**FISH4KENYA**

**REPORT ON PROJECT ACTIVITIES – 2023-2024**

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This report highlights activities in fish farming under the Fish 4 Kenya project. During the period under review the following fish farming activities were done.

1. Recruitment of farmers
2. Training of farmers on the different modules of aquaculture
3. Aquaculture extension services to project farmers
4. Fingerling purchase and fish feed purchase
5. Harvesting and marketing
6. **Recruitment of farmers**

A total number of 20 farmers were recruited within the project region and this was done with considerations being made on all the requirements of a fish farmer that include having a pond that is active and functional and also the farmer to have the zeal and passion of promoting aquaculture through sustainable rearing of fish.

1. **Training of farmers on the different modules of aquaculture**

Training of good aquacultural practices was done with modules including: sampling (to ascertain the growth rate and general wellbeing of the fish), pond fertilization with specific inputs and their quantities, liming, feeding and feeding regimes, stocking, water quality management, record keeping/ma and harvesting. The topics were disseminated in phases and the farmers understood the content as it was measured through the application they did on their specific fish ponds. Farmer trainings and capacity building on new technologies, emerging issues in aquaculture, bench marking with other farmers from other regions is considered a very vital aspect in production cycle of any enterprise in this case fish costed a total of Ksh. 99,680.00 and this had a very significant output in the sense that production by the fish farmers was seen realizing profits at the end of the cycle.

1. **Aquaculture extension services to project farmers**

Routine monitoring was done through extension visits made to the project farmers for maximum benefits in terms of aquaculture & integrated knowledge and profits at the end of the cycle. Besides, other parameters were established through the monitoring/ extension visits and this included water temperature, pH, ammonia and algae bloom concentration. Besides the fish were sampled to ascertain the growth rate of the fish is in terms of weight, length food conversion ratio (FCR) and any abnormal physical signs that could hinder the fish not to grow healthy.

1. **Fingerling and fish feed purchase**

During the period under review farmers prepared their ponds adequately and quality fingerlings from accredited hatchery were supplied to the farmers who stocked to their well-prepared ponds that had undergone liming, and fertilization. Fingerlings (monosex) and fish feed (marsh and pellets) worth Ksh 84,000 and Ksh 436,000 respectively were purchased and supplied to farmers.

1. **Harvesting and marketing**

Harvesting which is the final step in the cycle was done and project farmers realized good returns. This was due to the fact that pond management was well enhanced and the farmers implemented accordingly the knowledge they acquired during trainings. Most farmers employed complete harvesting, draining the pond ending the production cycle, and the market source was mainly at farm gate with others transporting the fish to other major markets around the farms. A 250g fish was sold at averagely Ksh 80/=. at farm gate where most of the fish were sold to locals as a delicacy promoting good nutrition and enhanced incomes among households.

It can be deduced that profits margins were realized after the sale of the fish produce, the fish product was sold fresh at farm gate while others were value added through frying and sold, however this value addition was done by 7 farmers.

Stocking for year 2 of the training program is scheduled for March 26, 2024. Trainees are required to pay for the cost of the fingerlings in year 2 and all have done so – see table below. Fish4Kenya will continue to provide financial support for the feed in year 2 and provide technical and logistical support to trainees.

Table 1: The table below summarizes the fish harvested after production cycle.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Fish 4 Kenya | | | | | | | |
| Fish Farmers Data – year 1 trainiees 2023-2024 | | | | | | | |
| Fish farming trainee # | **No. of fish stocked** | **No of fish remained after cycle** | **No of fish harvested** | **No of fish sold** | **No of fish consumed** | **No of fish dead** | **Amount realised** |
| 1 | 600 | 582 | 479 | 470 | 9 | 18 | Ksh37,600 |
| 2 | 600 | 600 | 420 | 400 | 20 | 0 | Ksh32,000 |
| 3 | 600 | 600 | 530 | 500 | 30 | 0 | Ksh40,000 |
| 4 | 600 | 595 | 580 | 560 | 20 | 5 | Ksh44,800 |
| 5 | 600 | 590 | 490 | 450 | 30 | 10 | Ksh36,000 |
| 6 | 600 | 590 | 370 | 350 | 20 | 10 | Ksh28,000 |
| 7 | 600 | 600 | 470 | 458 | 12 | 0 | Ksh36,640 |
| 8 | 600 | 600 | 501 | 484 | 17 | 0 | Ksh38,720 |
| 9 | 600 | 600 | 450 | 400 | 50 | 0 | Ksh32,000 |
| 10 | 600 | 600 | 465 | 450 | 15 | 0 | Ksh36,000 |
| 11 | 600 | 600 | 510 | 490 | 20 | 0 | Ksh39,200 |
| 12 | 600 | 600 | 355 | 350 | 5 | 0 | Ksh28,000 |
| 13 | 600 | 590 | 415 | 390 | 25 | 10 | Ksh31,200 |
| 14 | 600 | 600 | 260 | 245 | 15 | 0 | Ksh19,600 |
| 15 | 600 | 593 | 499 | 489 | 10 | 7 | Ksh39,120 |
| 16 | 600 | 580 | 380 | 370 | 10 | 20 | Ksh29,600 |
| 17 | 600 | 579 | 499 | 477 | 22 | 21 | Ksh38,160 |
| 18 | 600 | 550 | 480 | 360 | 40 | 50 | Ksh28,800 |
| 19 | 600 | 580 | 410 | 380 | 10 | 20 | Ksh30,400 |
| 20 | 600 | 594 | 510 | 500 | 10 | 6 | Ksh40,000 |
|  | **12000** | **11823** | **9073** | **8573** | **390** | **177** | **Ks.685,840** |

* *The number of fishes that died were during the early stages of the production cycle and this was attributed to various reasons such as theft cases, predation, however little mortalities were recorded because of the good aqua cultural practices being implemented by the project farmers*.
* *Household consumption was also realized to be low as most farmers intended to convert fish into monetary terms that could help them in other basic essentials*. *This translated to Ksh.39,000*
* *All trainees have already paid for fingerlings money for new stocking to be done on 26th march 2024.*
* *Group 1 (trained in 2019-2021) and Group 2 (trained in 2021-23) members sampling will start soon I will share photos. They are all doing well. Fish4Kenya is providing technical and logistical support but no further financial support after the 2 year training period.*

**Summary of the fish production training expenditures – 2023-24**

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary of expenditure** | | | |
| **S/n** | **Item** | **Cost (Ksh)** | **Remarks** |
|  |  |  |  |
| 2 | Fingerling purchase | 72000 | Monosex fingerlings purchased |
| 3 | Fingerlings transportation | 12000 |  |
| 4 | Fish feed purchase – 5 shipments | 436,000 | Both marsh & pellets purchased |
| 5 | Feed Transportation – **Total** 5 shipments | 66,000 |  |
|  | **Total** | **596,000**  **(~$6000 Cdn)** | Does not include managers salary and expenses for logistical and technical support to all trainees |

*Therefore Ksh. 685,840 + Ksh 39,000= Ksh.724,840*

*Ksh. 724,840 - Ksh. 596,000 =* ***Ksh. 138,840*** *was realized as project profit (sales revenues – production costs) for the 20 fish farmers in 2023-24. While this profit for 20 fish farmers may seem small it is important to remember that this is based on the use of high cost commercial feeds for the entire production cycle. All fish farmers operate also operate maize and vegetable farms and use some of the production and byproducts to feed their fish reducing feed costs.*

**Conclusion and recommendation**

It can be concluded that the project is making a great impact to farmers and their households as the incomes generated can be effectively be used in managing their daily lives and help in aspects such as school fee payments and other household needs. Therefore, more recruitment needs to be done as demand for the project is high so as to reach more farmers within and outside the region with the main goal of promoting of promoting aquaculture for food security, income generation, source of employment and productive use of riparian land.

Report prepared by:

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