

Eritrea's Agricultural Development Over the Past 35 Years



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Advancements in Water Reservoir Construction and Livestock Development

Over the past 35 years of independence, Eritrea has made remarkable progress in transforming its agricultural sector through sustained investment in water resource development; soil and water conservation, and livestock production. These achievements, realized through the Government's own efforts and in collaboration with development partners, have played a decisive role in improving food security, strengthening rural livelihoods, and enhancing the resilience of farming communities across the country.

One of the most significant accomplishments has been the extensive construction of water reservoirs throughout Eritrea. At the time of independence in 1991, the country had only about 130 dams. Today, that number has increased more than sixfold to approximately 850 water reservoirs. These include large strategic dams, medium-sized reservoirs and micro-dams.

The expansion of water infrastructure has had far-reaching benefits. In a country characterized by arid and semi-arid conditions and highly vulnerable to recurrent drought and desertification, water harvesting has become a cornerstone of national development policy. The reservoirs have ensured reliable water supplies for domestic public use, livestock, and also for irrigation contributing significantly to agricultural production.

These reservoirs have helped increase vegetable production by more than six times and fruit production by over 71 times compared to the early years of independence. Farmers in all regions of the country attest to the transformative impact of the dams, noting that they have enabled the establishment of new farms, expanded irrigated agriculture, and substantially improved household incomes and living standards.



The success in water resource development is closely linked to Eritrea's comprehensive soil and water conservation programs. Recognizing that land degradation and water scarcity posed major threats to agricultural productivity, the Government and people of Eritrea made conservation work a national priority. Over the past 35 years, more than 293,000 hectares of agricultural land and over 135,000 hectares of catchment areas have been rehabilitated through terracing, and other conservation measures. In addition, check dams with a total volume exceeding 6.2 million cubic meters have been constructed to control erosion, enhance groundwater recharge, and reduce sedimentation in reservoirs.

Parallel to these achievements in water development, Eritrea has also registered substantial progress in livestock production and animal health. Livestock is an essential component of the agricultural sector, providing meat, milk, eggs, honey, draft power, and income for rural households. Since independence, the Government has undertaken comprehensive programs to improve animal health, increase productivity, and expand access to modern livestock technologies.

A major breakthrough has been the establishment of compulsory vaccination programs to control endemic livestock diseases. Since 2013, around 2.5 million animals have been vaccinated annually against diseases such as Lumpy Skin Disease, Sheep and Goat Pox, Peste des Petits Ruminants (PPR), and Foot and

Mouth Disease. Beginning in 2025, the vaccination campaign was significantly expanded, covering more than 6 million livestock and poultry. As a result, disease outbreaks and animal mortality have been reduced to minimal levels, greatly improving herd health and productivity.

The poultry sector has also experienced extraordinary growth. At independence, poultry production was largely limited to traditional village-based poultry keeping systems; and was practiced by relatively few households. To promote modern poultry systems, the Government began importing improved parent-stock breeds, multiplying them locally, and distributing day-old chicks to farmers and households. During the past 35 years, approximately 113,000 parent-stock chickens have been imported, and more than 8 million day-old chicks have been distributed to beneficiaries across the country.

This intervention has enabled thousands of families—particularly women and youth—to engage in poultry production as a source of income and nutrition. The increased availability of eggs and poultry meat has made an important contribution to improving household food security and dietary diversity.

Beekeeping is another area where notable progress has been achieved. In 1991, Eritrea had an estimated 19,000 bee colonies. Through targeted extension services and the introduction of improved hive technologies, this number has grown to more than 46,000 colonies. Traditional hives are gradually being replaced by more efficient modern frame hives and top-bar hives. Currently, 51 percent of colonies are managed using modern frame hives, 41 percent remain in traditional hives, and 8 percent use top-bar hives.

As a result of these improvements, honey production has expanded to all regions of the country. Increased supply has made honey more accessible to consumers, with prices declining by more than half compared to the early 1990s. At the same time, beekeeping has become an increasingly important source of supplementary income for rural households and an environmentally sustainable agricultural enterprise.

Taken together, the achievements in water reservoir construction and livestock development illustrate Eritrea's long-term commitment to building a resilient and

self-reliant agricultural sector. By investing in critical infrastructure, conserving natural resources, and strengthening animal production systems, the country has laid a strong foundation for sustainable agricultural growth.

These accomplishments have not only boosted production but have also improved the livelihoods of farmers and pastoralists throughout the nation. Reliable water supplies, healthier livestock, and expanded opportunities in poultry and beekeeping have increased incomes, enhanced nutrition, and strengthened food security.

As Eritrea celebrates 35 years of independence, these milestones stand as clear evidence of what can be achieved through visionary leadership, community participation, and unwavering national determination. The progress registered over the past three and a half decades provides a solid platform for further advances in agricultural development and for ensuring a more prosperous future for all Eritreans.

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Over the past 35 years of independence, substantial efforts have been undertaken to ensure the availability of safe and nutritious agricultural products in markets across Eritrea. According to reports from the Regulatory Services Department (RSD) of the Ministry of Agriculture, major achievements in this area are summarized below. It is also important to note that the necessary inspection and control services have been carried out using appropriate regulatory instruments and guidelines.

Ensuring Food Safety and Quality

Because food safety begins at the farm level, considerable efforts have been made to put into practice the “farm-to-table” fundamental principle in food safety. Accordingly, a number of inspection initiatives have been implemented to regulate agricultural products at the production stage.

One notable example is the successful control of pesticide-contaminated tomatoes produced in the Gash-Barka Region and sold in the markets of Asmara. Through strict enforcement measures and awareness-raising campaigns targeting farmers, the misuse of pesticides was significantly reduced. Today, apart from occasional incidents, contamination of tomatoes with pesticide residues is no longer a major concern in the market.

In line with good agricultural and manufacturing practices, efforts have also been made to ensure the safety and quality of raw materials used on farms and in agri-food processing establishments. Over the past 35 years, the number of agri-food enterprises processing animal and plant products—including animal feed manufacturing facilities—has increased from around seven before Eritrea’s independence to nearly 40 in 2026. This figure does not include more than 25 small-scale sesame oil processing enterprises currently operating in the country.



Plant and Animal Quarantine

The primary objective of quarantine services is to prevent the introduction of plant and animal pests and diseases associated with the importation of plants, animals, and their products, while at the same time ensuring that agricultural products intended for export are free from pests and diseases. Quarantine services are provided at official entry points. Currently, four quarantine stations operate in the

country: Asmara International Airport, Massawa Seaport, Assab Seaport, and Teseney. Continuous efforts are underway to strengthen both human resources and laboratory capacities at these facilities.

Improving Seed Quality

To increase crop production and productivity, several improved varieties of field crops and vegetables have been developed over the past independence years by the National Agricultural Research Institute (NARI) of the Ministry of Agriculture. After evaluation and approval by the National Variety Release Committee, coordinated by the Regulatory Services Department, these varieties have been incorporated into seed multiplication programs, which have had a significant impact on crop production and productivity. Over the past 12 years, annual production of improved seed has increased from 700 quintals to 6,000 quintals.



Agricultural Chemicals

Agricultural chemicals can have serious adverse effects on human health, animals, and the environment if they are not properly managed and used. Pesticides, in particular, pose significant risks. In response, a nationwide campaign conducted between 2007 and 2017 led to the safe disposal of more than 360 tons of obsolete pesticide stocks, many of which had accumulated since the colonial era. These stocks were transported to England for disposal in accordance with international standards. Approximately 160 metric tons remain and are scheduled for safe disposal in the near future. In addition, more than 6,500 empty pesticide containers were cleaned and crushed using appropriate technology for safe and easy storage.

With regard to veterinary drugs, 46 metric tons of expired veterinary medicines and vaccines were safely disposed of within the country in collaboration with relevant institutions. An additional six metric tons are expected to be disposed of in the near future.

Natural Resources Regulatory Activities

In collaboration with relevant government institutions and some private entities, the Regulatory Services Department has established a National Database on Fauna and Flora (NDFF), which currently contains records of nearly 5,000 species of fauna and flora. Efforts are underway to make this database accessible to the public. The identification and registration process will also be expanded to further enrich the NDFF and enhance its usefulness to concerned institutions.

Role of the Regulatory Services Department

The Regulatory Services Department was established in 2003 and is responsible for regulating issues related to natural resources, plant resources, and animal resources. The Department is currently playing a significant role in advancing the Ministry of Agriculture's strategic objective: "Safe and Nutritious Food for Everyone, Everywhere."

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