

DOMINION FARMS

Life
out of
the
swamp



Dominion Farms operates in Nyanza province, Western Kenya, and produces rice, fish and rotation crops. AECF has co-funded the development of Dominion's aquaculture programme. This complements nearly \$2 million of existing operational investment and \$38 million of infrastructure investment. Dominion has created a workable business out of previously untamable swamp. Its mission is to reduce poverty, transfer technology and to advance sustainable capitalism in East Africa. This business is transforming fish farming in Kenya, once a staple



Give a man a fish..... help a man establish a fish farm and provide a livelihood for life.

source of protein. Kenyans reduced consumption of fish as part of their regular diet due to over-fishing in Lake Victoria. Dominion is the major producer of quality fingerlings (baby fish) and has been commissioned by the government to produce two million fingerlings per month for sale across Kenya, notably in Central province, but also in Western and Nyanza provinces. Fish farming is taking off markedly and has the potential to ensure food security unlike any other indigenous crop. In addition to the supply of fingerlings to small farmers, Dominion will be supporting development of out-growers who provide raw ingredients (for example soya beans) for Dominion's new fish feed plant.

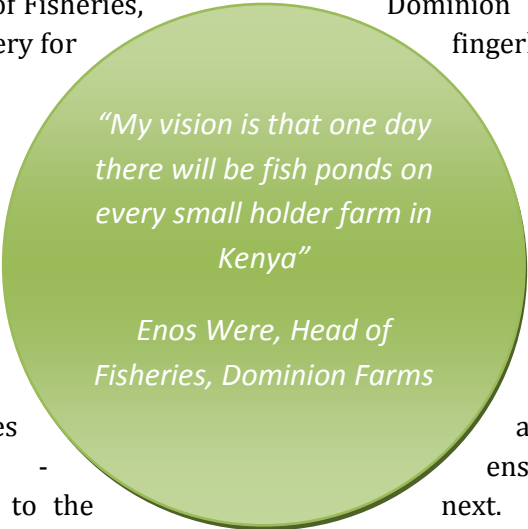
In supporting the sustainability of this new fish farming market, Dominion is developing a centre of excellence for fish farming. It houses a laboratory and a team of experts researching growth rates, best feed, and how to sex the fish to avoid inbreeding that has ruined fish farms elsewhere in the world. About \$2.5 million has been spent on the breeding programme alone. Dominion's researchers also provide crucial extension support and advice to new smallholder fish farmers in the area. Their advice on rearing, feeding, harvesting and marketing helps ensure the farmers get a reasonable price for their fish.

The farm has the potential to impact on the market structure of the fish industry in Kenya by building/catalysing many changes in the market such as high quality fingerlings, research and development of new fish feed combinations, opening up local and international markets for Kenyan Tilapia and influencing the Government of Kenya's policy and regulatory environment for the industry.

Purpose of the funds

The original purpose of the AECF grant was to build ponds for conventional fish farming, and associated infrastructure. The human development impact of this includes increased employment for local people; transferred knowledge and skills to local farmers; and indirect employment and contracting for suppliers and sellers within the supply chain. Since AECF awarded the grant, and in response to the Ministry of Fisheries, Dominion expanded the aquaculture project to include a hatchery for setting up fishponds. Dominion expanded the aquaculture project to include a hatchery for setting up fishponds. Dominion expanded the aquaculture project to include a hatchery for setting up fishponds. Dominion expanded the aquaculture project to include a hatchery for setting up fishponds.

To date the project has transformed one of the poorest areas of Kenya and is improving the lives of its current employees and the local community thanks to smallholder fish farming. At full capacity the farm aims to contract a further five to six thousand farmers to provide the raw ingredients for fish feed. A key feature of the farm is its integrated processes across the fish farming and cropping enterprises - ensuring that benefits pass from one agricultural process to the next. Water is re-used from the fishponds to provide nutrition-rich water for the rice fields, waste from rice production (rice bran) is used to feed the fish, banana crops to shade the duckweed ponds, and cow manure is used to accelerate algae growth in the fish ponds. The river Yala was redirected to reclaim the swamp via a weir. The weir will soon charge hydroelectric turbines that will aerate the fish ponds, allowing for greater density of fish per pond. Dominion’s selective breeding program has brought the fish yield up from 24% meat content to 34%.



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Metrics box

AECF repayable grant	US\$ 979,229
Matching funds from Dominion	US\$ 1.7m
Amount spent	US\$ 38m on infrastructure, diverting the river, building roads,
Produce	Commercial fishing yet to start. 2m fingerlings are produced per month
Number of small holder farmers benefiting	Tens of thousands of small holder farmers receiving fingerlings. US\$1.5m into local economy through wages. Up to 6,000 contract farmers when fully operational, each with potential to earn US\$ 1,750 p.a.



Local people in Nyanza and Western provinces are poor. When Dominion arrived it was reported that around 85% of the population was living below the poverty line. AIDS was rampant (30% of those tested being HIV positive compared to 7% across Kenya) and other preventable diseases such as malaria, cholera and typhoid were prevalent. There were no bicycles, poor roads and the hallmark of malnutrition - children with bloated stomachs - was a typical sight. Tribal customs of land distribution into many tiny plots has contributed to the creation of 'rural slums'. Smallholder farmers typically produced low value cereals and wheat crops. A typical diet is low in protein.

In the seven years since Dominion has been operating, the swamp area has been transformed. Taming the swamp by diverting the river has reduced malaria, farm workers travel about on bicycles and children are healthier and in school. The proportion of people living below the poverty line has said to have decreased to below 65%.

Fish farming has given people in the area and across Kenya more widely, the opportunity for a much increased value of crop, at relatively low risk. The anticipated contract farming arrangements, whereby local farmers produce rice, soy, and rotation crops for fish feed, is likely to provide profitable employment for up to six thousand farmers with a potential annual income of Ksh 140,000 per farmer. In return for access to all Dominion's technology, high nutrition water from the fish ponds, and a guaranteed market for their produce, farmers will be expected to sell all their produce to Dominion and work according to Dominion's crop schedule.

The farmers will receive start up financing from the government and local banks for an 'Outgrowers' scheme. Farmer will receive around Ksh200, 000 or \$15,000 per group of fifteen to manage sixty acre plots on Dominion land, equivalent to around Ksh80, 000 per farmer.

Sustainable

Dominion aims to be fully self-sufficient and profitable – providing its own electricity for pond aeration (through the dam), fuel diesel (soy bean oil), and fertilizer. Contract farmers will produce the raw ingredients for fish feed on site to guarantee supply and quality

A blast freezer will be used to freeze the fish in 12 minutes for export to new markets – in Europe and Africa. Because of the quality of Dominion's high intensity fishing, it has the potential to compete with China's supply for freshwater fish to the US



In addition to being a centre of excellence in research and fish farming technology, Dominion is soon to open a Transformation Centre for 1200 students, providing vocational farming training – for fishing, rice and general farming. It will select the most disadvantaged people in the local communities who will be trained in farming and also supported with life skills such as financial responsibility (with input from Equity bank modules), as well as a health programme.

The vision for this centre will be to produce a critical mass of competent farmers for whom the work is a positive business choice, not a default occupation after failing at school. Promoting business skills is a passion of Dominion's founder-owner. The farm has assisted local employees to form their own companies, to whom the farm contracts out services for the farm.

Smallholder fish farming

Silvanus Obunaka had a small farm producing maize and other low value crops. He responded to proposals from the government's economic stimulus programme to promote fish farming and worked with Dominion to establish 5 ponds and purchased 5000 fingerlings. The government paid for the cost of constructing the ponds, which provided construction labour for local people.



He describes the work as hard – and intensive – having to monitor the growth of the fish, protect them from predators and theft. He has had training and received material supplies from Dominion and his business is heavily supported by extension workers who advise about marketing. His life has much improved since he has had fish to harvest. He said he had purchased a generator since becoming a fishfarmer, he has a television, and good quality new clothes. He is also employing a full time worker to assist with the other crops.

Margaret Achieng' Siagi started fish farming in 2007. Previously she produced tomatoes and sukuma wiki. Margaret has seven ponds, two of which she leases and she has received 4,500 fingerlings from dominion. She is delighted with her harvests, and has a trusted contact at markets to ensure she gets a good price. With the profits from her new business she has bought a cow and she puts the proceeds from the fish sales into an account she uses for paying for school fees.



Women in the local community employed as workers in the rice fields said that working on the farm improved life. One lady had built a house, another talked of many more children attending school now the women in the community were properly employed as opposed to subsistence through farming sukuma and tomatoes.



The AECF

The Africa Enterprise Challenge Fund (AECF) is a US\$100m private sector fund, backed by some of the biggest names in development finance and hosted by the Alliance for a Green Revolution in Africa (AGRA).

Sectors funded by AECF

AECF aims to encourage private sector companies to compete for investment support for their new and innovative business ideas in agri-business, rural financial services, renewable energy and technologies to assist small farmers to adapt to climate change.

Criteria for funding

To qualify for funding a project should be commercially viable and have a positive impact on the rural poor in Africa, delivering increased incomes and employment for poor people, through reduced costs and improved productivity.

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