# ANNUAL REPORT 2019



# Aqua-Farms Organization

Development through blue economy

## Message from the Executive Secretary



Mr. Cretus Mtonga Executive secretary - AFO

The year 2019 - 2020 Marks the 3nd Anniversary since we started the journey of making the change to our adorable world. Our efforts and vision is sharpening up day to day and we are glad we can see the gradual steps towards sustainable use of the Ocean, Lakes and Rivers.

When we started the year we had an ambition that this year should be the year to make things and have an impact beyond the previous year, and modify our approaches as we continue to grow.

The economic empowerment of women to help move their ocean-related marine products into a wider public enabled an increased awareness of the community on marine products, also added more value to these products.

Community-based bioassessment of water quality was a project of its kind as it enabled the community to take lead on assessing their own water at Ngerengere catchment. This proved how communities can have an impact when they take a lead to conserve and protect water resources.

Various training in aquaculture, best fish farm practices and feed manufacturing at our farms and our partner's farms reached out to Tanzanians in need of this worth knowledge to manage their own farms. We hope this will contribute to the access and availability of protein in future.

Various research and projects in fisheries like Tuna and tuna-like species, rising awareness of fishermen on best practices to reduce bycatch and protect endangered species enabled enhanced sustainability in our artisanal centred fishery.

Ecosystem restoration has been one of our strategies in the conservation of fisheries resources. Through increased stakeholders and cooperation, mangroves at Mbweni are reviving again.

All these activities were, and continue to be, undertaken with the passion, assistance and generous support of our partners, donors and members. We the Secretariat are extremely grateful to you. And wish you more involvement in 2020-2021.

In 2020/2021, we envision to expand our impact to reach a vast number of Tanzanians through cooperation and collaboration. We envision to have more partners from local and international scope to work together in conservation, fisheries and aquaculture. Thank you.

Signature:



# ABOUT US

Aqua-Farms Organization was registered on July 2017 under NGO Act No. 24 of 2002 with 13 founding members who came together with the aim of ensuring development and food security is achieved through environmental friendly aquaculture and rebuild-ed fisheries.

# VISION

To be an excellent Organization in replenishing aquatic resources with community based conservation and sustainable aquaculture.



### What we do!

Promoting environmental friendly and economic competitive aquaculture;

We support conservation of aquatic environment and stock enhancement;

We support research on sustainable exploitation of aquatic resources and aquaculture;

We improve community health of the lacustrine and coastal communities;

We empower youth and women in utilization of aquatic resources and aquaculture.

## Mission

To enhance food access and income generation to community through sustainable utilization of aquatic resources

### Economic Empowerment

Sustainable Blue Shop-Project



Impact: increased income for \$1 to \$3 Where: Unguja Zanzibar Duration: 6 Months

#### **SusBlue Shop Mission**

To enhance community responsibility in the conservation and protection of marine resources. Through supporting local market products from the aquatic environment, and push towards Industrialization.

#### SEAWEED FARMERS

Due to unfair prices on the seaweed export market and the push of climate change on Seaweed industry, seaweed farmers who are made by 80% women took s step to add value to seaweed and make cosmetics that can be used locally as well as with tourist, the products made had a stagnant market and AFO took a step to diversify the local produce through its susblue shop

#### WHY THE SHOP

The shop was established for value addition and market expansion of the seaweed products made by women in Zanzibar Island to improve their livelihood and income, by September 2019, the project has been able to work with 32 women and Improve their livelihood from \$1 a day to \$ 3, through online platforms, and the financial literacy knowledge is given to them.

#### How

Aqua-Farms Organization established an Instagram page named <u>susblueshop</u> and a <u>website page</u> that the value-added seaweed products are shared and sold, beyond Zanzibar, and placed our office as a collection centre for seaweed products, in this case, were soaps, hair food and seaweed powder.

#### Way forward

The product need development to meet the market demand as they have been the same for more than a decade now. We call in partners to do product development and revolutionaries the efforts of these farmers.





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### **Mikoko na Jamii** Peri-Urban Mangrove restoration



Impact: 10,000 Mangroves Restored Where: Mbweni And Kunduchi, Dar es Salaam Duration: 24 Months

#### Mikoko na Jamii Mission

Mission Green "Mikoko na Jamii Project" is the project that started in 2016, the first mangroves replanting attempt were done at Kunduchi creek Dar es Salaam, the three next attempts have been taking place at Mbweni Dar es Salaam, we look forward to expanding and reach various coastal areas of Tanzania.

#### **COMMUNITY-BASED APPROACH**

The project has been able to involve the community and as the key driver to the project by providing them with alternative sustainable ways of using mangroves to make a living, the project until then has given 4 modern beehives and needed gears for protection against bees, thus supporting

26 women with financial literacy knowledge and economic beekeeping techniques

The project had been able to bring more than 200 volunteers at different phases of restoration, where they had an opportunity to collect and restore mangroves. Alongside with that, the project has a greater expansion in media outreach where through different television and radio programs, YouTube documentary and social media usage to influence and involve all those in love to make the world a better place. Tanzania Forest Service Agency (TFS) Tanzania, Rotary club of Dar es Salaam Mlimani. Fisheries Development and Conservation Organization (FIDEC), Young Wanawake Ship Tanzania, Mazingira Mbweni (Residents), Beach Management Unit Mbweni as the ones who have been given the mandate by national laws to patrol and protect the mangrove forest from time to time.

#### Has the restoration worked?

Aqua-Farms Organization in collaboration with Vrije Universitet- Belgium conducted an assessment to see the success of the mangrove restoration and Percentage of survival were high at the sites with a history of mangroves (restored sites) compared to the novel sites (site with no history of The success rate after two mangroves). years of monitoring in percentage ranged from 0 to 109% depicting also the importance of natural regeneration it was recommended that survey and preselection of the site (s) following the depicted factors should guide replantation of mangroves in the area. If the factors are not met, another

#### AQUA-FARMS ORGANIZATION

measure of mangroves restoration apart from replanting such as hydrological repair

#### Way forward

We are looking forward to offering training to the women on economic beekeeping and expand our activities beyond Kunduchi and Mbweni to reach other peri-urban mangroves along the Coast of Tanzania

### Aquaculture Empowerment

### The Game changer



Impact: 120 Trained, 4 new Ventures and 20 extension services Where: Dar es Salaam & Coast Region Duration: 12 Months

#### TRAINING

With the demand deficit of 480,000 tons of fish per year in Tanzania, as a result of decreased wild-catch and increase in population, Aquaculture( fish farming) has a great potential to replace the needed demand, but it faces several constraints such as fish seeds (fish fingerlings), fish feed, and Skills. Realizing technology this Aqua-Farms Organization and Fisheries Development and Environmental Conservation with great support from Department of Aquatic Sciences and Fisheries (DASF)- University of Dar es Salaam, Kunduchi Campus co-organized a education on different training on aguaculture systems and structures. and showing example different fish farming pond and pond management. During the training, the participants got a chance to know the different aquaculture structure and system such as different type of pond as well as to understand the concept of integrated aquaculture. The farmers got a chance to understand the integrated aquaculture system as a way of conserving the environment and ensure the food security as well as increase productivity of water, land and associated resources while contributing to increased food fish production. Moreover, the training also covered on mobile and urban-based fish farming where farmers had a chance to Visit the Mbezi African fish farm

#### CONSULTATION

Aqua-Farms Offers consultation to fish farmers at a friendly administrative cost to support the operation of the organization. Our consultancies are offered with our experienced technicians. In 2019 we have been able to consult 4 farmers for new setup ventures and done extension services to 20 farmers across the Pwani and Dar es Salaam

#### **WAY FORWARD**



AFO in 2020 is looking forward to starting an incubation to support Aquaprenuers with skill and techniques to put in place their businesses so as we can boost innovators in the development of aquaculture

### Ocean Events Gender and Ocean



Impact: 70 Attendees Where: Dar es Salaam Output: Deliberations shared to IOC-UNESCO

#### WORLD OCEANS DAY

For June 8th 2019, we have had an opportunity of raising awareness on the benefits of humankind that are derived from the oceans much more important is on the role of gender equality in marine sciences, along with women and girls involved in informal sectors related to fisheries. The conference was organized by Aqua-Farms Organization and involved, institutes from various ocean-related activities, this includes University of Dar es Salaam, Youngship Tanzania, Women in Marine Science Network, Western Indian Ocean Marine Sciences Association, World Wildlife Funds, Tanzania Fisheries Research Institute, Women in the Maritime sector in Eastern and Southern Africa.

#### **WE DID IT FOR**

The purpose of building a greater ocean and gender literacy while discovering ways to promote gender equality in ocean-related activities, such as marine scientific research, fisheries, policy-making and management. Discussion on women participation towards healthy, sustainable and productive oceans

#### Objectives were

To advocate for gender participation in Ocean Sciences and informal sectors related to fisheries

To advocate for the Ocean Decade and how gender will play a role

#### DELIBERATION

Following the message from the Director-General, it was agreed that we should send a message back to the director-general of UNESCO, on our willingness to be part of the coming Ocean Decade, we would love to be engaged in the planning and implementation phase at the national scale

Following the gender and the ocean, it was observed that women involved in marine sciences, both natural and maritime sciences, for girls are not favoured and it has been a status quo over years, so we agree to have marine education programs for girls in secondary schools so as to encourage them to join this science as, if we can't nurture they can never know. Following the good lead is done by Aqua-Farms



Organization through it's Aquatic Resources Education Programme, that has been educating girls in secondary education on opportunities aligned with marine resources. The next coming WOD, Exhibition of ocean research posters from marine scientist and product's advertising impacting social livelihoods will take part. This will raise awareness on opportunities found on the oceans to the society and various ocean products.



### **OUR 2019 BEST**

Appreciation to some of

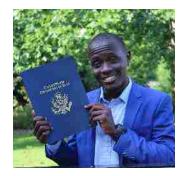
#### Nancy Iraba

our Staff

Nancy received an award from the NEXT EINSTEIN FORUM as the Young

Upcoming Female Marine Scientist, We congratulate Nancy for showing other women and young early careers that no efforts go unrecognized.

University. This has always been her dream and AFO encourage capacity building if its team, we wish you good studies



#### Jerry Mang'ena

Jerry Mang'ena was among the 700 Africa young Leader who had an opportunity to take part in the

Mandela Washington Fellowship at the University of Georgia, Since his return, Jerry has pushed the organization towards success from the Knowledge and experience from the Fellowship.

#### Best Knowledgable About AFO



#### Cretus J. Mtonga

Despite of remote working for the whole year of 2020 Cretus, has shown

outstanding ability to deliver and implement tasks that have made the organization move forward. We consider you the outstanding warrior of the Organization.



#### Prisca Issangya

Prisca was awarded a scholarship by the Government of China for to pursue masters in Marine sciences at Zheijang Ocean



Fadhili Malesa, Benard Kaitira And Valeli Joseph New Staff



#### Linus Hoza

Join Aqua-Farms team In June 2019 in the directorate of Aquaculture.

### WATER QUALITY COMMUNITY-BASED BIOASSESSMENT OF WATER QUALITY



Impact: 12 trained on bioassessment Where: Morogoro Duration: 6 Months Outputs: Video

Monitoring of water quality in developing countries is still challenging, considering the requirement for very expensive equipment to measure various water quality parameters in order to conclude about water quality status. Monitoring and proper conservation measures are therefore necessary to protect the health of local communities.

Macroinvertebrates provide a cheap, reliable, long term based and easy way of assessing water quality. The method used was adapted from Kaaya et al. 2014.

#### TRAINING

Two days community training regarding macroinvertebrate monitoring was conducted. Sampling then took place using 1 mm mesh size kick net. Identification took place followed by analysis with the community.

#### CONCLUSION

We conclude that biomonitoring is an easy, cheap and reliable method of monitoring water quality in developing countries like Tanzania. When communities become well trained and empowered, they can be able to monitor their own water they depend. When provided with enough funding, support and adequate supervision, biomonitoring may become an essential tool and component for successful and effective participatory integrated water resource management in Tanzania.



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