stakeholder collaboration.

These dams not only provide drinking water for people and livestock but have also boosted vegetable production by six-fold and fruit production by 71 times. Furthermore, over 276,000 hectares of on-farm and 129,000 hectares of off-farm land have been improved through soil and water conservation activities.





Crop Development

In 1992, about 327,000 hectares of land were cultivated for agriculture. Today, that figure has increased to 512,000 hectares. 14 improved seed varieties - namely 6 of wheat, 3 of barley, 1 of maize, 1 of sorghum, and 3 of millet which were developed by NARI were distributed to farmers. These varieties have doubled production levels compared to the early post-independence period.



Date Cultivation

Date cultivation began in 1996 with interested farmers and expanded significantly through tissue culture between 1998 and 2017, resulting in about 3,000 plantations. Dates are primarily grown in the Northern Red Sea region, with smaller numbers in the Southern Red Sea and Gash-Barka regions. Since 2023, under national projects supported jointly by IFAD, UNDP and FAO, the number has reached more than 55,000 date palms planted in the Northern and Southern Red Sea regions. The date varieties include the Medjool, Barhi,



Khalas etc., which currently yields 50–60 kg per tree, with a goal of an average 90 kgs per tree. The national project aims to cultivate 1 million date trees by 2030.

Migratory Pest Control

Eritrea is globally recognized for its effective migratory pest control. In the past 34 years, over 600,000 hectares of land were infested by desert locusts. However, effective responses and control measures from the Ministry of Agriculture, the public, defense forces, regional administration offices and other institutions have mitigated the impact without significant disaster.

With 7 million hectares of land suitable for breeding locusts—4.7 million hectares in the Red Sea coastal areas during winter and 2.3 million hectares in summer—Eritrea is a key front-line for locust control.



Similarly, tree locust infestations, which began in 2019, became more severe by 2023. Starting from 2023 till first quarter of 2025, 45,000 hectares in the Gash- Barka region and some parts of the Anseba and Southern regions were infested. These infestations were successfully controlled through coordinated efforts of the government and the public.

Additionally, African migratory locust infestations affected around 30,000 hectares of land during summer seasons over the years; and were successfully brought under control.

The Quelea-quelea bird infestation mainly affects the western regions and Gash-Barka, with over 5,000 hectares managed effectively in the past independence years.

In 2018, fall armyworm outbreak occurred; and an emergency control measure was taken, and thanks to the government's decisive measure, the pest caused no significant damage to crop and range lands.

Livestock Development

Before Eritrea's independence, poultry farming, as an agribusiness, was not widespread. To improve this, the Ministry of Agriculture began importing parent stock chicks. So far, 113,000 parent stock chicks have been imported, and 7.5-million one-month-old chicks have been distributed. This number is increasing yearly reaching all regions of the country.

In 1991, there were 19,000 bee colonies. By 2025, this number increased to around 45,000, with a shift from traditional hives to modern and top-bar hives. Currently, 51% of hives are modern, 41% are traditional, and 8% are top-bar hives. Today, honey is produced almost all over the country. In the 1990s, the price of honey was over 400 Nakfa, whereas today it has decreased to around 200 Nakfa.

Animal Health

Significant improvements have been made in animal health. To combat livestock diseases, the government improved vaccination and treatment services, and significantly reduced the number of contagious diseases. Since 2013, after the launching of free and compulsory



vaccination program, around 2.5 million livestock have been vaccinated annually, significantly lowering mortality rates. Diseases addressed include Peste des Petites Ruminants (PPR), Lumpy Skin Disease (LSD), Sheep pox, and Foot and Mouth Disease (FMD).

Eritrea successfully eradicated Rinderpest, a disease fought since the armed struggle. The country achieved complete eradication and became one of the countries who completely eradicated the disease by 2005 earning a medal and certificate from the World Organization for Animal Health (WOAH).

Organic Agriculture

Since 2021, a joint committee was established by the Ministries of Agriculture and Marine Resources, to boost organic farming by producing solid and liquid organic fertilizers, fish amino acid and seaweed liquid fertilizers as well as bio-pesticides. Moreover, research and training of farmers on best organic farming practices are continuously conducted all over the country.





For example, bio-pesticides made from garlic, pepper, and the prosopis tree “temri musa” are now being used. To date, 260,000 liters of fish amino acid and seaweed extract, along with 2,000 cubic meters of compost, have been produced and distributed across five regions. Moreover, to promote organic farming, a demonstration site is being established in Akria sub-zone of the Central region.

Regulatory Services

To ensure citizens receive safe and nutritious agricultural products, regulations of quality and safety of agricultural goods, animals, plants, and animal drugs and pesticides have shown a great improvement over the past 34 years of independence. According to reports of the Regulatory Services Department (RSD), the number of certified

small and medium agricultural food processors has increased from 8 to 30. For instance, imported yogurt has been replaced with domestic production. Additional efforts are underway to improve meat inspection, slaughterhouse facilities, and their equipment.

To control imports and exports, quarantine stations are established at the international Asmara airport, at the Massawa and Assab ports, and Teseney, to ensure immediate inspections. Exported products are also provided health certification. Moreover, the RSD chairs the national quality-seed release committee starting from multiplication up to distribution processes.

From the year 2007 to 2017, the RSD made considerable efforts to safely dispose and safeguard obsolete pesticides that are harmful to human and animal health and dangerous to the environment. Subsequently, more than 360 tons of obsolete pesticides, accumulated since colonial times, were safely safeguarded abroad.

Furthermore, efforts have been made to introduce safer systems for handling empty pesticide containers, including technology-driven drum-crushing services. In addition, over 46 tons of expired animal drugs were identified and, through collaboration with relevant partners, safely and environmentally responsibly disposed of.





grown in capacity and is staffed with 181 employees out of which 62 percent are females.

The laboratory's expertise spans over 30 key professional units. It supports animal diseases diagnosis, plant pests and diseases diagnosis, food and feed safety and quality test, animal vaccine production, testing the safety and quality of livestock products, establishment and strengthening of regional animal and plant health laboratories.

Finally, it is worth mentioning that the RSD, in collaboration with relevant government bodies and academic institutions, has successfully established a national database of fauna and flora, which currently includes entries for over 4,500 species.

National Animal and Plant Health Laboratory (NAPHL)

The National Animal and Plant Health Laboratory (NAPHL), under the Ministry of Agriculture, has been playing a crucial role in diagnosing diseases affecting livestock and plants.

Originally established by the Italians in 1903, this laboratory is one of the oldest in Africa. During the first independence years, it was providing limited functions with just 18 staff members. Now, however, the lab has

Over the past 34 years, the laboratory has tested a wide range of samples for various animal diseases and pests. Previously, it used to analyze about 600 samples per year, but now it processes around 14,000 samples annually—a significant increase. In times of emergency, the lab can test up to 12,000 samples per month, indicating its advanced diagnostic capacity.

In recent years, at the request of the Ministry of Agriculture, the laboratory has produced 300,000 doses of vaccine against Newcastle disease and 70,000 doses against PPR (Peste des Petits Ruminants), totaling 370,000 vaccine doses. Looking ahead, the lab plans to locally produce 1 million doses of the Newcastle disease vaccine and initiate new production trials for the Infectious Bursal Disease (IBD) vaccine, thereby expanding its local vaccine manufacturing capacity.



May 12: International Day of Plant Health Observed



Mr. Tekleab Mesghena

International Day of Plant Health was commemorated for the fourth time in Asmara at the Emba Soira Hotel on May 13, under the theme “The Importance of Plant Health in One Health.” The event was attended by senior officials from the Ministry of Agriculture, representatives of the Food and Agriculture Organization (FAO), experts from relevant ministries and associations, as well as invited guests.

In his keynote speech, Mr. Tekleab Mesghena, Director General of the Regulatory Services Department (RSD) at the MoA, noted that Eritrea’s topography and diverse climatic conditions present challenges to plant

health and agricultural activities. He emphasized that over the past 34 years of independence, the Ministry has worked tirelessly to enhance the prevention and control of plant pests and diseases including desert locusts, tree locusts, and armyworms. Efforts have also included strengthening plant quarantine systems, developing integrated pest management strategies, and improving drought- and disease-resistant crop varieties.

Representing the Food and Agriculture Organization office in Eritrea, Mr. Sium Teame remarked that securing and sustaining plant health in agriculture is one of the FAO’s top priorities. He added that eradicating poverty and improving nutrition—through the integration of community health and agriculture—are central to building a sustainable agricultural sector.

During the event, presentations were delivered by representatives of the Ministry of Agriculture and the Ministry of Health (MoH), including:

- “Plant Health: Why is it Crucial for the Success of One Health” by Mr. Tekleab Mesghna (MoA)

- “Climate Change and Its Impacts on Plant Health” presented by Ms. Saron Berhane (MoA)
- “Early Warning for Emerging Pests” by Mr. Said Nuredin (MoA)
- “Documenting the Vital Link: Strengthening One Health Through Plant Health Research” by Mr. Michael Yacob (MoA)
- “One Health: Historical Perspectives and Current Situation” by Mr. Mulugeta Russom (MoH)

Following the presentations and panel discussion, participants raised several key concerns and recommendations which include:

- Strengthening measures to prevent and control the entry of new pests through cross-border movement
- Taking action against the spread of Striga weed, which is becoming increasingly prevalent
- Conducting effective surveillance of banana, mango, and date pests
- Strengthening regional and international platforms for real-time information exchange, and promoting organic pesticides supported by research and verified results.



Editor-in-Chief: Ermias Solomon, Director of Public Relations Division

Email:- ersohab@gmail.com, Tel: 292-1- 182225/ +291-7143877

Assistant Editor-in-Chief: Filmawit Measho; Information and Media Relations Unit Head

Translation: Amanuel Gebrehiwet

Photo Credit: Abraham Berhane, Tomas Mehari, Habteab Andemariam, Azieb Kibrom