

# THE UNITED REPUBLIC OF TANZANIA



## MINISTRY OF LIVESTOCK AND FISHERIES DEVELOPMENT

### **FISHERIES DEVELOPMENT DIVISION**

**FISHERIES ANNUAL STATISTICS REPORT- 2012** 

Fisheries Development Division

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**APRIL, 2013** 

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#### **FOREWORD**

The Fisheries Annual Statistical Report is prepared annually by Fisheries Development Division of the Ministry of Livestock and Fisheries Development; it contains updated information on the following fisheries categories;

- Capture fish production;
- Frame Survey information;
- Export data;
- Import data;
- Fish consumption;
- Fisheries protection and Licensing information;
- EEZ data; and
- Aquaculture production.

The reports are presented in summary tables, chart, and histograms of key information on; Annual fish production data, in quantity of major groups of fish species by water bodies, economic value of production data for major and minor water bodies for 2012 in. Imports and Exports of fishery products in terms of quantity and value are briefly elaborated in this report. The report gives summary statistics for apparent consumption of fish and fishery products, it includes a brief overview of summary tables and graphs of major trends (2001 - 2012) and issues relating to the individual statistical sets, levels of fishing activity (fishing effort) accompanied by, aquaculture production in terms of number of fish farmers, stocking density and quantity produced by district as well as notes on fish consumption.

Data of fishing effort were compiled from frame survey, fish producing factors, fishing vessels and gears by type and size at all landing sites. Fish production information from artisanal fisheries, Import and Export data, Monitoring and Surveillance information were also elaborated in this report. Aquaculture and EEZ have been collected from Aquaculture Development Department and Deep Sea Fishing Authority respectively.

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Tanzania Fisheries Annual Statistics Report - 2012, "The Ministry of Livestock and Fisheries Development - Fisheries Development Division".

#### 1.0 INTRODUCTION

## 1.1 Overview of Tanzania Fisheries

Tanzania is a coastal state on the Western Indian Ocean situated in the Eastern part of Africa. It is richly endowed with natural water resources from lakes, rivers, dams and Indian Ocean. The country has a total area of 947,300 km<sup>2</sup>, water covers 61,500km<sup>2</sup>, (6.4 %) while land masses covers 885,800 km<sup>2</sup> (93.6%) according to Economic Reports of Tanzania 2012.

Tanzania shares three major inland lakes in Africa (Table 1). Lake Victoria is by far the largest and economically most significant for the national fisheries (shared by Kenya and Uganda) and it is the second largest fresh water lake in the world. Lake Tanganyika (shared with Burundi, DRC and Zambia) is the second deepest lake in the world and Lake Nyasa is shared by Malawi, and Mozambique. There are also other inland water bodies, minor lakes, rivers, dams, ponds and wetlands. For that matter the country is rich in fishery resources (Table 2).

**Table 1: Country's water bodies distribution** 

| Water body                | Total Area<br>(km²) | Tanzanian share<br>(area in km²) | Percentage (%) |
|---------------------------|---------------------|----------------------------------|----------------|
| Lake Victoria             | 68,800              | 35,088                           | 51             |
| Lake Tanganyika           | 32,900              | 13,489                           | 41             |
| Lake Nyasa                | 30,800              | 5,760                            | 20             |
| Marine (Territorial sea)  | 64,000              | 64,000                           | 100            |
| EEZ                       | 223,000             | 223,000                          | 100            |
| Other inland water bodies | 5,000               | 5,000                            | 100            |

**Table 2: Estimated Tanzania fisheries potential** 

| Water body                | Total Area<br>(km²) | Tanzania<br>share (area<br>km²) | Coverage<br>(%) | Estimated Fisheries Resource Potential (Tones) |
|---------------------------|---------------------|---------------------------------|-----------------|--|
| Lake Victoria             | 68,800              | 35,088                          | 51              | 1,944,444 (2011)                               |
| Lake Tanganyika           | 32,900              | 13,489                          | 41              | 295,000 (1998)                                 |
| Lake Nyasa                | 30,800              | 5,760                           | 20              | 168,000 (1994)                                 |
| Marine (Territorial sea)  | 64,000              | 64,000                          | 100             | 100,000 (1970's)                               |
| EEZ (Deep sea)            | 223,000             | 223,000                         | 100             | Unknown  |
| Other inland water bodies | 5,000               | 5,000                           | 7               | 30,000 (1970's)                                |

Table 3: Major and minor water bodies

| WATER BODIES (MARINE AND INLAND WATER BODIES) |                 |                                  |
|---|-----------------|----------------------------------|
| TYPE OF WATER BODY                            | WATER BODY      | REGION                           |
|   | Indian Ocean    | Mtwara,Lindi,DSM,Coast and Tanga |
|   | Lake Victoria   | Mwanza,Kagera and Mara           |
| MAJOR WATER BODIES                            | Lake Tanganyika | Kigoma and Rukwa                 |
|   | Lake Nyasa      | Mbeya,Ruvuma and Iringa          |
|   | Lake Rukwa      | Mbeya and Rukwa                  |
|   | Mtera Dam       | Dodoma and Iringa                |
|   | Nyumba ya Mungu | Moshi and Arusha                 |
|   | Lake Babati     |                                  |
|   | Lake Basuto     |                                  |
|   | Lake Tlawi      |                                  |
|   | Lake Eyasi      |                                  |
|   | Lake Natroni    | Arusha                           |
|   | Nondwa Dam      |                                  |
|   | Bahi Dam        |                                  |
|   | Hombolo Dam     |                                  |
| MINOR WATER BODIES                            | Kisaki Dam      | Dodoma                           |
| MINOR WATER BODIES                            | Lake Kitangiri  |                                  |
|   | Mgori Dam       |                                  |
|   | Mianji Dam      |                                  |
|   | Chibumagwa Dam  |                                  |
|   | Lake Singidani  |                                  |
|   | Lake Kindai     |                                  |
|   | Lake Kibwi      | Singida                          |
|   | Igombe River    |                                  |
|   | Ugala River     |                                  |
|   | Maboha River    |                                  |
|   | Shela River     | Tabora                           |

| Mwamapuli River  |           |
|------------------|-----------|
| Sola Dam         |           |
| Mhumbu Dam       |           |
| Ning'wa Dam      |           |
| Songwa Dam       |           |
| Mwadui Dam       |           |
| Igundu Dam       | Shinyanga |
| Kihanga Dam      |           |
| Ngwazi Dam       |           |
| Nzivi Dam        | Iringa    |
| Mara River       |           |
| Lubanda River    |           |
| Kiarano Dam      | Mara      |
| Simiyu River     |           |
| Mirongo River    |           |
| Malya Dam        | Mwanza    |
| Lake Ikimba      | Kagera    |
| Ruvuma River     |           |
| Ruhusu River     | Ruvuma    |
| Malagarasi River |           |
| Luche River      |           |
| Nguluka Dam      | Kigoma    |
| Kyungululu Dam   |           |
| Mbaka River      |           |
| Ruhuhu River     |           |
| Songwe River     |           |
| Kiwira River     | Mbeya     |
| Lukuledi River   |           |
| Matandi River    | ]         |
| Mbwemkulu River  | Lindi     |

| Limbs  | a River     |          |
|--------|-------------|----------|
| Umba   | a RIVEI     |          |
| Rufiji | River       |          |
| Wam    | i River     |          |
| Ruvu   | River       |          |
| Lake   | Mteke       |          |
| Lake   | Nyatupa     |          |
| Lake   | Uba         |          |
| Lugo   | ngwe Dam    |          |
| Wem    | e Dam       |          |
| Luwe   | . Dam       |          |
| Ilu Da | am          |          |
| Zumb   | oi Dam      |          |
| Umw    | e Dam       |          |
| Lung   | ola Dam     | Pwani    |
| Pang   | ani River   |          |
| Buhu   | li Dam      |          |
| Zigi [ | Dam         | Tanga    |
| Mind   | u Dam       |          |
| Kidat  | u Dam       |          |
| Kilom  | nbero River |          |
| Mget   | a River     |          |
| Mkata  | a River     |          |
| Ruhu   | hu River    | Morogoro |

#### 1.2 Main Fisheries Resources

The artisanal fishery in Tanzania is the most important fisheries as it lands most of the inland and the marine catches and contributes to creating employment, food, foreign exchange earnings and recreation. The capture fishery of Tanzania is divided into two components, the freshwater and marine waters. This fishery is dominated by fishing vessels mostly small ranges between 6 to 11 m long, mainly motorized by outboard engines and few have inboard engines, other crafts used including dugout canoes of 3-5 meters long.

## 1.3 The fishery resources in Tanzania are the following:

- (i) Major lakes (Victoria, Tanganyika and Nyasa): All fin fish and sardines;
- (i) Marine Territorial Waters: Shellfish and finfish;
- (ii) Marine Exclusive Economic Zone: Mainly fin fish tuna and tuna-like species these are mostly captured by Distant Water Fishing Nations. However, plans are underway, to encourage Tanzanian fishers to secure some financial assistance so that they can be able to fish in the EEZ.

Table 4: Checklist of exploited Fish Species in Marine Water

| No. | Common /English Name     | Latin /Scientific Name      | Swahili Name |
|-----|--------------------------|-----------------------------|--------------|
| 1.  | Thumbprint emperor       | Lethrinus rhodopterus       | Changu       |
| 2.  | Peacock grouper          | Cephalopholis argus         | Chewa        |
| 3.  | Yellowfin fusilier       | Caesio xaenithonotus        | Mbono        |
| 4.  | Dogtooth tuna            | Gymnasada nuda              | Jodari       |
| 5.  | Slender silver-biddy     | Gerres oblongus             | Chaa         |
| 6.  | Giant tiger prawn        | Penaeus bubulus             | Kamba mti    |
| 7.  | Ornate spiny lobster     | Panulirus ornatus           | Kamba koche  |
| 8.  | Blue- tail mullet        | Oedalechilus kesteveni      | Mkizi        |
| 9.  | Freckled gotfish         | Upeneus oligospirus         | Mkundaji     |
| 10. | Japanese threadfin bream | Nemipterus japonicus        | Koana        |
| 11. | White-spotted octopus    | Octopus chromatus           | Pweza        |
| 12. | East African sardinella, | Sardinella neglecta         | Dagaa-papa   |
| 13. | Carolines parrotfish     | Carrotomus spinidens        | Pono         |
| 14. | King fish                | Scomberomorus plurilineatus | Nguru        |
| 15. | Indian Mackerel          | Restrelliger chrysozonus    | Vibua        |
| 16. | Indian Squids            | Loligo duvauceli            | Ngisi        |
| 17. | Silky shark              | Carcharinus falciformis     | Dagaa-Papa   |
| 18. | Commerson's anchony      | Anchoviella commersonii     | Dagaa-mcheli |
| 19. | White-spotted spine foot | Siganus oramin              | Tasi         |
| 19  | Obtuse barracuda         | Sphyraenella chrysotaenia   | Msusa/Mzia   |
| 20  | Tille travelly           | Caranx cynodon              | Kolekole     |
| 21  | Sleek unicornfish        | Naso hexacanthus            | Puju         |
| 22  | Giant catfish            | Arius serratus              | Hongwe       |
| 23  | Milk fish                | Chanos chanos               | Mwatiko      |
| 24  | White-fin Wolf herring   | Chirocentrus dorab          | Mkonge       |

| 25 | Cock grunter           | Pomadasys multimaculatum | Karamamba |
|----|------------------------|--------------------------|-----------|
| 26 | Black- barred halfbeak | Hemiramphus commersoni   | Chuchunge |
| 27 | Sword fish             | Xiphias gladius          | Nduwaro   |
| 28 | Unicorn leatherjacket  | Alutera monoceros        | Kikande   |
| 29 | Cobia                  | Rachycentron canadum     | Songoro   |
| 30 | Feathertail stringray  | Hypolophus sephen        | Taa       |
| 31 | Jarbua terrapin        | Holocentrus servus       | Kui       |
| 32 | Bengal snapper         | Lutjanus bengalensis     | Janja     |

Table 5: Checklist of the exploited fish Species in Inland water

| No. | Common / FAO Name       | Latin/ Scientific Name                 | Swahili/local Name        | Water body    |
|-----|-------------------------|--|---------------------------|---------------|
| 1   | Nile perch              | Lates stappersii                       | Mgebuka/Mkeke/Mvolo       | Lake          |
| 2   |                         | Lates anguistifrons                    | Sangara                   | Tanganyika    |
| 3   |                         | Lates mariae                           | Sangara /Ng'omba          |               |
| 4   |                         | Lates microlepis                       | Sangara/Nonzi             |               |
| 5   | Tilapia                 | Oreochromis tanganicae<br>(Serotheron) | Ngege                     |               |
| 6   |                         | Boulengerochromis microlepis           | Kuhe/Inkumpi              |               |
| 7   | Lake Tanganyika Sprat   | Stolothrissa tanganicae                | Dagaa                     |               |
| 8   | Lake Tanganyika Sardine | Limnothrisa miodon                     | Dagaa/Lumbu               |               |
| 9   | Catfish                 | Clarias gariepinus                     | Kambale,Mumi              |               |
| 10  |                         | Labeo lineatus                         | Mbiligi                   |               |
| 11  |                         | Synodontis lacustricolus               | Ngogo/Gogogo/Kolokolo     |               |
| 12  |                         | Bagrus docmak Mbofu,                   |                           |               |
| 13  |                         | Bathybates spp                         | Mbanga/Lembela            |               |
| 14  |                         | Hemibates stenosoma                    | Mpande                    |               |
| 15  |                         | Hydrocynus vittatus (tiger fish)       | Manje                     |               |
| 16  |                         | Malapterurus electricus                | Nyika                     |               |
|     |                         |  |                           |               |
| 17  | Nile perch              | Lates niloticus                        | Sangara                   | Lake Victoria |
| 18  | Tilapia                 | Oreochromis niloticus                  | Sato/Perege               |               |
| 19  |                         | Tilapi zillii                          | Sato                      |               |
| 20  |                         | Oreochromis rukwaensis                 | Sasala                    |               |
| 22  |                         | Oreochromis leucostictus               | Satu, Ngege               |               |
| 23  |                         | Balirius tanganicae                    | Mbasa                     |               |
| 24  |                         | Tilapia rendalli                       | Kayabo                    |               |
| 25  |                         | Cintharinus gibbosus                   | Imbasa, Kukulu            |               |
| 26  | Catfish                 | Clarias theodorae                      | Kambale                   |               |
| 27  |                         | Clarias liocephalus                    | Kambale                   |               |
| 28  |                         | Clarias gariepinus                     | Kambale                   |               |
| 29  | Protopterus             | Protopterus aethiopicus                | Kamongo, Kambale<br>mamba |               |

| 30 | Haplochromines        | Astatotilapia nubile    | Furu          |            |
|----|-----------------------|-------------------------|---------------|------------|
| 31 |                       | Haplochromis pallidus   | Furu          |            |
| 32 |                       | Haplochromis obesus     | Furu          |            |
| 33 |                       | Haplochromis bloyeti    | Furu          |            |
| 34 | Spider prawns         | Nematopalaemon tenuipes | Uduvi         |            |
| 35 | Lake Victoria sardine | Ostrothrissa miodon     | Dagaa         |            |
| 36 | Lake Victoria sardine | Rastrineobola argentae  | Dagaa         |            |
|    |                       |                         |               |            |
| 37 | Tilapia               | Oreochromis sp.         | Magege        | Lake Nyasa |
| 38 | •                     | Rhamphochromis          | Ngelwa        |            |
| 39 | Minor Cichlid         | Opsaridium sp.          | Mbelele/Mbasa |            |
|    |                       |                         |               |            |
| 40 |                       | Haplochromis sp.        | Utapi         |            |
| 41 | Catfish               | Bathclarius nyasensis   |               |            |
| 42 | Sardine               | Engraulicypris sp.      | Usipa/dagaa   |            |
| 43 |                       | Labeo                   | Ningu         |            |
| 44 |                       | Synodontis              | Ngogo         |            |
| 45 |                       | Bagrus                  | Mbofu         |            |
|    |                       |                         |               |            |
| 46 |                       | Oreochromis urolepis    | Perege        | Mtera dam  |
| 47 |                       | synodontis              | Kambale       |            |
| 48 |                       | hydrocynus              | Mchena        |            |
| 49 |                       | Clarias sp.             | Ngogo         |            |
| 50 |                       | Bagrus                  | Vitoga        |            |
| 51 |                       |                         | Kimbumbu      |            |
| 52 |                       |                         | Sulusulu      |            |
| 53 |                       |                         | Mbapala       |            |
| 54 |                       |                         | Ningu         |            |
| 55 |                       |                         | Ngarara       |            |
| 56 |                       |                         | Ngobero       |            |

In 2012 the total fish production was 365,023 metric tons valued at 1,307,131,723.7 T.Sh (Table 6), of which about 86% was from freshwater and the remaining 14 % was from the marine waters (Fig. 1).

Table 6: Total fish production from all major water bodies in Tanzania (marine and inland) for 2012

|                     | Nui     | mbers          | Estimated Fish Cate | ches and Values |
|---------------------|---------|----------------|---------------------|-----------------|
|                     |         |                | Catches in (m       |                 |
| Water bodies        | Fishers | Fishing crafts | tons)               | Values in Tsh.s |
| Lake Victoria       | 101,250 | 28,470         | 238,365.93          | 876,855,291.31  |
| Lake Tanganyika     | 26,612  | 11,506         | 59,394.60           | 190,062,720.00  |
| Lake Nyasa          | 5,550   | 2,632          | 10,890.00           | 39,959,000.00   |
| Lake Rukwa          | 3,428   | 1,786          | 3,964.74            | 12,687,168.00   |
| Mtera Dam           | 2,487   | 1,586          | 989.80              | 6,091,301.42    |
| Nyumba ya Mungu Dam | 786     | 502            | 251.00              | 251,000.00      |
| Lake Kitangiri      | 1,700   | 825            | 317.40              | 666,540.00      |
|                     |         |                |                     |                 |
| Lake Singidani      | 62      | 19             | 143.00              | 429,000.00      |
| Lake Kindai         | 46      | 15             | 73.00               | 226,300.00      |
| Lake Burunge        | 195     | 110            | 44.60               | 133,800.00      |
| Minor waters        | 4,304   | 1,870          | 509.93              | 1,987,804.00    |
| Small scale Marine  | 36,321  | 7,664          | 50,079.38           | 177,781,799.00  |
| Grand Total         | 182,741 | 56,985         | 365,023             | 1,307,131,724   |

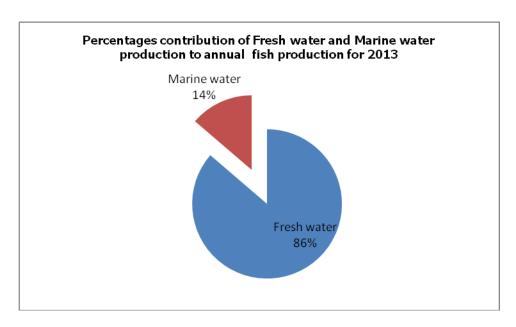


Figure 1: Percentages contribution of Fresh water and Marine water production to annual fish production for 2012

#### 2.0 OVERVIEW FISHERIES STATISTICS

## 2.1 Fishing Landing site

A total number of 1,384 landing sites were recorded in 2012 giving a 3% increase from the 2011 frame survey. Since 2005 there has been a steady increase in the number of landing sites in all water bodies (Table 7).

The highest number of landing sites is found in Lake Victoria (609  $^{2012 \, FS}$ ), others are Marine (257  $^{2009 \, FS}$ ), Lake Tanganyika (239  $^{2010 \, FS}$ ), Lake Nyasa (114  $^{2011 \, FS}$ ), Lake Rukwa (72  $^{2013 \, FS}$ ), Mtera dam (27  $^{2011 \, FS}$ ), Nyumba ya mungu dam (21  $^{2010 \, FS}$ ) and Minor water (18) $^1$ 

<sup>1</sup> Minor water bodies include Lake Jipe <sup>2010 FS</sup>, Lake Kitangiri, Lake Babati, Lake Kindai <sup>2010 FS</sup> and Lake Burunge etc.

Table 7: Grand summary of all Artisanal fisheries for 2012

|                                |                |                |                |               |               | Nyumba     |              |              |               |
|--------------------------------|----------------|----------------|----------------|---------------|---------------|------------|--------------|--------------|---------------|
| WATER BODIES                   | Marine         | L. Victoria    | L.Tanganyika   | L. Nyasa      | L. Rukwa      | ya Mungu   | Minor water  | Mtera Dam    | Totals        |
| NUMBER OF LANDING SITE         | 257            | 609            | 239            | 114           | 72            | 21         | 18           | 27           | 1,384         |
| NUMBER OF FISHERS              | 36,321         | 101,250        | 26,612         | 5,550         | 3,428         | 786        | 6,307        | 2,487        | 182,741       |
| NUMBER OF FISHING VESSELS      | 7,664          | 28,470         | 11,506         | 2,632         | 1,786         | 502        | 2,839        | 1,586        | 56,985        |
| WEIGHT IN M. TONS              | 50,079.38      | 238,365.93     | 59,394.60      | 10,890.00     | 3,964.74      | 251        | 1,087.93     | 989.80       | 365,023       |
| VALUE IN 000's TShs            | 177,781,799.00 | 876,855,291.31 | 190,062,720.00 | 39,959,000.00 | 12,687,168.00 | 251,000.00 | 3,443,444.00 | 6,091,301.42 | 1,307,131,724 |
| GEARS IN USE                   |                |                |                |               |               |            |              |              |               |
| NUMBER OF GILL NETS            | 19,940         | 352,117        | 523,856        | 11,582        | 21,281        | 856        | 348          | 63,189       | 995,467       |
| NUMBER SHARK NETS              | 3,733          | -              | -              | -             | -             | -          | -            |              | 3,733         |
| NUMBER OF BEACH SEINS          | 768            | 8,019          | -              | 12            | 344           | 80         | 123          | 211          | 9,558         |
| NUMBER OF SCOOP NETS           | 40             | 545            | 82             | -             | -             | -          | -            |              | 667           |
| NUMBER OF CAST NETS            | 229            | 94             | -              | 4             | -             | 2          | -            |              | 329           |
| NUMBER OF APPOLLO LIFT<br>NETS | -              | -              | 66             | -             | -             | -          | -            |              | 66            |
| NUMBER OF LIFT NETS            | -              | 45             | 1,664          | -             | -             | -          | -            | 3,802        | 5,511         |
| NUMBER OF LAMPS                | -              | -              | 11,929         | -             | -             | -          | -            |              | 11,929        |
| NUMBER OF RING NETS            | 1,241          | -              | 185            | 1             | -             | -          | -            | 7,761        | 9,188         |
| NUMBER OF DAGAA SEIN NETS      | -              | 7,834          | -              | 728           | -             | -          |              |              | 8,562         |
| NUMBER OF HAND LINES           | 13,955         | 16,754         | 13,048         | 284           | 15,000        | 5          | 33,955       | 1,907        | 94,908        |
| NUMBER OF LONG LINES           | 9,437          | 6,359,887      | 600            | 157,648       | 885           | 949        | 8,677        | 155,851      | 6,693,934     |
| NUMBER OF TRAPS                | 4,674          | 928            | 22             | 71            | 2,820         | 2,677      | 31           | 240          | 12,527        |
| NUMBER OF SPEARS               | 1,315          | -              | -              | -             | -             | -          | -            | 7            | 1,322         |
| NUMBER OF PURSE SEINES         | -              | -              | -              | 1,120         | -             | -          | -            |              | 1,120         |
| NUMBER OF TRAWLERS             | 3              | -              | -              | -             | -             | -          | -            |              | 3             |

| OTHER GEARS (HAND HELD<br>NETS &MONOFILAMENTS) | -   | 2,905 | -     | -  | -  | - | - | 2,905 |
|--|-----|-------|-------|----|----|---|---|-------|
| ENGINES  |     |       |       |    |    |   | - | -     |
| No. OF OUTBOARD ENGINES                        | 737 | 8,081 | 1,002 | 15 | 12 | - | - | 9,850 |
| No. OF INBOARD ENGINES                         | 94  | 1     | 1     | 1  | 1  | - | 1 | 94    |

<sup>&</sup>lt;sup>1</sup> Minor water bodies include Lake Jipe <sup>2010 FS</sup>, Lake Kitangiri, Lake Babati, Lake Kindai <sup>2010 FS</sup> and Lake Burunge etc.

## 2.2 Fishers

The fisheries sector provides a source of employment and livelihood to a substantial number of people. About **182,741** people are engaged on full-time basis out of this about **175,077** and **7,664** are involved in fresh water and marine fishing respectively, while approximately more than 4 million people make their livelihoods through various fisheries-related activities, such as; boat building, net making, fish processing and food marketing. There is a steady rise in number of fishers and fishing vessels over the years, this evident since 2003 (Fig. 2).

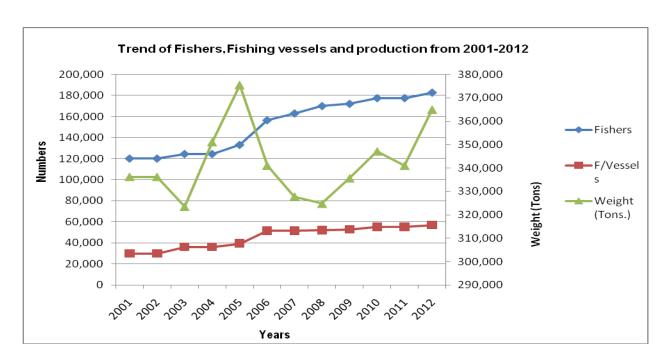


Figure 2: Trend of fishers and fishing vessels from 2001-2012

## 2.3 Fishing Gears

The common fishing gears used by artisanal fishers according to frame surveys are; Long lines (6,693,934), Gill nets (995,467), Hand lines (94,908), Traps 12,527, Ring nets (9,188), Dagaa Seine Nets 8,562 Lift nets (5,511) and Shark nets (3,733) (Fig.3 and Table 8). Other gears used are Appollo Lift nets in Lake Tanganyika, Purse Seines, Cast nets, Spears Monofilament nets and Scoop nets.

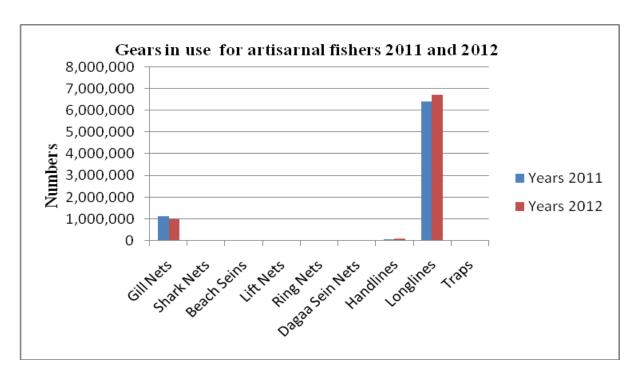


Figure 3: Fishing gears in use for artisanal fishers

## 2.4 Fisheries Economics.

Fisheries production contributed to 1.42 % to GDP in 2011 (Fig.4), a decline from 1.81 % in 1999, but has shown a steady growth in line with the national trends in GDP, suggesting the sector has a balanced economy (Fig. 5).

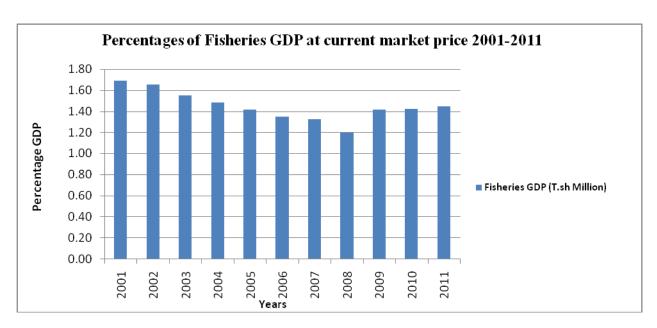


Figure 4: Trend of percentages of Fisheries Gross Domestic at current market price from 2001-2011

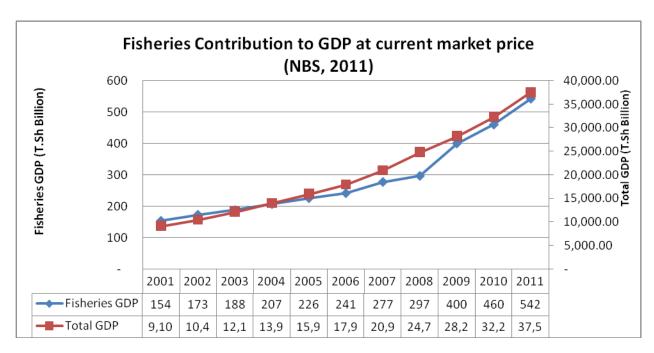


Figure 5: Trend of Fisheries contribution to total GDP of all economic activity from 2001-2011

## 2.5 Fish consumption

Fish and fishery products represent a very valuable source of protein and essential micronutrients for balanced nutrition and good health. In 2010, fish accounted for 16.6 % of the world population's intake of animal protein and 6.5 % of all protein consumed. Globally, fish provides about 3.0 billion people with almost 20 % of their intake of animal protein, and 4.3 billion people with about 15 % of such protein (FAO Statistics Year book 2010).

Fish provides around 55% of the animal protein consumption in Tanzania in 2011, studies suggest "dagaa" being particularly important for low-income consumers. However, the per capita animal protein from fish has shown a declining

trend to 7.6 kg/capita in 2012 (Table 9), This is below the FAO recommended consumption of 18 kg/capita/yr and it is the aim of the Fisheries Policy to increase this.

Table 8: Estimation of fish consumption for 2012

| Per capital fish consumption (kg)                      |                |
|--|----------------|
| National fish consumption (kg)                         | 340,217,451.01 |
| Aquaculture export (mainly prawns)                     | 116,688        |
| Export of fish/fish production in kg                   | 41,394,267.86  |
| Aquaculture production (Tilapia &others)               | 3,628,500.00   |
| National fisheries production(kg) (capture production) | 373,214,217.87 |
| consumption(kg)  | 4,885,689.00   |
| Imports of fish/fish products for direct human         |                |
| Population size  | 44,929,002     |

## **3.0 SUMMARY OF FISHERIES STATISTICS FOR 2012**

Table 9: Grand summary for fisheries statistics 2012

| ITEM                        | FRESH WATERS     | MARINE WATERS | TOTAL            |
|-----------------------------|------------------|---------------|------------------|
| NUMBER OF FISHERS           | 146,420          | 36,321        | 182,741          |
| NUMBER OF FISHING VESSELS   | 49,321           | 7,664         | 56,985           |
| WEIGHT OF FISH IN M. TONS   | 314,944.00       | 50,079.38     | 365,023.38       |
| VALUE OF FISH IN 000'S TSHS | 1,129,349,924.72 | 177,781,799   | 1,307,131,723.72 |
| GEARS IN USE                |                  |               |                  |
| NUMBER OF GILL NETS         | 975,527          | 19,940        | 995,467          |
| NUMBER SHARK NETS           | 0                | 3,733         | 3,733            |
| NUMBER OF BEACH SEINES      | 2,639            | 768           | 3,407            |
| NUMBER OF SCOOP NETS        | 627              | 40            | 667              |
| NUMBER OF CAST NETS         | 100              | 229           | 329              |
| NUMBER OF APPOLLO LIFT NETS | 66               | 0             | 66               |
| NUMBER OF LIFT NETS         | 1,758            | 0             | 1,758            |
| NUMBER OF LAMPS             | 11,929           | 0             | 11,929           |
| NUMBER OF RING NETS         | 186              | 1,241         | 1,427            |
| NUMBER OF DAGAA SEINE NETS  | 14,692           | 0             | 14,692           |
| NUMBER OF HOOKS/HAND LINES  | 80,115           | 13,955        | 94,070           |
| NUMBER OF LONG LINES        | 6,528,646        | 9,437         | 6,538,083        |
| NUMBER OF TRAPS             | 7,732            | 4,674         | 12,406           |
| NUMBER OF SPEARS            | 0                | 1,315         | 1,315            |
| NUMBER OF PURSE SEINES      | 1,120            | 0             | 1,120            |
| NUMBER OF TRAWLERS          | 0                | 3             | 3                |
| MONOFILAMENTS NETS          | 2,905            |               | 2,905            |
| ENGINES                     |                  |               | 0                |
| NUMBER OF OUTBOARD ENGINES  | 9,932            | 737           | 10,669           |
| NUMBER OF INBOARD ENGINES   | 0                | 94            | 94               |

## **4.0 FISHERY STATISTICS BY WATER BODIES FOR 2012**

#### 4.1: LAKE VICTORIA FISHERY STATISTICS

Table 10: Artisanal Fisheries Statistics for Lake Victoria, 2012

|  | _              |                |                |                |
|--|----------------|----------------|----------------|----------------|
| Item                                     | Kagera         | Mara           | Mwanza         | Totals         |
| Total number of Landing sites            | 171            | 146            | 285            | 602            |
| Total number of Fishermen                | 22,930         | 25,378         | 52,942         | 101,250        |
| Total number of Fishing vessels          | 7,183          | 6,807          | 14,480         | 28,470         |
| Total weight of fish catch (Tonnes)      | 31,957.49      | 62,403.15      | 144,005.25     | 238,365.9      |
| Total value of fish in 000's TShs.       | 117,559,159.40 | 229,556,841.97 | 529,739,143.95 | 876,855,291.31 |
| Number of Fishing gears by type and size |                |                |                |                |
| Number of Gill nets                      | 92,969         | 84,997         | 174,151        | 352,117        |
| Number of Traps                          | 269            | 152            | 476            | 928            |
| Number of hand lines                     | 3,187          | 6,487          | 7,080          | 16,754         |
| Number of Long lines                     | 1,277,056      | 1,703,357      | 3,379,474      | 6,359,887      |
| Number of Beach seines                   | 484            | 514            | 1,081          | 2,079          |
| Number of Scoop nets                     | 533            | 10             | 2              | 545            |
| Number of cast nets                      | 45             | 23             | 26             | 94             |
| Number of Lift nets                      | 14             | 0              | 31             | 45             |
| Number of Small seine (Dagaa seine)      | 1,645          | 1,648          | 4,726          | 8,019          |
| Others (unspecified)                     | 1188           | 2,629          | 4,127          | 2,905          |
| Engines                                  |                |                |                |                |
| Number of Outboard engines               | 2,181          | 1,209          | 4,691          | 8,081          |
| Number of Inboard engines                | 0              | 0              | 0              | 0              |

Table 11: Weight of fish caught in metric tons for Kagera region by district and by species for 2012

| KAGERA REGION | Nile Perch | Tilapia  | Dagaa    | Haplochr | Clarius | Protopterus | Bagrus | Others | Total     |
|---------------|------------|----------|----------|----------|---------|-------------|--------|--------|-----------|
| Chato         | 5,932.86   | 4,032.52 | 107.84   | 35.02    | 36.91   | 97.23       | 19.94  | 0.0    | 10,262.33 |
| Bukoba        | 607.38     | 193.17   | 2,262.86 | 90.28    | 28.18   | 12.30       | 27.88  | 1.09   | 3,223.14  |
| Muleba        | 12,568.24  | 98.22    | 5,498.20 | 159.93   | 25.60   | 9.82        | 110.82 | 1.19   | 18,472.03 |
| Sub Total     | 19,108.48  | 4,323.91 | 7,868.90 | 285.24   | 90.68   | 119.35      | 158.64 | 2.28   | 31,957.49 |

Table 12: Value of fish caught in Kagera region in 000's tshs by district and by species for 2012

| KAGERA<br>REGION | Nile Perch | Tilapia    | Dagaa      | Haplochr  | Clarius | Protopterus | Bagrus  | Others | Total       |
|------------------|------------|------------|------------|-----------|---------|-------------|---------|--------|-------------|
| Chato            | 21,824,662 | 14,834,084 | 396,719    | 128,833   | 135,768 | 357,668     | 73,358  | 0      | 37,751,093  |
| Bukoba           | 2,234,328  | 710,591    | 8,324,168  | 332,120   | 103,651 | 45,256      | 102,556 | 4,015  | 11,856,683  |
| Muleba           | 46,233,656 | 361,317    | 20,225,742 | 588,327   | 94,161  | 36,132      | 407,668 | 4,380  | 67,951,383  |
| Sub Total        | 70,292,647 | 15,905,992 | 28,946,629 | 1,049,280 | 333,580 | 439,055     | 583,582 | 8,394  | 117,559,159 |

Table13: Weight of fish caught in metric tons for Mara region by district and by species for 2012

| MARA REGION | Nile Perch | Tilapia  | Dagaa    | Haplochr | Clarius | Protopterus | Bagrus | Others | Total    |
|-------------|------------|----------|----------|----------|---------|-------------|--------|--------|----------|
| Bda         | 1 202 1    | 4 220 4  | 0.0      | 41.1     | FO 1    | 4.2         | 22.1   | 0.0    | F 7F7 0  |
| Bunda       | 1,302.1    | 4,328.4  | 0.0      | 41.1     | 59.1    | 4.2         | 22.1   | 0.0    | 5,757.0  |
| Musoma      | 6,748.8    | 939.0    | 8,512.4  | 291.8    | 39.2    | 4.1         | 20.4   | 0.0    | 16,555.7 |
| Tarime      | 4,586.0    | 4,991.8  | 14,533.0 | 50.0     | 32.9    | 1.0         | 44.1   | 0.0    | 24,238.9 |
| Rorya       | 7,351.1    | 1,782.7  | 5,056.8  | 1,325.7  | 246.8   | 35.6        | 33.5   | 19.3   | 15,851.5 |
| Sub Total   | 19,988.0   | 12,042.0 | 28,102.2 | 1,708.6  | 378.1   | 44.9        | 120.1  | 19.3   | 62,403.1 |

Table 14: Value of fish caught in Mara region in 000's tshs by district and by species for 2012

| MARA REGION | Nile Perch | Tilapia    | Dagaa       | Haplochr  | Clarius   | Protopterus | Bagrus  | Others | Total       |
|-------------|------------|------------|-------------|-----------|-----------|-------------|---------|--------|-------------|
| Bunda       | 4,789,937  | 15,922,489 | 0           | 151,206   | 217,447   | 15,475      | 81,351  | 0      | 21,177,904  |
| Musoma      | 24,826,261 | 3,454,303  | 31,313,622  | 1,073,550 | 144,381   | 15,110      | 74,891  | 0      | 60,902,118  |
| Tarime      | 16,870,053 | 18,362,987 | 53,461,390  | 183,980   | 120,950   | 3,613       | 162,374 | 0      | 89,165,346  |
| Rorya       | 27,041,756 | 6,557,946  | 18,602,040  | 4,876,689 | 907,928   | 131,060     | 123,140 | 70,913 | 58,311,473  |
| Sub Total   | 73,528,006 | 44,297,725 | 103,377,052 | 6,285,425 | 1,390,707 | 165,257     | 441,756 | 70,913 | 229,556,842 |

Table 15: Weight of fish caught in metric tons for Mwanza region by district and by species for 2012

| MWANZA REGION | Nile Perch | Tilapia  | Dagaa    | Haplochr | Clarius | Protopterus | Bagrus | Others | Total     |
|---------------|------------|----------|----------|----------|---------|-------------|--------|--------|-----------|
| Geita         | 2,085.1    | 4,714.4  | 1,087.3  | 32.2     | 262.5   | 74.9        | 74.7   | 121.3  | 8,452.3   |
| Magu          | 6,696.1    | 2,663.4  | 324.3    | 67.1     | 86.9    | 19.3        | 34.9   | 18.3   | 9,910.4   |
| Misungwi      | 855.6      | 759.6    | 0.0      | 42.8     | 32.9    | 35.5        | 52.0   | 1.9    | 1,780.3   |
| Mwanza        | 8,875.4    | 750.2    | 4,034.0  | 1,919.0  | 43.2    | 30.8        | 36.6   | 0.0    | 15,689.3  |
| Sengerema     | 20,429.4   | 5,970.5  | 20,327.3 | 5,505.5  | 59.4    | 35.1        | 61.4   | 139.0  | 52,527.6  |
| Ukerewe       | 17,065.4   | 6,614.3  | 31,650.3 | 171.2    | 72.6    | 32.7        | 23.0   | 15.9   | 55,645.4  |
| Sub Total     | 56,007.1   | 21,472.5 | 57,423.2 | 7,737.8  | 557.4   | 228.3       | 282.5  | 296.2  | 144,005.2 |

Table 16: Value of fish caught in metric tons for Mwanza region by species and by month for 2012

| MWANZA<br>REGION | Nile Perch  | Tilapia    | Dagaa       | Haplochr   | Clarius   | Protopterus | Bagrus    | Others    | Total       |
|------------------|-------------|------------|-------------|------------|-----------|-------------|-----------|-----------|-------------|
| Geita            | 7,670,366   | 17,342,393 | 3,999,710   | 118,432    | 965,557   | 275,404     | 274,674   | 446,063   | 31,092,598  |
| Magu             | 24,632,208  | 9,797,649  | 1,193,077   | 246,973    | 319,675   | 70,913      | 128,541   | 67,336    | 36,456,372  |
| Misungwi         | 3,147,549   | 2,794,406  | -           | 157,337    | 120,950   | 130,695     | 191,170   | 6,825     | 6,548,932   |
| Mwanza           | 32,649,255  | 2,759,844  | 14,839,595  | 7,059,411  | 158,761   | 113,395     | 134,636   | 0         | 57,714,898  |
| sengerema        | 75,151,963  | 21,963,094 | 74,776,120  | 20,252,676 | 218,542   | 129,235     | 225,732   | 511,209   | 193,228,573 |
| Ukerewe          | 62,777,027  | 24,331,584 | 116,429,222 | 629,641    | 267,119   | 120,257     | 84,599    | 58,322    | 204,697,771 |
| Sub Total        | 206,028,368 | 78,988,971 | 211,237,724 | 28,464,471 | 2,050,604 | 839,899     | 1,039,353 | 1,089,755 | 529,739,144 |

Table 17: Weight of fish caught in m.tons for Lake Victoria by month and by species, 2012

| Species        | Jan      | Feb      | March    | Apr      | May      | June     | July     | Aug      | Sept     | Oct      | Nov      | Dec      | Totals    |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Nile perch     | 7,153.4  | 9,010.0  | 8,187.0  | 7,725.2  | 7,456.4  | 6,491.6  | 8,187.4  | 9,306.3  | 8,545.0  | 8,439.5  | 6,730.1  | 7,793.6  | 95,025.7  |
| Tilapiines     | 3,194.6  | 2,740.0  | 2,679.8  | 3,849.4  | 2,703.3  | 3,478.0  | 3,585.7  | 3,618.9  | 3,583.3  | 2,533.9  | 2,416.9  | 2,802.3  | 37,186.1  |
| Dagaa          | 7,186.4  | 6,847.4  | 9,379.2  | 8,356.1  | 7,680.5  | 7,696.3  | 7,585.0  | 8,874.8  | 6,839.3  | 7,105.8  | 7,522.8  | 8,722.0  | 93,795.8  |
| Haplochromines | 708.3    | 729.7    | 781.7    | 678.1    | 702.5    | 709.9    | 1,952.3  | 748.9    | 763.6    | 573.8    | 780.6    | 905.1    | 10,034.3  |
| Bagrus         | 135.4    | 76.9     | 76.8     | 77.7     | 67.8     | 95.6     | 96.3     | 86.7     | 77.1     | 87.8     | 76.0     | 88.2     | 1,042.4   |
| Clarias        | 10.7     | 14.0     | 16.4     | 13.8     | 17.7     | 38.3     | 31.9     | 103.4    | 84.7     | 31.7     | 12.1     | 14.1     | 388.7     |
| Protopterus    | 47.4     | 48.5     | 48.9     | 49.3     | 46.3     | 58.3     | 37.6     | 46.3     | 57.3     | 36.4     | 37.8     | 43.8     | 558.0     |
| Others         | 14.0     | 2.0      | 45.4     | 38.6     | 29.3     | 27.8     | 9.5      | 37.1     | 25.7     | 24.1     | 37.8     | 43.8     | 335.0     |
| Totals         | 18,450.1 | 19,468.5 | 21,215.2 | 20,788.3 | 18,703.8 | 18,595.9 | 21,485.6 | 22,822.3 | 19,976.2 | 18,832.9 | 17,614.1 | 20,412.8 | 238,365.9 |

Table 18: Value of fish caught in 000' tshs for Lake Victoria by month and by species 2012

| Species        | Jan        | Feb        | March      | Apr        | May        | June       | July       | Aug        | Sept       | Oct        | Nov        | Dec        | Totals      |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| Nile perch     | 26,314,426 | 33,144,385 | 30,116,763 | 28,418,169 | 27,429,145 | 23,880,168 | 30,118,114 | 34,234,396 | 31,433,893 | 31,045,787 | 24,757,512 | 28,669,668 | 349,562,426 |
| Tilapiines     | 11,751,797 | 10,079,554 | 9,857,800  | 14,160,362 | 9,944,553  | 12,794,253 | 13,190,388 | 13,312,433 | 13,181,593 | 9,321,116  | 8,890,783  | 10,308,571 | 136,793,203 |
| Dagaa          | 26,436,069 | 25,188,757 | 34,502,464 | 30,738,996 | 28,253,715 | 28,311,781 | 27,902,398 | 32,646,825 | 25,159,268 | 26,139,424 | 27,673,490 | 32,084,812 | 345,038,001 |
| Haplochromines | 2,605,391  | 2,684,224  | 2,875,394  | 2,494,551  | 2,584,150  | 2,611,523  | 7,181,569  | 2,754,809  | 2,809,116  | 2,110,642  | 2,871,452  | 3,329,450  | 36,912,270  |
| Bagrus         | 498,253    | 282,959    | 282,594    | 285,769    | 249,492    | 351,719    | 354,237    | 318,981    | 283,689    | 322,923    | 279,711    | 324,346    | 3,834,674   |
| Clarias        | 39,234     | 51,497     | 60,475     | 50,730     | 65,147     | 140,768    | 117,373    | 380,186    | 311,426    | 116,644    | 44,635     | 51,752     | 1,429,868   |
| Protopterus    | 174,235    | 178,578    | 180,002    | 181,389    | 170,294    | 214,564    | 138,250    | 170,294    | 210,951    | 133,906    | 138,980    | 161,133    | 2,052,575   |
| Others         | 51,497     | 7,190      | 167,045    | 141,972    | 107,629    | 102,227    | 34,927     | 136,461    | 94,672     | 88,578     | 138,980    | 161,133    | 1,232,312   |
| Totals         | 67,870,903 | 71,617,145 | 78,042,538 | 76,471,938 | 68,804,124 | 68,407,003 | 79,037,256 | 83,954,386 | 73,484,609 | 69,279,019 | 64,795,543 | 75,090,866 | 876,855,328 |

Table 19: Species percentage composition by months and by species for Lake Victoria, 2012

| Species        | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec | Totals |
|----------------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|--------|
| Nile perch     | 3.0 | 3.8 | 3.4 | 3.2 | 3.1 | 2.7  | 3.4  | 3.9 | 3.6  | 3.5 | 2.8 | 3.3 | 39.9   |
| Tilapiines     | 1.3 | 1.1 | 1.1 | 1.6 | 1.1 | 1.5  | 1.5  | 1.5 | 1.5  | 1.1 | 1.0 | 1.2 | 15.6   |
| Dagaa          | 3.0 | 2.9 | 3.9 | 3.5 | 3.2 | 3.2  | 3.2  | 3.7 | 2.9  | 3.0 | 3.2 | 3.7 | 39.3   |
| Haplochromines | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3  | 0.8  | 0.3 | 0.3  | 0.2 | 0.3 | 0.4 | 4.2    |
| Bagrus         | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0 | 0.0 | 0.4    |
| Clarias        | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0 | 0.0 | 0.2    |
| Protopterus    | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0 | 0.0 | 0.2    |
| Others         | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0 | 0.0  | 0.0 | 0.0 | 0.0 | 0.1    |
| Totals         | 7.7 | 8.2 | 8.9 | 8.7 | 7.8 | 7.8  | 9.0  | 9.6 | 8.4  | 7.9 | 7.4 | 8.6 | 100.0  |

## 4.2 LAKE TANGANYIKA FISHERY STATISTICS

Table 20: Fisheries statistics for Lake Tanganyika for 2012

| Item                                | Kigoma (MC<br>&DC) | Mpanda DC    | Nkasi DC      | Sumbawanga DC | Total          |
|-------------------------------------|--------------------|--------------|---------------|---------------|----------------|
| Number of landing sites             | 87                 | 20           | 114           | 18            | 239            |
| Number of Fishers                   | 10,573             | 2,483        | 10,733        | 2,823         | 26,612         |
| Number of Fishing vessels           | 4,782              | 1,018        | 4,683         | 1,023         | 11,506         |
| Total weight of fish in metric tons | 16,664.40          | 2,767.80     | 28,117.00     | 11,780.40     | 59,329.60      |
| Total value of fish in 000's TShs.  | 53,326,080.00      | 8,856,960.00 | 90,182,400.00 | 37,697,280.00 | 190,062,720.00 |
| Number of vessels sails             | -                  | 518          | -             | -             | 2,988          |
| Number of vessels paddled           | -                  | 26           | -             | 199           | 225            |
| Number of vessels with engine       | 755                | 14           | 154           | 79            | 1,002          |
| Number of Transport vessels         | 76                 | -            | -             | 16            | 92             |
| Number of Outboard engine           | 755                | 14           | 154           | 79            | 1,002          |
| Number of Lamps                     | 11,533             | -            | -             | 396           | 11,929         |
| Gears by Types                      |                    |              |               |               |                |
| Normal Lift nets                    | 1,301              | 162          | 397           | 32            | 1,891          |
| Apollo lift nets                    | 66                 | -            |               |               | 66             |
| Gill nets                           | 14,579             | 6,109        | 9,401         | 1,717         | 31,806         |
| Hand lines                          | 1,552              | 13,411       | 153           | 371           | 2,194          |
| Scoop nets                          | 60                 | 0            | 0             | 0             | 60             |
| Ring nets                           | 115                | 47           | 337           | 145           | 644            |
| Long lines                          | 78,171             | 191,428      | 245,028       | 22,499        | 537,126        |
| Traps                               | -                  | -            | 22            | -             | 22             |
| Beach Seine nets                    | 58                 | 1            | 3             | 4             | 66             |

Table 21: The estimated total catches (t) on Lake Tanganyika by district and by species 2012.

| TARGETED SPECIES                               | KIGOMA DC | KIGOMA<br>MC | S'WANGA<br>DC | NKASI DC | MPANDA<br>DC | PRODUCTION | %<br>Contribution |
|--|-----------|--------------|---------------|----------|--------------|------------|-------------------|
|  |           |              | -             |          |              |            |                   |
| Stolothrissa tanganicae (Dagaa)                | 5,194.0   | 8,873.8      | 4,961.4       | 1,313.2  | 1,076.8      | 21,419.2   | 38.5              |
| Limnothrisa miodon (Dagaa/Lumbu)               | 536.8     | 444.2        | 35.8          | 7.2      | 29.4         | 1,053.4    | 1.9               |
| Clarias gariepinus (Kambale/Mumi)              | 107.8     | 309.4        | 0             | 0        | 0            | 417.2      | 0.8               |
| Kavungwe                                       | 135.4     | 707.6        | 0             | 0        | 0            | 843.0      | 1.5               |
| Boulengerochromis microlepsi<br>(Kuhe/Inkumpi) | 271.4     | 1,019.2      | 49.2          | 191.8    | 15.0         | 1,546.6    | 2.8               |
| Kungura  | 747.8     | 1,146.0      | 0.0           | 130.6    | 0.0          | 2,024.4    | 3.6               |
| Hydrocynus vittatus (tiger fish) (Manje)       | 30.0      | 0            | 0             | 0        | 0            | 30.0       | 0.1               |
| Masembe  | 1,671.2   | 0            | 0             | 0        | 0            | 1,671.2    | 3.0               |
| Bathybatus minor (Mbanga/Lembela)              | 94.4      | 953.2        | 0             | 147.4    | 19.4         | 1,214.6    | 2.2               |
| Labeo lineatus (Mbilingi)                      | 0.0       | 154.6        | 0             | 19.0     | 11.6         | 185.4      | 0.3               |
| Bagrus docmak (Mbofu/Kibogobogo)               | 0.0       | 740.0        | 0             | 0        | 0            | 740.0      | 1.3               |
| Lates stappersii Mgebuka/Mvolo                 | 3,765.0   | 7,293.4      | 6,212.4       | 94.8     | 1,546.2      | 18,911.8   | 34.0              |
| Hemibates stenosoma (Mpande)                   | 0         | 0            | 255.8         | 417.4    | 207.6        | 880.8      | 1.6               |
| O.tanganicae (Serotheron) (Ngege)              | 122.4     | 38.6         | 45.2          | 55.6     | 0            | 261.8      | 0.5               |
| Synodontis lacustricolus Ngogo/Kolokolo        | 0         | 446.0        | 0             | 0        | 0            | 446.0      | 0.8               |
| Malapterurus electricus (Nyika)                | 30.0      | 657.4        | 0             | 19.6     | 0            | 707.0      | 1.3               |
| Lates anguistifrons (Sangara)                  | 367.6     | 1,901.8      | 0             | 87.0     | 2.8          | 2,359.0    | 4.2               |

| Lates mariae (Sangara/Ng'omba) | 195.8    | 439.6    | 220.6    | 0       | 0       | 856.0    | 1.5   |
|--------------------------------|----------|----------|----------|---------|---------|----------|-------|
| TOTAL                          | 13,269.6 | 25,124.8 | 11,780.4 | 2,483.6 | 2,908.8 | 55,567.4 | 100.0 |

Table 22: The Value of catches on Lake Tanganyika (T.shs in 000') as estimated during for 2012.

| SPECIES                                     | KIGOMA DC     | KIGOMA<br>MC | SUMBAWANGA<br>DC | MPANDA DC    | NKASI DC      | TOTAL          |
|---|---------------|--------------|------------------|--------------|---------------|----------------|
| Stolothrissa tanganicae (Dagaa)             | 16,620,800.00 | 3,445,760.00 | 15,876,480.00    | 4,202,240.00 | 28,396,160.00 | 68,541,440.00  |
| Limnothrisa miodon (Dagaa/Lumbu)            | 1,653,760.00  | 94,080.00    | 114,560.00       | 23,040.00    | 1,421,440.00  | 3,306,880.00   |
| Clarias gariepinus (Kambale/Mumi)           | 376,960.00    | -            | -                | -            | 1,022,080.00  | 1,399,040.00   |
| Auchenoglanis occidentalis (Kavungwe)       | -             | -            | -                | -            | 2,296,320.00  | 2,296,320.00   |
| Boulengerochromis microlepsi (Kuhe/Inkumpi) | 900,480.00    | 48,000.00    | 157,440.00       | 613,760.00   | 3,261,440.00  | 4,981,120.00   |
| Tylochromis Polylepis (Kungura)             | 2,399,360.00  | -            | -                | 417,920.00   | 3,667,200.00  | 6,484,480.00   |
| Hydrocynus vittatus (tiger fish) (Manje)    | 156,800.00    | -            | -                | -            | -             | 156,800.00     |
| Haplochromis spp (Masembe)                  | 5,379,840.00  | -            | 1                | •            | 1             | 5,379,840.00   |
| Bathybatus minor (Mbanga/Lembela)           | 302,080.00    | 62,080.00    | -                | 471,680.00   | 3,050,240.00  | 3,886,080.00   |
| Labeo lineatus (Mbilingi)                   | -             | 37,120.00    | -                | 60,800.00    | 510,720.00    | 608,640.00     |
| Bagrus docmak (Mbofu/Kibogobogo)            | -             | -            | -                | -            | 2,368,000.00  | 2,368,000.00   |
| Lates stappersii Mgebuka/Mvolo              | 12,112,000.00 | 4,947,840.00 | 19,879,680.00    | 303,360.00   | 23,338,880.00 | 60,581,760.00  |
| Hemibates stenosoma (Mpande)                | -             | 664,320.00   | 818,560.00       | 1,335,680.00 | -             | 2,818,560.00   |
| O.tanganicae (Serotheron) (Ngege)           | 414,080.00    | -            | 144,640.00       | 177,920.00   | 123,520.00    | 860,160.00     |
| Synodontis lacustricolus Ngogo/Kolokolo     | -             | -            | -                | -            | 1,427,200.00  | 1,427,200.00   |
| Malapterurus electricus (Nyika)             | 109,440.00    | -            | -                | 62,720.00    | 2,103,680.00  | 2,275,840.00   |
| Lates anguistifrons (Sangara)               | 1,176,320.00  | 8,960.00     | -                | 278,400.00   | 6,149,760.00  | 7,613,440.00   |
| Lates mariae (Sangara/Ng'omba)              | 626,560.00    | 16,000.00    | 705,920.00       | 12,800.00    | 1,406,720.00  | 2,768,000.00   |
| Lates microlepis Sangara/Nonzi              | 1,023,360.00  | 1,920.00     | -                | -            | 469,760.00    | 1,495,040.00   |
| Others                                      | 549,120.00    | 199,040.00   | -                | 896,640.00   | 9,169,280.00  | 10,814,080.00  |
| TOTAL                                       | 43,800,960.00 | 9,525,120.00 | 37,697,280.00    | 8,856,960.00 | 90,182,400.00 | 190,062,720.00 |

Table 23: Species percentage composition by district for Lake Tanganyika – 2012

| SPECIES                                     | KIGOMA DC | KIGOMA MC | SUMBAWANGA DC | MPANDA DC | NKASI DC |
|---|-----------|-----------|---------------|-----------|----------|
| Stolothrissa tanganicae (Dagaa)             | 37.9      | 36.2      | 42.1          | 47.4      | 31.6     |
| Limnothrisa miodon (Dagaa/Lumbu)            | 3.8       | 1.0       | 0.3           | 0.3       | 1.6      |
| Clarias gariepinus (Kambale/Mumi)           | 0.9       | 0.0       | 0.0           | 0.0       | 1.1      |
| Auchenoglanis occidentalis (Kavungwe)       | 0.0       | 0.0       | 0.0           | 0.0       | 2.6      |
| Boulengerochromis microlepsi (Kuhe/Inkumpi) | 2.1       | 0.5       | 0.4           | 6.9       | 3.6      |
| Tylochromis Polylepis (Kungura)             | 5.5       | 0.0       | 0.0           | 4.7       | 4.1      |
| Hydrocynus vittatus (tiger fish) (Manje)    | 0.4       | 0.0       | 0.0           | 0.0       | 0.0      |
| Haplochromis spp (Masembe)                  | 12.3      | 0.0       | 0.0           | 0.0       | 0.0      |
| Bathybatus minor (Mbanga/Lembela)           | 0.7       | 0.7       | 0.0           | 5.3       | 3.4      |
| Labeo lineatus (Mbilingi)                   | 0.0       | 0.4       | 0.0           | 0.7       | 0.6      |
| Bagrus docmak (Mbofu/Kibogobogo)            | 0.0       | 0.0       | 0.0           | 0.0       | 2.6      |
| Lates stappersii Mgebuka/Mvolo              | 27.7      | 51.9      | 52.7          | 3.4       | 25.9     |
| Hemibates stenosoma (Mpande)                | 0.0       | 7.0       | 2.2           | 15.1      | 0.0      |
| O.tanganicae (Serotheron) (Ngege)           | 0.9       | 0.0       | 0.4           | 2.0       | 0.1      |
| Synodontis lacustricolus Ngogo/Kolokolo     | 0.0       | 0.0       | 0.0           | 0.0       | 1.6      |
| Malapterurus electricus (Nyika)             | 0.2       | 0.0       | 0.0           | 0.7       | 2.3      |
| Lates anguistifrons (Sangara)               | 2.7       | 0.1       | 0.0           | 3.1       | 6.8      |
| Lates mariae (Sangara/Ng'omba)              | 1.4       | 0.2       | 1.9           | 0.1       | 1.6      |
| Lates microlepis Sangara/Nonzi              | 2.3       | 0.0       | 0.0           | 0.0       | 0.5      |
| Others                                      | 1.3       | 2.1       | 0.0           | 10.1      | 10.2     |
| TOTAL PRODUCTION                            | 100       | 100       | 100           | 100       | 100      |

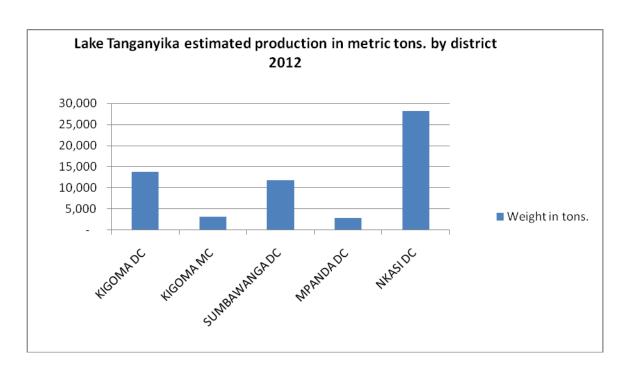


Figure 6 : Lake Tanganyika estimated production by district in metric tons. For 2012

#### 4.3 MARINE WATER FISHERY STATISTICS.

Table 24: Artisanal fisheries statistics for Marine water of Tanzania mainland, 2012

| ltem                                | Coast      | DSM        | Lindi      | Mtwara     | Tanga      | Totals      |
|-------------------------------------|------------|------------|------------|------------|------------|-------------|
| Total number of Landing sites       | 100        | 23         | 47         | 28         | 59         | 257         |
| Total number of Fishermen           | 12417      | 7430       | 5272       | 5792       | 5410       | 36,321      |
| Total number of Fishing vessels     | 3130       | 1184       | 1047       | 1111       | 1192       | 7,664       |
| Total weight of fish in metric tons | 9,692.75   | 19,454.53  | 4,481.45   | 3,660.96   | 12,789.58  | 50,079.27   |
| Total value of fish in 000's TShs.  | 33,924,640 | 68,090,859 | 15,685,077 | 12,813,346 | 44,763,527 | 175,277,449 |
| Number of Fishing gears by type ar  | nd size    |            |            |            |            |             |
| Number of Gill nets                 | 16740      | 431        | 524        | 1084       | 1161       | 19,940      |
| Number of Shark nets                | 1294       | 247        | 588        | 714        | 890        | 3,733       |
| Number of Traps                     | 1060       | 634        | 456        | 1196       | 1328       | 4,674       |
| Number of hand lines                | 2508       | 2462       | 1311       | 2963       | 4826       | 13,955      |
| Number of Long lines                | 9020       | 3          | 167        | 2          | 245        | 9,437       |
| Number of Beach seines              | 42         | 50         | 21         | 498        | 168        | 768         |
| Number of Ring nets                 | 417        | 235        | 70         | 154        | 83         | 1,241       |
| Number of Purse seine               | 0          | 0          | 0          | 0          | 0          | -           |
| Number of cast nets                 | 111        | 43         | 18         | 0          | 57         | 229         |
| Number of Scoop nets                | 0          | 27         | 0          | 0          | 13         | 40          |
| Number of Spears                    | 648        | 44         | 117        | 420        | 86         | 1,315       |
| Number of Trawl nets                | 3          | 0          | 0          | 0          | 0          | 3           |
| Number of Fences                    | 0          | 0          | 0          | 0          | 0          | -           |
| TOTAL                               |            |            |            |            |            | 55,335      |
| Engines                             |            |            |            |            |            |             |
| Number of Outboard engines          | 156        | 316        | 94         | 41         | 130        | 737         |
| Number of Inboard engines           | 14         | 64         | 2          | 0          | 14         | 94          |

Table 25: Weight of fish caught in metric tons for Tanga region by district and by month for 2012

| District | JAN     | FEB     | MARCH | APR     | MAY     | JUNE    | JULY    | AUG     | SEPT    | ОСТ   | NOV   | DEC     | Total    |
|----------|---------|---------|-------|---------|---------|---------|---------|---------|---------|-------|-------|---------|----------|
| Muheza   | 188.6   | 196.6   | 189.4 | 273.1   | 272.7   | 225.6   | 183.2   | 199.1   | 250.5   | 147.0 | 222.4 | 227.1   | 2575.2   |
| Pangani  | 159.4   | 141.0   | 135.7 | 316.8   | 315.8   | 232.9   | 189.4   | 275.8   | 255.3   | 220.3 | 212.1 | 230.2   | 2684.6   |
| Tanga    | 440.5   | 373.3   | 336.9 | 275.2   | 282.2   | 325.5   | 368.5   | 323.3   | 338.9   | 319.7 | 275.6 | 304.7   | 3964.2   |
| Mkinga   | 413.2   | 367.0   | 296.8 | 220.5   | 220.0   | 285.4   | 324.7   | 275.1   | 308.7   | 296.0 | 262.6 | 295.9   | 3565.8   |
| Totals   | 1,201.6 | 1,077.9 | 958.7 | 1,085.5 | 1,090.7 | 1,069.4 | 1,065.8 | 1,073.1 | 1,153.5 | 983.0 | 972.6 | 1,057.9 | 12,789.6 |

Table 26: Value of fish in 000's tshs for Tanga region by district and by month for 2012

| District | JAN       | FEB       | MARCH     | APR       | MAY       | JUNE      | JULY      | AUG       | SEPT      | ОСТ       | NOV       | DEC       | Total      |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Muheza   | 669,417   | 697,881   | 672,228   | 969,513   | 968,107   | 800,841   | 650,442   | 706,666   | 889,394   | 521,829   | 789,596   | 806,112   | 9,142,026  |
| Pangani  | 565,754   | 500,394   | 481,770   | 1,124,480 | 1,120,966 | 826,845   | 672,228   | 979,001   | 906,261   | 782,217   | 753,051   | 817,357   | 9,530,323  |
| Tanga    | 1,563,731 | 1,325,130 | 1,195,815 | 976,892   | 1,001,842 | 1,155,404 | 1,308,263 | 1,147,673 | 1,203,194 | 1,135,022 | 978,298   | 1,081,610 | 14,072,873 |
| Mkinga   | 1,466,744 | 1,302,992 | 1,053,498 | 782,920   | 780,811   | 1,013,087 | 1,152,592 | 976,541   | 1,096,017 | 1,050,686 | 932,265   | 1,050,335 | 12,658,487 |
| Totals   | 4,265,646 | 3,826,396 | 3,403,310 | 3,853,805 | 3,871,727 | 3,796,176 | 3,783,525 | 3,809,880 | 4,094,866 | 3,489,755 | 3,453,209 | 3,755,413 | 45,403,709 |

Table 27: Weight of fish caught in metric tons for Coast region by district and by month for 2012

| District | JAN    | FEB    | MARCH  | APR    | MAY    | JUNE   | JULY   | AUG    | SEPT   | OCT      | NOV    | DEC    | Total    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|----------|
| Mafia    | 227.69 | 155.23 | 213.72 | 261.41 | 223.23 | 238.52 | 290.91 | 292.39 | 398.29 | 300.05   | 300.21 | 311.34 | 3,212.99 |
| Rufiji   | 8.45   | 34.53  | 27.67  | 20.93  | 96.75  | 144.10 | 122.69 | 186.78 | 134.99 | 234.89   | 178.08 | 213.65 | 1,403.50 |
| Mkuranga | 227.92 | 113.02 | 237.42 | 194.86 | 217.85 | 145.25 | 246.20 | 149.81 | 123.21 | 190.63   | 222.74 | 211.24 | 2,280.13 |
| Bagamoyo | 125.91 | 187.03 | 149.64 | 304.29 | 146.08 | 194.68 | 318.55 | 281.88 | 252.87 | 304.37   | 298.58 | 232.23 | 2,796.12 |
| Totals   | 589.97 | 489.81 | 628.44 | 781.49 | 683.91 | 722.55 | 978.35 | 910.86 | 909.35 | 1,029.95 | 999.61 | 968.46 | 9,692.75 |

Table 28: Value of fish in 000's tshs for Coast region by district and by month for 2012

| District | JAN       | FEB       | MARCH     | APR       | MAY       | JUNE      | JULY      | AUG       | SEPT      | ОСТ       | NOV       | DEC       | Total      |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Mafia    | 808,291   | 551,066   | 758,708   | 928,013   | 792,478   | 846,734   | 1,032,730 | 1,038,001 | 1,413,929 | 1,065,164 | 1,065,761 | 1,105,259 | 11,406,132 |
| Rufiji   | 30,010    | 122,568   | 98,216    | 74,286    | 343,458   | 511,568   | 435,560   | 663,057   | 479,204   | 833,873   | 632,169   | 758,462   | 4,982,432  |
| Mkuranga | 809,099   | 401,229   | 842,833   | 691,766   | 773,361   | 515,645   | 874,002   | 531,809   | 437,388   | 676,726   | 790,721   | 749,888   | 8,094,467  |
| Bagamoyo | 446,981   | 663,971   | 531,212   | 1,080,239 | 518,596   | 691,099   | 1,130,841 | 1,000,682 | 897,687   | 1,080,520 | 1,059,963 | 824,420   | 9,926,211  |
| Totals   | 2,094,380 | 1,738,833 | 2,230,969 | 2,774,304 | 2,427,894 | 2,565,045 | 3,473,134 | 3,233,549 | 3,228,208 | 3,656,283 | 3,548,614 | 3,438,029 | 34,409,242 |

Table 29: Weight of fish caught in metric tons for Dar es Salaam region by district and by month for 2012

| District  | JAN      | FEB      | MARCH    | APR      | MAY      | JUNE     | JULY     | AUG      | SEPT     | ОСТ      | NOV      | DEC      | Total     |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| llala     | 780.23   | 962.09   | 1,088.84 | 1,646.83 | 1,187.57 | 1,457.02 | 908.87   | 1,075.49 | 688.54   | 900.53   | 870.39   | 688.59   | 12,255.00 |
| Kinondoni | 387.20   | 215.34   | 402.10   | 498.43   | 279.59   | 321.72   | 408.12   | 442.10   | 540.26   | 410.87   | 329.74   | 291.20   | 4,526.68  |
| Temeke    | 214.05   | 105.75   | 210.29   | 287.23   | 238.27   | 274.06   | 296.99   | 231.25   | 217.20   | 201.70   | 196.08   | 199.99   | 2,672.86  |
| Totals    | 1,381.48 | 1,283.18 | 1,701.22 | 2,432.49 | 1,705.43 | 2,052.81 | 1,613.98 | 1,748.84 | 1,446.00 | 1,513.11 | 1,396.22 | 1,179.77 | 19,454.53 |

Table 30: Value of fish in 000's tshs for Dar es Salaam region by district and by month for 2012

| District  | JAN       | FEB       | MARCH     | APR       | MAY       | JUNE      | JULY      | AUG       | SEPT      | ОСТ       | NOV       | DEC       | Total      |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| llala     | 2,769,806 | 3,415,434 | 3,865,366 | 5,846,244 | 4,215,888 | 5,172,434 | 3,226,486 | 3,817,998 | 2,444,304 | 3,196,898 | 3,089,897 | 2,444,480 | 43,505,235 |
| Kinondoni | 1,374,572 | 764,471   | 1,427,458 | 1,769,440 | 992,530   | 1,142,121 | 1,448,823 | 1,569,458 | 1,917,907 | 1,458,592 | 1,170,584 | 1,033,749 | 16,069,704 |
| Temeke    | 759,868   | 375,401   | 746,514   | 1,019,658 | 845,855   | 972,922   | 1,054,306 | 820,941   | 771,077   | 716,048   | 696,089   | 709,969   | 9,488,647  |
| Totals    | 4,904,246 | 4,555,305 | 6,039,338 | 8,635,342 | 6,054,273 | 7,287,477 | 5,729,614 | 6,208,397 | 5,133,288 | 5,371,538 | 4,956,569 | 4,188,198 | 69,063,586 |

| District | JAN    | FEB    | MARCH  | APR    | MAY    | JUNE   | JULY   | AUG    | SEPT   | ОСТ    | NOV    | DEC    | Total    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| Kilwa    | 201.81 | 177.98 | 196.04 | 124.61 | 183.28 | 225.49 | 123.04 | 153.82 | 95.88  | 144.83 | 170.56 | 176.53 | 1,973.88 |
| Lindi    | 192.26 | 206.94 | 220.72 | 143.04 | 185    | 344.21 | 137.02 | 216.06 | 170.7  | 242.2  | 255.76 | 193.66 | 2,507.57 |
| Totals   | 394.08 | 384.92 | 416.77 | 267.65 | 368.28 | 569.7  | 260.06 | 369.88 | 266.58 | 387.03 | 426.32 | 370.19 | 4,481.45 |

Table 32: Value of fish caught in 000's tshs for Lindi region by district and by month for 2012

| District | JAN       | FEB       | MARCH     | APR     | MAY       | JUNE      | JULY    | AUG       | SEPT    | ОСТ       | NOV       | DEC       | Total      |
|----------|-----------|-----------|-----------|---------|-----------|-----------|---------|-----------|---------|-----------|-----------|-----------|------------|
| Kilwa    | 706,344   | 622,919   | 686,146   | 436,147 | 641,488   | 789,215   | 430,638 | 538,385   | 335,572 | 506,892   | 596,969   | 617,860   | 6,908,576  |
| Lindi    | 672,911   | 724,290   | 772,516   | 500,656 | 647,517   | 1,204,748 | 479,557 | 756,198   | 597,454 | 847,696   | 895,160   | 677,796   | 8,776,501  |
| Totals   | 1,379,255 | 1,347,209 | 1,458,662 | 936,803 | 1,289,005 | 1,993,963 | 910,196 | 1,294,583 | 933,027 | 1,354,588 | 1,492,129 | 1,295,657 | 15,685,077 |

Table 33 : Weight of fish caught in metric tons for Mtwara region by district and by month for 2012

| District | JAN   | FEB   | MARCH | APR   | MAY   | JUNE  | JULY  | AUG   | SEPT  | ОСТ   | NOV   | DEC   | Total  |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Mtwara   | 473.2 | 333.1 | 323.3 | 379.3 | 348.1 | 293.0 | 276.0 | 200.7 | 273.2 | 295.0 | 220.7 | 245.4 | 3661.0 |
| Totals   | 473.2 | 333.1 | 323.3 | 379.3 | 348.1 | 293.0 | 276.0 | 200.7 | 273.2 | 295.0 | 220.7 | 245.4 | 3661.0 |

Table 34: Value of fish caught in 000's tshs for Mtwara region by district and by month for 2012

| District | JAN       | FEB       | MARCH     | APR       | MAY       | JUNE      | JULY    | AUG     | SEPT    | ОСТ       | NOV     | DEC     | Total      |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|-----------|---------|---------|------------|
| Mtwara   | 1,656,347 | 1,165,946 | 1,131,474 | 1,327,600 | 1,218,260 | 1,025,564 | 965,940 | 702,464 | 956,343 | 1,032,354 | 772,274 | 858,782 | 12,813,346 |
| Totals   | 1,656,347 | 1,165,946 | 1,131,474 | 1,327,600 | 1,218,260 | 1,025,564 | 965,940 | 702,464 | 956,343 | 1,032,354 | 772,274 | 858,782 | 12,813,346 |

Table 35 : Weight of fish caught in metric tons for Marine waters by region and by month for 2012

| Regions       | January | February | March   | April   | May     | June    | July    | August  | September | October | November | December | Total    |
|---------------|---------|----------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|----------|
| Tanga         | 1,201.6 | 1,077.9  | 958.7   | 1,085.5 | 1,090.7 | 1,069.4 | 1,065.8 | 1,073.1 | 1,153.5   | 983.0   | 972.6    | 1,057.9  | 12,789.6 |
| Coast         | 590.0   | 489.8    | 628.4   | 781.5   | 683.9   | 722.6   | 978.4   | 910.9   | 909.4     | 1,030.0 | 999.6    | 968.5    | 9,692.8  |
| Lindi         | 394.1   | 384.9    | 416.8   | 267.7   | 368.3   | 569.7   | 260.1   | 369.9   | 266.6     | 387.0   | 426.3    | 370.2    | 4,481.5  |
| Mtwara        | 473.2   | 333.1    | 323.3   | 379.3   | 348.1   | 293.0   | 276.0   | 200.7   | 273.2     | 295.0   | 220.7    | 245.4    | 3,661.0  |
| Dar es salaam | 1,381.5 | 1,283.2  | 1,701.2 | 2,432.5 | 1,705.4 | 2,052.8 | 1,614.0 | 1,748.8 | 1,446.0   | 1,513.1 | 1,396.2  | 1,179.8  | 19,454.5 |
| Total         | 4,040.4 | 3,568.9  | 4,028.4 | 4,946.4 | 4,196.4 | 4,707.4 | 4,194.1 | 4,303.4 | 4,048.7   | 4,208.1 | 4,015.4  | 3,821.7  | 50,079.3 |

Table 36: Value of fish in 000's tshs for Marine waters by region and by month for 2012

| Regions          | January    | February   | March      | April      | May        | June       | July       | August     | September  | October    | November   | December   | Total       |
|------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| Tanga            | 4,265,680  | 3,826,545  | 3,403,385  | 3,853,525  | 3,871,985  | 3,796,370  | 3,783,590  | 3,809,505  | 4,094,925  | 3,489,650  | 3,452,730  | 3,755,545  | 45,403,035  |
| Coast            | 2,094,500  | 1,738,790  | 2,230,820  | 2,774,325  | 2,427,845  | 2,565,230  | 3,473,320  | 3,233,695  | 3,228,370  | 3,656,500  | 3,548,580  | 3,438,175  | 34,410,150  |
| Lindi            | 1,399,055  | 1,366,395  | 1,479,640  | 950,335    | 1,307,465  | 2,022,435  | 923,355    | 1,313,145  | 946,430    | 1,373,850  | 1,513,365  | 1,314,210  | 15,909,020  |
| Mtwara           | 1,679,860  | 1,182,505  | 1,147,715  | 1,346,515  | 1,235,755  | 1,040,150  | 979,800    | 712,485    | 969,860    | 1,047,250  | 783,485    | 871,170    | 12,996,520  |
| Dar es<br>salaam | 4,904,325  | 4,555,360  | 6,039,260  | 8,635,375  | 6,054,170  | 7,287,440  | 5,729,700  | 6,208,240  | 5,133,300  | 5,371,505  | 4,956,510  | 4,188,290  | 69,063,074  |
| Total            | 14,343,420 | 12,669,595 | 14,300,820 | 17,560,075 | 14,897,220 | 16,711,625 | 14,889,765 | 15,277,070 | 14,372,885 | 14,938,755 | 14,254,670 | 13,567,390 | 177,781,799 |

Table 37: Weight of fish in metric tons and by species for Marine 2012

| District/spp   | Muheza | Pangani | Tanga   | Mkinga | Mafia  | Rufiji | Mkuranga | Bagamoyo | Kilwa  | Lindi  | Mtwara | Ilala   | Kinondoni | Temeke | Total  |
|----------------|--------|---------|---------|--------|--------|--------|----------|----------|--------|--------|--------|---------|-----------|--------|--------|
| Acanthuridae   | 7.72   | 3.14    | 11.46   | 11.31  | 18.17  | ,      | 10.45    | <u> </u> | 6.87   | 11.48  | 17.09  | 6.51    | 94.64     | 94.64  | 293.5  |
| Aridae         | 52.05  | 71.41   | 48.92   | 59.16  | 24.5   | 81.01  | 307.07   | 60.08    |        | 16.82  | 25.8   | 3710.08 | 19.25     | 18.39  | 4494.5 |
| Caesionidae    | 0      | 0       | 54.27   | 73.58  | 59.75  | 0      | 0        | 0        | 68.71  | 11.52  |        | 208.24  | 46.47     | 33.69  | 556.2  |
| Carangidae     | 131.45 | 72.64   | 114.22  | 104.05 | 173.16 | 25.65  | 230.64   | 56.19    | 148.76 | 49.83  | 162.57 | 193.38  | 277.92    | 173.17 | 1913.6 |
| Clariidae      | 0      | 5.61    | 0       | 11.69  | 6.69   | 2.39   | 0.95     | 0        | 0      | 14.42  | 0      | 0       | 0         | 0      | 41.8   |
| Chanidae       | 0      | 0       | 44.59   | 59.7   | 6.23   | 0      | 0        | 107.5    | 0      | 0      | 0      | 209.62  | 0         | 0      | 427.6  |
| Chirocentridae | 15.4   | 0       | 28.94   | 45.85  | 72.05  | 2.64   | 0        | 45.08    | 66.83  | 50.5   | 22.96  | 27.18   | 0         | 0      | 377.4  |
| Clupeidae      | 1.23   | 0       | 2111.48 | 94.53  | 31.47  | 52.13  | 164.37   | 775.89   | 0      | 192.48 | 449.26 | 3389.86 | 225.04    | 131.04 | 7618.8 |
| Gerridae       | 2.87   | 1.23    | 2.27    | 11.98  | 33.76  | 0      | 0        | 0        | 0      | 253.05 | 47.02  | 251.58  | 0.27      | 0.8    | 604.8  |
| Haemulidae     | 3.26   | 0.75    | 3.22    | 10.78  | 9.62   | 9.54   | 0        | 0        | 0      | 2.31   | 0      | 135.29  | 0         | 22.05  | 196.8  |
| Hemiramphidae  | 51.87  | 123.5   | 4.11    | 5.17   | 80.99  | 10.02  | 0        | 32.93    | 107.66 | 6.83   | 62.07  | 102.3   | 224.91    | 126.81 | 939.2  |
| Istiophoridae  | 66.21  | 3.05    | 57.26   | 31.89  | 9.66   | 0      | 0        | 0        | 0      | 2.77   | 0      | 96.23   | 240.05    | 163.91 | 671.1  |
| Labridae       | 13.84  | 104.11  | 19.95   | 182.7  | 34.95  | 0.12   | 0        | 164.67   | 47.9   | 2.41   | 80.03  | 128.33  | 530.31    | 235.32 | 1544.6 |
| Lethrinidae    | 734.86 | 323.42  | 66.34   | 76.46  | 217.67 | 34.48  | 180.33   | 72.71    | 220.82 | 53.21  | 333.83 | 401.66  | 894.54    | 533.33 | 4143.7 |
| Loliginidae    | 0      | 0       | 86.47   | 114.39 | 50.11  | 1.67   | 0        | 32.42    | 0      | 2.67   | 0      | 198.18  | 28.56     | 87.49  | 602.0  |
| Mugilidae      | 0.37   | 24.29   | 30.84   | 63.21  | 34.5   | 4.77   | 121.35   | 0        | 0      | 25.83  | 0.74   | 0       | 0         | 0      | 305.9  |
| Mullidae       | 3.19   | 0       | 32.71   | 114.45 | 33.86  | 0      | 9.5      | 4.78     | 0      | 17.15  | 6.02   | 190.42  | 1.55      | 0.97   | 414.6  |
| Nemipteridae   | 49.71  | 46.77   | 50.84   | 171.68 | 10.32  | 0      | 0        | 293.51   | 0      | 348.05 | 5.61   | 35.43   | 45.82     | 13.42  | 1071.2 |
| Octopodidae    | 38.25  | 275.73  | 47.83   | 133.84 | 104.14 | 0.12   | 0        | 13.3     | 151.31 | 54.11  | 9.82   | 285.76  | 52.32     | 84.64  | 1251.2 |
| Others         | 260.73 | 173.36  | 225.45  | 230.43 | 337.9  | 304.19 | 363.68   | 76.91    | 222.6  | 326.49 | 685.05 | 94.94   | 34.57     | 25.05  | 3361.3 |
| Palinuridae    | 0.64   | 229.32  | 0       | 144.49 | 9.62   | 7.87   | 9.41     | 30.42    | 13.76  | 0      | 0      | 25.33   | 0         | 0      | 470.9  |
| Penaeidae      | 0.74   | 0       | 0       | 0      | 10.76  | 661.7  | 406.43   | 104.56   | 0      | 0.95   | 0      | 205.78  | 0         | 0      | 1390.9 |
| Rachycentridae | 291.24 | 8.86    | 83.92   | 137.84 | 10.09  | 1.08   | 1.14     | 13.3     | 0      | 58.3   | 28.83  | 64.91   | 57.44     | 66.86  | 823.8  |
| Rays           | 536.05 | 694.31  | 94.54   | 263.7  | 34.25  | 6.43   | 51.39    | 82.88    | 121.49 | 56.16  | 256.84 | 50.11   | 210.07    | 115.01 | 2573.2 |
| Scombridae(J)  | 32.97  | 2.08    | 276.06  | 279.42 | 193.11 | 105.83 | 113.12   | 92.35    | 0      | 24.2   | 69.1   | 209.44  | 523.66    | 142.91 | 2064.2 |
| Scombridae(N)  | 38.49  | 2.98    | 80.39   | 144.59 | 166.4  | 0      | 0        | 117.21   | 0      | 33.62  | 86.22  | 191     | 249.26    | 152.2  | 1262.4 |
| Scombridae (v) | 5.02   | 0       | 143.02  | 267.97 | 896.01 | 0.36   | 89.91    | 418.83   | 518.53 | 32.53  | 610.16 | 827.87  | 249.67    | 61.07  | 4121.0 |

| Serranidae   | 29.27   | 19.47   | 63.31   | 159.46  | 49.44   | 91.5    | 115.38  | 7.51    | 0       | 412.01  | 57.21   | 466.14   | 53.78   | 72.89   | 1597.4   |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|----------|
| Sharks       | 87.91   | 237.76  | 20.58   | 151.53  | 40.89   | 0       | 93.17   | 61.77   | 12.35   | 49.86   | 213.33  | 40.1     | 86.92   | 99.34   | 1195.5   |
| Siganidae    | 72.88   | 233.15  | 69.67   | 238.92  | 218.97  | 0       | 11.84   | 88.51   | 183.85  | 292.78  | 431.4   | 238.24   | 188.28  | 102.69  | 2371.2   |
| Sphyraenidae | 46.99   | 27.69   | 91.54   | 170.98  | 233.97  | 0       | 0       | 42.75   | 82.48   | 105.25  | 0       | 271.09   | 191.41  | 115.14  | 1379.3   |
| TOTAL        | 2,575.2 | 2,684.6 | 3,964.2 | 3,565.8 | 3,213.0 | 1,403.5 | 2,280.1 | 2,796.1 | 1,973.9 | 2,507.6 | 3,661.0 | 12,255.0 | 4,526.7 | 2,672.9 | 50,079.5 |

Table 38: Marine species percentage composition 2012

| District/spp      | Muhez<br>a | Pangan<br>i | Tang<br>a | Mking<br>a | Mafi<br>a | Rufij | Mkurang<br>a | Bagamoy<br>o | Kilw<br>a | Lindi  | Mtwar<br>a | Ilal<br>a | Kinondon | Temek<br>e | Total |
|-------------------|------------|-------------|-----------|------------|-----------|-------|--------------|--------------|-----------|--------|------------|-----------|----------|------------|-------|
| District/spp      | a          | •           | а         | а          |           | •     | а            | 0            | а         | Liliui | a          | а         |          | -          | iotai |
| Acanthuridae      | 0.0        | 0.0         | 0.0       | 0.0        | 0.0       | -     | 0.0          | -            | 0.0       | 0.0    | 0.0        | 0.0       | 0.2      | 0.2        | 0.6   |
| Aridae            | 0.1        | 0.1         | 0.1       | 0.1        | 0.1       | 0.2   | 0.6          | 0.1          | -         | 0.0    | 0.1        | 7.4       | 0.0      | 0.0        | 9.0   |
| Caesionidae       | -          | -           | 0.1       | 0.2        | 0.1       | -     | -            | -            | 0.1       | 0.0    | -          | 0.4       | 0.1      | 0.1        | 1.1   |
| Carangidae        | 0.3        | 0.2         | 0.2       | 0.2        | 0.4       | 0.1   | 0.5          | 0.1          | 0.3       | 0.1    | 0.3        | 0.4       | 0.6      | 0.4        | 3.8   |
| Clariidae         | -          | 0.0         | -         | 0.0        | 0.0       | 0.0   | 0.0          | -            | -         | 0.0    | -          | -         | -        | -          | 0.1   |
| Chanidae          | -          | -           | 0.1       | 0.1        | 0.0       | -     | -            | 0.2          | -         | -      | -          | 0.4       | -        | -          | 0.9   |
| Chirocentridae    | 0.0        | -           | 0.1       | 0.1        | 0.1       | 0.0   | -            | 0.1          | 0.1       | 0.1    | 0.1        | 0.1       | -        | -          | 0.8   |
| Clupeidae         | 0.0        | -           | 4.2       | 0.2        | 0.1       | 0.1   | 0.3          | 1.6          | -         | 0.4    | 0.9        | 6.8       | 0.5      | 0.3        | 15.2  |
| Gerridae          | 0.0        | 0.0         | 0.0       | 0.0        | 0.1       | -     | -            | •            | -         | 0.5    | 0.1        | 0.5       | 0.0      | 0.0        | 1.2   |
| Haemulidae        | 0.0        | 0.0         | 0.0       | 0.0        | 0.0       | 0.0   | -            | -            | -         | 0.0    | -          | 0.3       | -        | 0.0        | 0.4   |
| Hemiramphida<br>e | 0.1        | 0.3         | 0.0       | 0.0        | 0.2       | 0.0   | -            | 0.1          | 0.2       | 0.0    | 0.1        | 0.2       | 0.5      | 0.3        | 1.9   |

| Istiophoridae      | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | _   | _   | -   | l - | 0.0 | -   | 0.2      | 0.5 | 0.3 | 1.3       |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|-----------|
| Labridae           | 0.0 | 0.2 | 0.0 | 0.4 | 0.1 | 0.0 | =   | 0.3 | 0.1 | 0.0 | 0.2 | 0.3      | 1.1 | 0.5 | 3.1       |
| Lethrinidae        | 1.5 | 0.7 | 0.1 | 0.2 | 0.4 | 0.1 | 0.4 | 0.2 | 0.4 | 0.1 | 0.7 | 0.8      | 1.8 | 1.1 | 8.3       |
| Loliginidae        | -   | -   | 0.2 | 0.2 | 0.1 | 0.0 | -   | 0.1 | -   | 0.0 | -   | 0.4      | 0.1 | 0.2 | 1.2       |
| Mugilidae          | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | -   | -   | 0.1 | 0.0 | -        | -   | -   | 0.6       |
| Mullidae           | 0.0 | -   | 0.1 | 0.2 | 0.1 | -   | 0.0 | 0.0 | -   | 0.0 | 0.0 | 0.4      | 0.0 | 0.0 | 0.8       |
| Nemipteridae       | 0.1 | 0.1 | 0.1 | 0.3 | 0.0 | -   | -   | 0.6 | -   | 0.7 | 0.0 | 0.1      | 0.1 | 0.0 | 2.1       |
| Octopodidae        | 0.1 | 0.6 | 0.1 | 0.3 | 0.2 | 0.0 | -   | 0.0 | 0.3 | 0.1 | 0.0 | 0.6      | 0.1 | 0.2 | 2.5       |
| Others             | 0.5 | 0.4 | 0.5 | 0.5 | 0.7 | 0.6 | 0.7 | 0.2 | 0.4 | 0.7 | 1.4 | 0.2      | 0.1 | 0.1 | 6.7       |
| Palinuridae        | 0.0 | 0.5 | -   | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -   | -   | 0.1      | -   | -   | 0.9       |
| Penaeidae          | 0.0 | -   | -   | -   | 0.0 | 1.3 | 0.8 | 0.2 | -   | 0.0 | -   | 0.4      | -   | -   | 2.8       |
| Rachycentrida<br>e | 0.6 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | _   | 0.1 | 0.1 | 0.1      | 0.1 | 0.1 | 1.6       |
| Rays               | 1.1 | 1.4 | 0.2 | 0.5 | 0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.5 | 0.1      | 0.4 | 0.2 | 5.1       |
| Scombridae(J)      | 0.1 | 0.0 | 0.6 | 0.6 | 0.4 | 0.2 | 0.2 | 0.2 | -   | 0.1 | 0.1 | 0.4      | 1.1 | 0.3 | 4.1       |
| Scombridae(N)      | 0.1 | 0.0 | 0.2 | 0.3 | 0.3 | -   | ı   | 0.2 | -   | 0.1 | 0.2 | 0.4      | 0.5 | 0.3 | 2.5       |
| Scombridae<br>(v)  | 0.0 | -   | 0.3 | 0.5 | 1.8 | 0.0 | 0.2 | 0.8 | 1.0 | 0.1 | 1.2 | 1.7      | 0.5 | 0.1 | 8.2       |
| Serranidae         | 0.1 | 0.0 | 0.1 | 0.3 | 0.1 | 0.2 | 0.2 | 0.0 | -   | 0.8 | 0.1 | 0.9      | 0.1 | 0.2 | 3.2       |
| Sharks             | 0.2 | 0.5 | 0.0 | 0.3 | 0.1 | -   | 0.2 | 0.1 | 0.0 | 0.1 | 0.4 | 0.1      | 0.2 | 0.2 | 2.4       |
| Siganidae          | 0.2 | 0.5 | 0.1 | 0.5 | 0.4 | -   | 0.0 | 0.2 | 0.4 | 0.6 | 0.9 | 0.5      | 0.4 | 0.2 | 4.7       |
| Sphyraenidae       | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | -   | -   | 0.1 | 0.2 | 0.2 | -   | 0.5      | 0.4 | 0.2 | 2.8       |
| Total              | 5.1 | 5.4 | 7.9 | 7.1 | 6.4 | 2.8 | 4.6 | 5.6 | 3.9 | 5.0 | 7.3 | 24.<br>5 | 9.0 | 5.3 | 100.<br>0 |

#### 4.4 LAKE NYASA FISHERY STATISTICS

Table 39: Summary of Lake Nyasa fisheries Statistics – 2012

|     | Description                         | Mbeya(Kyela) | Ruvuma(Mbinga) | Iringa(Ludewa) | Total         |
|-----|-------------------------------------|--------------|----------------|----------------|---------------|
| 1   | Number of Landing sites             | 20           | 70             | 24             | 114           |
| 2   | Number of fishing vessels           | 669          | 1,357          | 606            | 2,632         |
| 3   | Number of fishers                   | 2,073        | 2,375          | 1,102          | 5,550         |
| 4   | Total weight of fish in metric tons | 2,116.80     | 6,807.20       | 2,380.80       | 10,899.25     |
| 5   | Total value of fish in 000's Tshs   | 6,561,928.21 | 21,102,199.71  | 7,380,342.14   | 39,959,000.00 |
| 6   | Fishing gears                       |              |                |                |               |
|     | Gillnets by size                    |              |                |                |               |
| 6.1 | GN < 2.5-3"                         | 355          | 14,329         | 549            | 15,233        |
| 6.2 | GN 3.5-5"                           | 141          | 3,098          | 707            | 3,946         |
|     | Total number of GN <5"              | 496          | 17,427         | 1,256          | 19,179        |
| 6.3 | GN 6"                               | 46           | 463            | 165            | 674           |
| 6.4 | GN 7"                               | 4            | 210            | 43             | 257           |
| 6.5 | GN 8"                               | 3            | 37             | 23             | 63            |
| 6.6 | GN 9"                               | 1            | 0              | 120            | 121           |
| 6.7 | GN 10"                              | 0            | 0              | 0              | 0             |
| 6.8 | GN > 10"                            | 3            | 0              | 0              | 3             |
|     | Total number of GN ≥ 5"             | 57           | 710            | 351            | 1,118         |
|     | Total number of Gillnets            | 553          | 18,137         | 1,607          | 20,297        |
| 7   | Ring nets                           |              |                |                |               |
| 7.1 | RN < 5 mm                           | 5            | 0              | 255            | 260           |
| 7.2 | RN 6 to 9 mm                        | 0            | 0              | 140            | 140           |

| 7.3   | RN 10 mm              | 1   | 0      | 0     | 1       |
|-------|-----------------------|-----|--------|-------|---------|
|       | Total Ring nets       |     |        |       | 401     |
| 8     | Lift Nets(mesh size)  |     |        |       |         |
| 8.1   | LN < 5 mm             | 1   | 0      | 237   | 238     |
|       | Total Lift nets       |     |        |       |         |
| 9     | Hooks                 |     |        |       |         |
| 9.1   | No. of Hand lines     | 102 | 190    | 0     | 292     |
| 9.2   | No. Long line hooks   |     |        |       |         |
| 9.2.1 | LL <4                 | 25  | 0      | 0     | 25      |
| 9.2.2 | LL 4-7                | 20  | 3,483  | 500   | 4,003   |
| 9.2.3 | LL 8-9                | 169 | 62,799 | 7,300 | 70,268  |
| 9.2.4 | LL >10                | 8   | 80,440 | 0     | 80,448  |
|       | Total Long line hooks |     |        |       | 155,036 |
| 10    | Other gears           |     |        |       |         |
| 10.1  | Traps                 | 26  | 523    | 5     | 554     |
| 10.2  | Light                 | 228 | 225    | 501   | 954     |

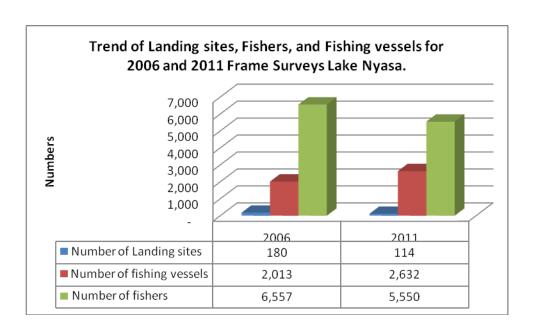


Figure 7: Total number of Lake Nyasa fishers, landing sites and fishing vessels for 2006 and 2011

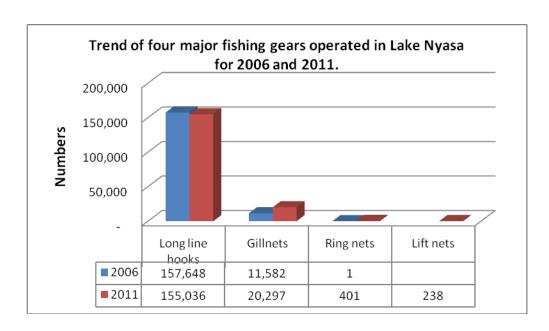


Figure 8: Trend of major fishing gears operated in Lake Nyasa for 2006 and 2011.

Table 40: Weight of fish caught in metric tons for Lake Nyasa 2012

| REGION          | January  | February | March  | April  | May    | June    | July   | August  | September | October | November | December | Total     |
|-----------------|----------|----------|--------|--------|--------|---------|--------|---------|-----------|---------|----------|----------|-----------|
| MBEYA (Kyela)   | 153.45   | 220.82   | 250.6  | 173.32 | 177.9  | 176.23  | 132.93 | 165.5   | 111.4     | 128.52  | 184.53   | 135.5    | 2,010.86  |
| IRINGA(Ludewa)  | 172.64   | 194.3    | 160.39 | 165.03 | 180.33 | 243.03  | 92.44  | 255.24  | 278.66    | 154.44  | 147.81   | 217.53   | 2,261.65  |
| RUVUMA( Mbinga) | 726.27   | 813.51   | 533    | 497.19 | 391.29 | 632.49  | 514.29 | 604.59  | 512.29    | 394.29  | 452.79   | 547.19   | 6,626.74  |
| TOTAL           | 1,052.36 | 1,228.63 | 943.99 | 835.54 | 749.52 | 1051.75 | 739.66 | 1025.33 | 902.35    | 677.25  | 785.13   | 900.22   | 10,890.00 |

Table 41: Value of fish caught in metric tons for Lake Nyasa 2012

| INLOIDIN   Dalidaly   I coldaly   Indicit   April   Indy   Dalic   Daly   August   Deptember   Detember   Dete | REGION | January | February | March | April | May | June | July | August | September | October | November | December | Total |
|--|--------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|-------|
|--|--------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|-------|

| MBEYA (Kyela)   | 562,580.8   | 809,573.7   | 918,753.6   | 635,428.5   | 652,219.8   | 646,097.2   | 487,350.0   | 606,758.7   | 408,416.4   | 471,182.0   | 676,526.8   | 3,300,400.6 | 7,371,659.6  |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| IRINGA(Ludewa)  | 632,935.5   | 712,345.7   | 588,024.3   | 605,035.6   | 661,128.7   | 891,000.4   | 338,905.0   | 935,764.9   | 1,021,627.6 | 566,210.3   | 541,903.3   | 797,511.9   | 8,292,393.0  |
| RUVUMA( Mbinga) | 2,662,662.4 | 2,982,503.0 | 1,964,348.4 | 1,822,805.7 | 1,434,553.5 | 2,329,100.2 | 1,882,301.4 | 2,216,557.3 | 1,878,165.6 | 1,445,552.1 | 1,670,281.3 | 2,006,116.5 | 24,294,947.4 |
| TOTAL           | 3,858,178.6 | 4,504,422.4 | 3,471,126.3 | 3,063,269.8 | 2,747,901.9 | 3,866,197.7 | 2,708,556.4 | 3,759,080.8 | 3,308,209.6 | 2,482,944.5 | 2,888,711.3 | 3,226,193.9 | 39,959,000.0 |

Table 42: Weight in metric tons by species and by month for Lake Nyasa, 2012

| MONTH     | TILAPIA | HAPLO   | RAMPHO  | LABEO  | BAGRUS  | CLARIAS | BARBAS | BARILIUS | DAGAA   | OTHERS | TOTAL     |
|-----------|---------|---------|---------|--------|---------|---------|--------|----------|---------|--------|-----------|
| JANUARY   | 302.13  | 332.9   | 105.8   | 17.57  | 85.55   | 47.08   | 14.73  | 84.99    | 57.89   | 3.66   | 1052.36   |
| FEBRUARY  | 276.74  | 287.59  | 67.34   | 56.63  | 176.46  | 63.74   | 81.77  | 70.35    | 90.97   | 57.4   | 1228.63   |
| MARCH     | 213.59  | 136.95  | 49.89   | 9.5    | 65.99   | 62.73   | 27.59  | 259.6    | 45.7    | 73.15  | 943.99    |
| APRIL     | 69.8    | 334.82  | 91.36   | 10.8   | 48.77   | 97.36   | 9.95   | 59.88    | 101.7   | 11.02  | 835.54    |
| MAY       | 80.74   | 194.14  | 194.14  | 2.3    | 32.62   | 44      | 14.05  | 88.06    | 119.8   | 27.33  | 749.52    |
| JUNE      | 95.55   | 131.23  | 145.77  | 2.43   | 44.28   | 51.52   | 48.67  | 262.26   | 207.88  | 11.65  | 1051.75   |
| JULY      | 79.49   | 93.45   | 72.33   | 3.06   | 11.5    | 33      | 19.02  | 235.22   | 141.9   | 50.64  | 739.66    |
| AUGUST    | 171.7   | 135.33  | 123.06  | 9.78   | 181.15  | 78.9    | 6.87   | 148.56   | 84.6    | 85.56  | 1025.33   |
| SEPTEMBER | 28.88   | 136.1   | 147.23  | 40.45  | 164.27  | 52.25   | 11.31  | 116.27   | 96.05   | 109.33 | 902.35    |
| OCTOBER   | 22.75   | 101.1   | 98.05   | 0      | 84.52   | 30.07   | 9.8    | 53.97    | 96.98   | 179.49 | 677.25    |
| NOVEMBER  | 24.38   | 102.33  | 115.21  | 0.39   | 188.84  | 14.9    | 6.03   | 21.44    | 223.79  | 88.1   | 785.13    |
| DECEMBER  | 153.3   | 96.86   | 120.63  | 129.36 | 100.23  | 99.33   | 3.3    | 75.53    | 102.02  | 19.2   | 900.22    |
| TOTAL     | 1,519.1 | 2,082.8 | 1,330.8 | 282.3  | 1,184.2 | 674.9   | 253.1  | 1,476.1  | 1,369.3 | 716.5  | 10,890.00 |

Table 43: Value of fish caught in metric in 000's tsh by species and by month for Lake NYASA, 2012

| MONTH     | TILAPIA   | HAPLO     | RAMPHO    | LABEO     | BAGRUS    | CLARIAS   | BARBAS  | BARILIUS  | DAGAA     | OTHERS    | TOTAL      |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|------------|
| JANUARY   | 1,108,615 | 1,221,520 | 388,215   | 64,470    | 313,911   | 172,752   | 54,049  | 311,856   | 212,417   | 13,430    | 3,861,236  |
| FEBRUARY  | 1,015,450 | 1,055,263 | 247,093   | 207,794   | 647,490   | 233,883   | 300,041 | 258,137   | 333,799   | 210,620   | 4,509,569  |
| MARCH     | 783,732   | 502,515   | 183,063   | 34,859    | 242,139   | 230,177   | 101,237 | 952,558   | 167,688   | 268,411   | 3,466,379  |
| APRIL     | 256,119   | 1,228,565 | 335,230   | 39,629    | 178,953   | 357,246   | 36,510  | 219,719   | 373,171   | 40,436    | 3,065,578  |
| MAY       | 296,262   | 712,364   | 712,364   | 8,439     | 119,694   | 161,451   | 51,554  | 323,121   | 439,586   | 100,283   | 2,925,116  |
| JUNE      | 350.604   | 481,526   | 534.878   | 8,916     | 162,478   | 189.044   | 178,586 | 962.318   | 762,780   | 42.748    | 3,673,880  |
| JULY      | 291,675   | 342,899   | 265,403   | 11,228    | 42,197    | 121,088   | 69,791  | 863,100   | 520,678   | 185,815   | 2,713,873  |
| AUGUST    | 630.024   | 496,570   | 451.548   | 35,886    | 664,699   | 289,510   | 25,208  | 545,116   | 310,425   | 313,948   | 3.762.934  |
| SEPTEMBER | 105.970   | 499,396   | 540,235   | 148,424   | 602,761   | 191,722   | 41,500  | 426,633   | 352,439   | 401.168   | 3,310,249  |
| OCTOBER   | 83,477    | 370,969   | 359.778   | -         | 310,132   | 110.337   | 35,959  | 198.034   | 355.852   | 658,608   | 2,483,145  |
| NOVEMBER  | 89,458    | 375.483   | 422,743   | 1,431     | 692,916   | 54,673    | 22,126  | 78.670    | 821.159   | 323,268   | 2.881.928  |
| DECEMBER  | 562,508   | 355,411   | 442,631   | 474,664   | 367,777   | 364,475   | 12,109  | 277,144   | 374,345   | 70,451    | 3,301,516  |
| TOTAL     | 5,573,895 | 7,642,480 | 4,883,181 | 1,035,742 | 4,345,147 | 2,476,357 | 928,671 | 5,416,408 | 5,024,340 | 2,629,185 | 39,959,000 |

Table 44: Species percentage composition by month for Lake Nyasa, 2012

| MONTH     | TILAPIA | HAPLO | RAMPHO | LABEO | BAGRUS | CLARIAS | BARBAS | BARILIUS | DAGAA | OTHERS | TOTAL |
|-----------|---------|-------|--------|-------|--------|---------|--------|----------|-------|--------|-------|
| JANUARY   | 2.8     | 3.1   | 12     | 0.16  | 0.8    | 0.4     | 0.1    | 0.8      | 0.5   | 0      | 9.6   |
| FEBRUARY  | 2.5     | 2.6   | 0.6    | 0.5   | 1.6    | 0.6     | 0.7    | 0.6      | 0.8   | 0.5    | 11.17 |
| MARCH     | 1.9     | 1.2   | 0.5    | 0.1   | 0.6    | 0.6     | 0.3    | 2.4      | 0.4   | 0.7    | 8.7   |
| APRIL     | 0.7     | 3.3   | 0.9    | 0.1   | 0.5    | 1       | 0.1    | 0.6      | 1     | 0.1    | 8.4   |
| MAY       | 0.7     | 1.7   | 1.3    | 0     | 0.3    | 0.4     | 0.1    | 0.8      | 1.1   | 0.2    | 6.79  |
| JUNE      | 0.9     | 1.2   | 1.8    | 0     | 0.4    | 0.5     | 0.4    | 2.4      | 1.9   | 0.1    | 9.6   |
| JULY      | 0.7     | 0.9   | 0.7    | 0     | 0.1    | 0.3     | 0.2    | 2.2      | 1.3   | 0.5    | 7.04  |
| AUGUST    | 1.6     | 1.3   | 1.1    | 0.1   | 1.7    | 0.7     | 0.1    | 1.4      | 0.8   | 0.8    | 9.3   |
| SEPTEMBER | 0.3     | 1.3   | 1.4    | 0.4   | 1.5    | 0.5     | 0.1    | 1.1      | 0.9   | 1      | 8.2   |
| OCTOBER   | 0.2     | 0.9   | 0.9    | 0     | 0.8    | 0.3     | 0.1    | 0.5      | 0.9   | 1.6    | 6.2   |
| NOVEMBER  | 0.2     | 1     | 1.1    | 0     | 1.8    | 0.1     | 0.1    | 0.2      | 2.1   | 0.8    | 7.2   |
| DECEMBER  | 1.4     | 0.9   | 1.1    | 1.2   | 0.9    | 0.9     | 0      | 0.7      | 0.9   | 0.2    | 7.8   |
| TOTAL     | 13.9    | 19.4  | 12.2   | 2.4   | 11     | 6.2     | 2.3    | 13.5     | 12.6  | 6.5    | 100   |

#### 4.5 LAKE RUKWA FISHERY STATISTICS

Table 45 Summary of Lake Rukwa fisheries Statistics 2012

|                                     | S/wanga<br>district |         |              |        | Totals        |
|-------------------------------------|---------------------|---------|--------------|--------|---------------|
| Item                                | Mbozi               | Chunya* | Sumbawanga   | Mpanda |               |
| Number of landing sites             | 9                   | 28      | 26           | 9      | 72            |
| Number of Fishermen                 | 490                 | 1031    | 674          | 1234   | 3429          |
| Total weight of fish in metric tons | 1,579.7             |         | 2,385.0      |        | 3,964.72      |
| Total value of fish in 000's Tshs   | 5,054,991.30        |         | 7,632,116.23 |        | 13,428,205.34 |
| Number of Fishing vessels           | 189                 | 679     | 583          | 335    | 1786          |
| Number of vessels sails             |                     |         | -            |        | -             |
| Number of vessels paddled           |                     |         | -            |        | -             |
| Number of vessels with engine       | 0                   |         | -            |        | -             |
| Number of Transport vessels         | -                   |         | 5            |        | 5             |
| Number of Outboard engine           | -                   |         | 12           |        | 12            |
| Number of Lamps                     | -                   |         | -            |        | -             |
| Gears by Types                      |                     |         | -            |        | -             |
| Number of Gill nets                 | 295                 | 2525    | 5647         | 5740   | 301743        |
| Number of Hand lines                | -                   |         | 5995         |        | 5995          |
| Number of scoop nets                | -                   |         | -            |        | -             |
| Number of Ring nets                 | -                   |         | -            |        | -             |
| Number of Long lines                | 4107                | 30998   | 0            | 0      | 35,105.00     |
| Number of traps                     | 295                 | 2537    | 0            | 0      | 2832          |

Table 46: Weight of fish caught in metric tons for Lake Rukwa 2012

| REGION   | January | February    | March  | April | Mav | June  | July | August   | September   | October | November                                | December | Total  |
|----------|---------|-------------|--------|-------|-----|-------|------|----------|-------------|---------|---|----------|--------|
| 11201011 | ounau,  | . ob. aa. j | 111011 | , .p  |     | 04.10 | ou.y | , lagaet | Coptollisol | 00.020. | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 200020.  | . 0 ta |

| MBEYA (Mbozi) | 117.8  | 179.87 | 141.9 | 172.7 | 108.3 | 123.58 | 123.49 | 141.1  | 122.55 | 91.7   | 123.2  | 133.55 | 1,579.70 |
|---------------|--------|--------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|----------|
| SUMBAWANGA    | 113.05 | 188.35 | 211.5 | 137.6 | 212   | 188.35 | 231.97 | 227.78 | 144.37 | 227.87 | 294.23 | 208.02 | 2,385.00 |
| TOTAL         | 230.8  | 368.2  | 353.3 | 310.3 | 320.3 | 311.9  | 355.5  | 368.9  | 266.9  | 319.6  | 417.4  | 341.6  | 3,964.70 |

#### Table 47: Value of fish caught in Metric tons for Lake Rukwa 2012

| REGION        | January | February  | March     | April   | May       | June    | July      | August    | September | October   | November  | December  | Total      |
|---------------|---------|-----------|-----------|---------|-----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| MBEYA (Mbozi) | 376,959 | 575,597   | 453,905   | 552,619 | 346,543   | 395,462 | 395,160   | 451,516   | 392,167   | 293,452   | 394,253   | 427,359   | 5,054,991  |
| SUMBAWANGA    | 361,751 | 602,717   | 676,700   | 440,209 | 678,484   | 602,717 | 742,308   | 728,884   | 461,977   | 729,186   | 941,520   | 665,664   | 7,632,116  |
| TOTAL         | 738,710 | 1,178,314 | 1,130,604 | 992,828 | 1,025,027 | 998,179 | 1,137,468 | 1,180,400 | 854,144   | 1,022,638 | 1,335,773 | 1,093,023 | 12,687,108 |

#### Table 48: Weight of fish caught in Metric tons for Lake Rukwa by Species and by Month – 2012

| SPECIES | January | February | March | April | May   | June  | July  | August | September | October | November | December | Total  |
|---------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|--------|
| ALESTES | 0       | 0.60     | 0.59  | 0.20  | 2.83  | 0     | 0     | 0      | 0         | 0.11    | 0        | 0.17     | 4.50   |
| CLARIAS | 21.0    | 34.3     | 19.9  | 14.2  | 12.4  | 8.1   | 10.6  | 40.6   | 6.8       | 24.7    | 40.5     | 16.2     | 249.2  |
| HYDROC  | 12.5    | 0.0      | 2.1   | 4.2   | 5.8   | 3.7   | 2.9   | 0.0    | 0.0       | 1.3     | 1.1      | 0.0      | 33.8   |
| SYNOD   | 0.2     | 0.0      | 1.0   | 1.1   | 0.0   | 1.6   | 0.0   | 0.0    | 0.0       | 15.9    | 2.4      | 0.0      | 22.3   |
| LABEO   | 11.4    | 1.0      | 1.4   | 6.1   | 0.7   | 0.4   | 0.0   | 0.0    | 1.0       | 0.2     | 0.0      | 17.7     | 39.9   |
| TILAPIA | 404.7   | 1005.9   | 710.8 | 220.2 | 133.3 | 205.2 | 187.5 | 135.7  | 200.6     | 139.2   | 101.3    | 159.8    | 3604.3 |
| OTHERS  | 1.5     | 0.0      | 0.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0       | 0.3     | 0.0      | 8.9      | 10.9   |
| TOTAL   | 451.4   | 1041.8   | 735.9 | 246.1 | 155.1 | 219.1 | 200.9 | 176.3  | 208.4     | 181.7   | 145.3    | 202.8    | 3964.8 |

Table 49: Value of fish caught in Metric tons for Lake Rukwa by Species and By Month - 2012

| SPECIES  | January | February    | March | April  | Mav   | June | Julv | August | September   | October | November   | December | Total |
|----------|---------|-------------|-------|--------|-------|------|------|--------|-------------|---------|------------|----------|-------|
| OI LOILO | January | i coi uai y | Walti | Aprili | iviay | ounc | ouly | August | Ochteilibei | Octobei | NOVEILIBEI | December | iotai |

| ALESTES | 0           | 1904.75     | 1874.51     | 634.92    | 9070.23   | 0         | 0         | 0         | 0         | 362.81    | 0.00      | 544.21    | 14,391.43    |
|---------|-------------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| CLARIAS | 67210.4     | 109628.9    | 63642.8     | 45532.6   | 39727.6   | 25850.2   | 33771.5   | 130067.1  | 21647.6   | 79062.2   | 129583.4  | 51700.3   | 797424.5     |
| HYDROC  | 40120.7     | 0.0         | 6772.4      | 13544.9   | 18624.2   | 11942.5   | 9160.9    | 0.0       | 0.0       | 4232.8    | 3628.1    | 0.0       | 108026.5     |
| SYNOD   | 786.1       | 0.0         | 3325.8      | 3537.4    | 0.0       | 5139.8    | 0.0       | 0.0       | 0.0       | 50763.1   | 7649.2    | 0.0       | 71201.3      |
| LABEO   | 36401.9     | 3265.3      | 4414.2      | 19380.1   | 2388.5    | 1330.3    | 0.0       | 0.0       | 3144.3    | 544.2     | 0.0       | 56779.7   | 127648.4     |
| TILAPIA | 1,295,017.4 | 3,218,904.3 | 2,274,481.5 | 704,787.2 | 426,573.0 | 656,745.2 | 599,844.7 | 434,101.3 | 641,930.5 | 445,560.0 | 324,200.3 | 511,470.4 | 11,533,615.9 |
| OTHERS  | 4958.4      | 0.0         | 393.0       | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       | 0.0       | 1028.0    | 0.0       | 28541.0   | 34920.4      |
| TOTAL   | 1,444,494.9 | 3,333,703.2 | 2,354,904.3 | 787,417.0 | 496,383.5 | 701,008.0 | 642,777.1 | 564,168.4 | 666,722.5 | 581,553.0 | 465,061.0 | 649,035.5 | 12,687,228.5 |

Table 50: Species percentage composition by Months for Lake Rukwa - 2012

| SPECIES | January | February | March | April | May  | June | July | September | October | November | December | Total |
|---------|---------|----------|-------|-------|------|------|------|-----------|---------|----------|----------|-------|
| ALESTES | -       | 0.02     | 0.01  | 0     | 0.07 | 1    | -    | 1         | 0       | 1        | 0        | 0.11  |
| CLARIAS | 0.53    | 0.86     | 0.5   | 0.36  | 0.31 | 0.2  | 0.27 | 0.17      | 0.62    | 1.02     | 0.41     | 6.29  |
| HYDROC  | 0.32    | -        | 0.05  | 0.11  | 0.15 | 0.09 | 0.07 | -         | 0.03    | 0.03     | -        | 0.85  |
| SYNOD   | 0.01    | -        | 0.03  | 0.03  | -    | 0.04 | -    | -         | 0.4     | 0.06     | -        | 0.56  |
| LABEO   | 0.29    | 0.03     | 0.03  | 0.15  | 0.02 | 0.01 | -    | 0.02      | 0       | -        | 0.45     | 1.01  |
| TILAPIA | 10.21   | 25.37    | 17.93 | 5.56  | 3.36 | 5.18 | 4.73 | 5.06      | 3.51    | 2.56     | 4.03     | 90.91 |
| OTHERS  | 0.04    | -        | 0     | -     | -    | -    | -    | _         | 0.01    | -        | 0.22     | 0.28  |
| TOTAL   | 11.39   | 26.28    | 18.56 | 6.21  | 3.91 | 5.53 | 5.07 | 5.25      | 4.58    | 3.67     | 5.12     | 100   |

#### **5.0 FISHERIES EXPORT DATA**

Table 51: Trend of Export of fish and fishery products from 2001-2012

| Years | Weight in kgs | Aquarium fish in pieces | Value in US \$ | Value in T.Shs.    | Royality in T.Shs. |
|-------|---------------|-------------------------|----------------|--------------------|--------------------|
| 2001  | 41,640,247.90 | 80,577                  | 95,435,102.38  | 82,982,764,242.13  | 5,244,333,672.01   |
| 2002  | 32,662,878.21 | 28,301                  | 105,779,930.56 | 99,294,249,903.45  | 5,957,654,995.03   |
| 2003  | 42,352,738.09 | 24,500                  | 129,605,815.44 | 132,862,401,373.82 | 7,789,955,962.69   |
| 2004  | 46,011,033.37 | 15,784                  | 112,761,195.13 | 121,922,686,607.32 | 7,190,356,743.06   |
| 2005  | 57,289,083.63 | 21,025                  | 141,597,362.21 | 162,619,492,949.08 | 9,142,768,083.78   |
| 2006  | 44,495,623.37 | 21,741                  | 138,120,145.08 | 170,184,661,003.08 | 6,236,615,179.19   |
| 2007  | 57,795,513.60 | 25,502                  | 173,272,670.44 | 213,211,258,838.15 | 7,589,576,913.91   |
| 2008  | 51,426,207.32 | 33,066                  | 174,409,214.42 | 205,054,092,452.99 | 6,629,846,700.13   |
| 2009  | 41,148,261.00 | 53,188                  | 161,053,645.66 | 207,447,119,888.45 | 6,410,191,231.99   |
| 2010  | 39,771,833.70 | 40,552                  | 187,427,053.51 | 263,131,442,027.71 | 5,876,103,557.44   |
| 2011  | 37,996,433.30 | 61,215                  | 152,973,356.80 | 233,714,590,010.80 | 6,153,278,023.30   |
| 2012  | 41,394,267.90 | 45,550                  | 163,299,365.50 | 254,901,017,111.31 | 6,819,926,007.14   |

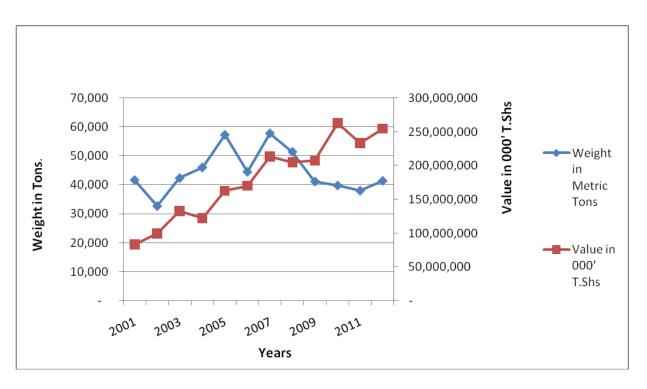


Figure 9: Trend of Export of fish and fishery products from 2001-2012

Table 52: Trend of Export of fish and fishery products for Fresh Water 2005-2012

| YEARS | WEIGHT (KG)    | LIVE FISH<br>(PCs) | FOB VALUE (TSH)  | FOB VALUE (TSH)      | ROYALITY (TSH)    |
|-------|----------------|--------------------|------------------|----------------------|-------------------|
| 2005  | 54,976,270.89  | 21,025             | 130,343,858.42   | 150,583,872,846.70   | 8,515,698,670.99  |
| 2006  | 41,774,645.87  | 21,741             | 128,890,039.93   | 158,755,917,243.27   | 5,673,123,481.06  |
| 2007  | 54,974,678.7   | 25,502             | 162,906,981.36   | 200,546,349,673.55   | 7,001,434,670.09  |
| 2008  | 48,831,915.2   | 33,066             | 161,942,967.34   | 190,256,063,759.95   | 6,031,844,256.15  |
| 2009  | 39,460,677.02  | 53,188             | 137,392,825.94   | 177,056,983,569.14   | 5,350,161,515.42  |
| 2010  | 38,288,946.64  | 40,552             | 180,010,247.39   | 252,901,148,861.80   | 5,313,087,453.21  |
| 2011  | 35,905,356.60  | 61,215             | 142,864,027.70   | 218,651,143,071.48   | 5,158,799,344.95  |
| 2012  | 39,150,263.46  | 45,550             | 152,917,950.07   | 238,504,134,166.23   | 5,923,095,632.90  |
| TOTAL | 353,362,754.34 | 301,839.09         | 1,197,268,898.14 | 1,587,255,613,192.13 | 48,967,245,024.77 |

Table 53: Trend of Export of fish and fishery products for Marine Water 2005-2012

| YEARS | WEIGHT (KG)   | LIVE FISH<br>(PCs) | FOB VALUE (TSH) | FOB VALUE (TSH)    | ROYALITY (TSH)   |
|-------|---------------|--------------------|-----------------|--------------------|------------------|
|       | ` '           | (PCS)              |                 | ` '                | ` '              |
| 2005  | 2,312,812.7   | 0                  | 11,254,112.6    | 12,036,287,917.8   | 627,110,136.6    |
| 2006  | 2,720,977.5   | 0                  | 9,230,105.1     | 11,428,743,759.8   | 563,491,698.1    |
| 2007  | 2,820,834.9   | 0                  | 10,365,689.1    | 12,664,909,164.6   | 588,142,243.8    |
| 2008  | 2,594,292.2   | 0                  | 12,466,247.1    | 14,798,028,693.0   | 598,002,444.0    |
| 2009  | 1,687,584.0   | 0                  | 23,660,819.7    | 30,390,136,319.3   | 697,366,911.6    |
| 2010  | 1,482,887.0   | 0                  | 7,416,806.1     | 10,230,293,165.9   | 563,016,104.2    |
| 2011  | 2,091,076.7   | 0                  | 10,109,329.1    | 15,063,446,939.3   | 994,478,678.4    |
| 2012  | 2,244,004.4   |                    | 10,381,415.4    | 16,396,882,945.1   | 896,830,374.2    |
| TOTAL | 17,954,469.44 | 0                  | 94,884,524.28   | 123,008,728,904.81 | 5,528,438,590.96 |

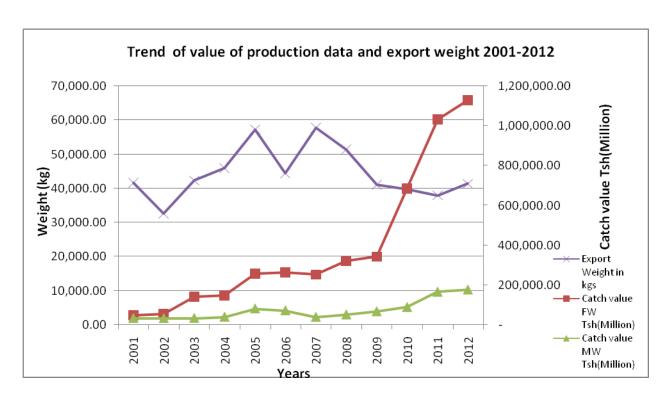


Figure 10: Trend Catch value and Export performance from 2001-2012

Table 54 : Grand summary of export of fish and fishery products for 2012

| FISH PRODUCTS                | WEIGHT IN<br>KGS | LIVE FISH IN PCS | FOB VALUE IN USD | FOB VALUE IN TSH  | ROYALITY IN TSH  |
|------------------------------|------------------|------------------|------------------|-------------------|------------------|
| Aquarium Fish /              | RGS              | PCS              | 030              | TOD VALUE IN 1311 | KOTALITI IN 1311 |
| L.Nyasa                      |                  | 4,802            | 17,297.26        | 28,189,930.28     | 2,186,737.07     |
| Aquarium Fish /L.Vict.       |                  | 100              | 997.26           | 1,575,671.23      | 111,986.30       |
| Aquarium Fish /<br>L.Tang.   |                  | 40,648           | 154,487.83       | 243,696,910.26    | 28,475,759.15    |
| Dried Fish Heads/NP          | 87,000.00        |                  | 12,750.00        | 19,866,597.84     | 3,389,000.00     |
| Dried Clarias/L.Tang.        | 267              |                  | 801              | 1,318,275.00      | 13,000.00        |
| Dried Clarias/ L.Vict.       | 1,420.00         |                  | 4,260.00         | 6,986,400.00      | 20,000.00        |
| Dried Dagaa/L.Rukwa          | 12,191.00        |                  | 36,573.00        | 59,550,183.00     | 489,000.00       |
| Dried Dagaa/L.Tang.          | 1,143,163.10     |                  | 2,434,965.40     | 3,844,125,457.69  | 107,582,557.00   |
| Dried Dagaa/L.Vict.          | 7,729,769.00     |                  | 5,874,665.79     | 9,192,645,014.68  | 522,045,178.95   |
| Dried Dagaa/marine           | 385,435.70       |                  | 419,169.92       | 675,247,167.03    | 19,867,040.43    |
| Dried Dagaa/L.Nyasa          | 35,365.00        |                  | 38,394.25        | 49,048,217.90     | 2,487,015.00     |
| Dried Fish Maws              | 204,663.50       |                  | 4,036,993.75     | 6,304,527,096.33  | 93,963,999.89    |
| Dried Fish Offcuts           | 126,000.00       |                  | 32,625.00        | 50,938,949.35     | 9,834,170.00     |
| Dried Fish /Kayabo           | 35,650.00        |                  | 85,427.77        | 144,943,419.20    | 9,913,447.00     |
| Dried Fish/ L.Tang.          | 183,604.30       |                  | 528,967.53       | 818,159,407.60    | 44,022,000.00    |
| Dried Furu/ L. Vict.         | 454,002.00       |                  | 457,792.39       | 579,277,640.90    | 18,236,650.00    |
| Dry salted<br>Perege/L.Rukwa | 384,793.00       |                  | 1,000,567.42     | 1,669,854,227.00  | 14,000,360.00    |
| Dried Dagaa/L.Rukwa.         | 121              |                  | 363              | 593,868.00        | 5,000.00         |
| Dried Perege/L.Vict.         | 676              |                  | 2,028.00         | 2,111,148.00      | 151,700.00       |
| Dried Perege/Mtera dam       | 3,072.00         |                  | 9,216.00         | 9,293,656.00      | 874,700.00       |
| Dried Uduvi/ marine          | 300              |                  | 561.24           | 900,000.00        | 22,500.00        |
| Fish Frames                  | 2,592,496.00     |                  | 814,444.60       | 1,267,639,569.47  | 39,241,866.50    |
| Fish Meal                    | 300,008.00       |                  | 58,882.40        | 91,740,106.20     | 8,992,712.00     |
| Fresh Fish Fillets           | 8,789,288.00     |                  | 40,449,228.09    | 62,984,385,586.80 | 1,700,473,402.11 |
| Fresh Fish /L .Vict.         | 300              |                  | 300              | 475,800.00        | 62,805.60        |

| <b>GRAND TOTAL</b>      | 41,394,267.90 | 45,550 | 163,299,365.50 | 254,901,017,111.31 | 6,819,926,007.14 |
|-------------------------|---------------|--------|----------------|--------------------|------------------|
| Smoked Fish/L.Tang.     | 2,464.20      |        | 20,813.50      | 32,675,001.60      | 652,000.00       |
| Sea shell/ Cowries      | 61,730.00     |        | 27,632.00      | 43,712,625.00      | 4,879,420.00     |
| Nile Perch Oil          | 200           |        | 18.61          | 30,000.00          | 4,200.00         |
| Live Lobster            | 60,861.00     |        | 1,220,308.09   | 1,929,272,307.90   | 85,296,000.75    |
| Live Crabs              | 248,197.00    |        | 1,641,309.92   | 2,602,340,263.98   | 244,899,566.82   |
| Frozen H & G Fish       | 1,128,203.00  |        | 5,683,747.90   | 8,866,829,576.45   | 238,886,754.05   |
| Frozen Fish/marine      | 66,986.40     |        | 114,526.13     | 180,692,571.92     | 11,449,746.73    |
| Frozen Fish Maws        | 1,292,164.50  |        | 21,321,904.82  | 33,313,918,778.38  | 234,885,905.86   |
| Frozen Fish Heads/NP    | 197,500.00    |        | 29,625.00      | 46,091,435.06      | 7,682,400.00     |
| Frozen Fish Chests      | 256,050.00    |        | 141,411.00     | 215,336,289.73     | 30,226,815.01    |
| Frozen Fish Belly flaps | 5,000.00      |        | 1,000.00       | 1,549,184.00       | 580,900.00       |
| Frozen Fish Off cuts    | 775,995.00    |        | 438,342.05     | 626,521,675.39     | 63,745,268.10    |
| Frozen Fish Fillets     | 12,730,685.70 |        | 65,990,424.90  | 102,959,069,053.07 | 2,435,290,648.85 |
| Frozen Crabs            | 12,527.00     |        | 253.3          | 464,045.22         | 106,531,407.07   |
| Frozen Squids           | 28,849.50     |        | 139,813.02     | 218,422,560.46     | 12,706,574.69    |
| Frozen Prawns /PUD      | 3,376.00      |        | 16,189.50      | 26,187,213.00      | 10,992,465.00    |
| Frozen Prawns/ wild     | 146,246.10    |        | 837,885.40     | 1,327,346,710.05   | 64,376,245.50    |
| Frozen Prawns/ farmed   | 116,688.00    |        | 610,347.86     | 966,382,454.48     | 6,111,474.00     |
| Frozen Cuttle fish      | 12,576.00     |        | 20,919.50      | 32,725,744.00      | 72,552,911.77    |
| Frozen Octopus          | 1,095,246.40  |        | 5,138,395.98   | 8,090,458,214.26   | 418,289,014.89   |
| Frozen Lobster /Tails   | 1,644.40      |        | 12,750.09      | 19,795,292.05      | 1,045,768.62     |
| Frozen Lobster/ w       | 10,488.00     |        | 102,934.42     | 161,030,327.82     | 7,027,205.31     |
| Fresh G&G Fish          | 417,105.00    |        | 1,892,709.75   | 2,950,119,370.17   | 86,237,068.12    |
| Fresh Fish / L.Tang.    | 241,114.30    |        | 1,225,017.88   | 1,937,419,959.40   | 45,213,997.00    |
| Fresh Fish Maws         | 12,786.00     |        | 199,326.00     | 305,536,158.13     | 3,899,662.00     |

Table 55: Export of fish and fishery products from Lake Victoria for 2012

|                         | WEIGHT IN     | LIVE FISH IN | FOB VALUE IN   |                    |                        |
|-------------------------|---------------|--------------|----------------|--------------------|------------------------|
| FISH PRODUCTS           | KGS           | PCS          | USD            | FOB VALUE IN TSH   | <b>ROYALITY IN TSH</b> |
| Aquarium Fish /L.Vict.  |               | 100          | 997.26         | 1,575,671.23       | 111,986.30             |
| Dried Fish Heads/NP     | 87,000.00     |              | 12,750.00      | 19,866,597.84      | 3,389,000.00           |
| Dried Clarias/ L.Vict.  | 1,420.00      |              | 4,260.00       | 6,986,400.00       | 20,000.00              |
| Dried Dagaa/L.Vict.     | 7,691,329.00  |              | 5,797,334.85   | 9,072,165,014.68   | 519,730,984.95         |
| Dried Fish Maws         | 204,663.50    |              | 4,036,993.75   | 6,304,527,096.33   | 93,963,999.89          |
| Dried Fish Offcuts      | 126,000.00    |              | 32,625.00      | 50,938,949.35      | 9,834,170.00           |
| Dried Fish /Kayabo      | 35,650.00     |              | 85,427.77      | 144,943,419.20     | 9,913,447.00           |
| Dried Furu/ L. Vict.    | 454,002.00    |              | 457,792.39     | 579,277,640.90     | 18,236,650.00          |
| Dried Perege/L.Vict.    | 676           |              | 2,028.00       | 2,111,148.00       | 151,700.00             |
| Fish Frames             | 2,522,496.00  |              | 786,444.60     | 1,223,746,009.07   | 38,253,048.50          |
| Fish Meal               | 300,008.00    |              | 58,882.40      | 91,740,106.20      | 8,992,712.00           |
| Fresh Fish Fillets      | 8,684,972.00  |              | 39,912,310.89  | 62,143,556,776.11  | 1,680,852,729.29       |
| Fresh Fish /L .Vict.    | 300           |              | 300            | 475,800.00         | 62,805.60              |
| Fresh Fish Maws         | 12,786.00     |              | 199,326.00     | 305,536,158.13     | 3,899,662.00           |
| Fresh G&G Fish          | 411,690.00    |              | 1,866,717.75   | 2,909,358,347.13   | 85,116,140.12          |
| Frozen Fish Fillets     | 12,588,313.70 |              | 65,285,770.66  | 101,856,128,139.85 | 2,408,559,708.89       |
| Frozen Fish Off cuts    | 775,995.00    |              | 438,342.05     | 626,521,675.39     | 63,745,268.10          |
| Frozen Fish Belly flaps | 5,000.00      |              | 1,000.00       | 1,549,184.00       | 580,900.00             |
| Frozen Fish Chests      | 256,050.00    |              | 141,411.00     | 215,336,289.73     | 30,226,815.01          |
| Frozen Fish Heads/NP    | 197,500.00    |              | 29,625.00      | 46,091,435.06      | 7,682,400.00           |
| Frozen Fish Maws        | 1,292,164.50  |              | 21,321,904.82  | 33,313,918,778.38  | 234,885,905.86         |
| Frozen H & G Fish       | 1,128,203.00  |              | 5,683,747.90   | 8,866,829,576.45   | 238,886,754.05         |
| TOTAL                   | 36,776,218.70 | 100          | 146,155,992.09 | 227,783,180,213.04 | 5,457,096,787.55       |

Table 56: Trend of Nile perch export performance from 2001 - 2012

|      |               | •              | Value              |                  |
|------|---------------|----------------|--------------------|------------------|
| Year | Weight (Kg)   | US \$          | T.sh               | Royalty T.sh     |
| 2001 | 39,038,599.70 | 86,178,585.67  | 74,928,607,542.35  | 4,685,276,229.20 |
| 2002 | 29,479,322.71 | 88,231,655.07  | 83,005,557,292.23  | 4,980,333,437.53 |
| 2003 | 37,286,859.16 | 112,049,948.54 | 114,779,736,803.55 | 6,707,948,377.98 |
| 2004 | 30,312,898.30 | 76,261,406.40  | 82,356,866,789.00  | 5,171,324,343.40 |
| 2005 | 53,675,473.70 | 129,184,492.60 | 148,785,948,008.60 | 8,419,301,970.40 |
| 2006 | 39,472,977.70 | 126,829,665.70 | 156,160,190,326.60 | 5,491,786,878.80 |
| 2007 | 50,078,575.60 | 158,442,058.50 | 195,242,463,549.70 | 6,660,034,977.00 |
| 2008 | 38,721,422.20 | 153,740,723.30 | 180,366,779,818.20 | 5,412,912,979.20 |
| 2009 | 28,721,577.00 | 130,644,300.10 | 168,368,910,379.90 | 4,628,409,654.50 |
| 2010 | 27,229,470.70 | 139,666,995.10 | 194,012,069,313.90 | 4,509,670,993.80 |
| 2011 | 25,426,157.20 | 127,601,694.31 | 197,899,741,508.31 | 4,299,987,312.20 |
| 2012 | 28,951,094.70 | 141,189,161.64 | 220,149,518,645.58 | 4,967,311,025.08 |

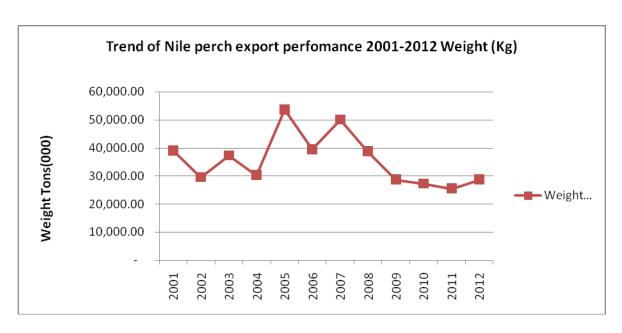


Figure 11: Trend of Nile perch export performance from 2001-2012

Table 57: Export of fish and fishery products from Marine waters for 2012

|                       | WEIGHT IN    | FOB VALUE IN  | FOB VALUE IN      | ROYALITY IN    |
|-----------------------|--------------|---------------|-------------------|----------------|
| FISH PRODUCTS         | KGS          | USD           | TSH               | TSH            |
| Dried Dagaa/marine    | 385,435.70   | 419,169.92    | 675,247,167.03    | 19,867,040.43  |
| Dried Shrimps/Uduvi   | 300          | 561.24        | 900,000.00        | 22,500.00      |
| Frozen Lobster/ w     | 10,488.00    | 102,934.42    | 161,030,327.82    | 7,027,205.31   |
| Frozen Lobster /Tails | 1,644.40     | 12,750.09     | 19,795,292.05     | 1,045,768.62   |
| Frozen Octopus        | 1,095,246.40 | 5,138,395.98  | 8,090,458,214.26  | 418,289,014.89 |
| Frozen Cuttle fish    | 8,610.00     | 45,489.36     | 70,818,131.01     | 3,751,218.22   |
| Frozen Prawns/ farmed | 116,688.00   | 610,347.86    | 966,382,454.48    | 6,111,474.00   |
| Frozen Prawns/ wild   | 146,241.10   | 837,815.50    | 1,327,243,500.55  | 64,371,558.93  |
| Frozen Prawns /PUD    | 3,376.00     | 16,189.50     | 26,187,213.00     | 10,992,465.00  |
| Frozen Squids         | 26,323.50    | 128,131.02    | 200,173,056.66    | 11,601,668.95  |
| Frozen Crabs          | 12,505.00    | 68,343.82     | 106,518,753.37    | 7,284,588.89   |
| Frozen Fish/marine    | 66,358.40    | 112,036.73    | 176,803,637.96    | 11,390,883.41  |
| L ive Crabs           | 248,197.00   | 1,641,309.92  | 2,602,340,263.98  | 244,899,566.82 |
| Live Lobster          | 60,861.00    | 1,220,308.09  | 1,929,272,307.90  | 85,296,000.75  |
| Nile Perch Oil        | 200          | 18.61         | 30,000.00         | 4,200.00       |
| Sea shell/ Cowries    | 61,730.00    | 27,632.00     | 43,712,625.00     | 4,879,420.00   |
| TOTAL                 | 2,244,204.40 | 10,381,434.05 | 16,396,912,945.08 | 896,834,574.24 |

Table 58: Export of fish and fishery products by water bodies for Lake Tanganyika, Lake Nyasa, Lake Rukwa and Mtera dam 2012

# a)Lake Tanganyika

| FISH PRODUCTS           | WEIGHT IN<br>KGS | LIVE FISH<br>IN PCS | FOB VALUE IN USD | FOB VALUE IN<br>TSH | ROYALITY IN<br>TSH |
|-------------------------|------------------|---------------------|------------------|---------------------|--------------------|
| Aquarium Fish / L.Tang. |                  | 40,648              | 154,487.83       | 243,696,910.26      | 28,475,759.15      |
| Dried Clarias/L.Tang.   | 267.0            |                     | 801.00           | 1,318,275.00        | 13,000.00          |
| Dried Dagaa/L.Tang.     | 1,095,589.4      |                     | 2,377,871.00     | 3,754,459,146.79    | 103,537,557.00     |
| Dried Fish/ L.Tang.     | 166,600.7        |                     | 478,376.73       | 739,860,557.60      | 42,882,000.00      |
| Fresh Fish / L.Tang.    | 241,114.3        |                     | 1,225,017.88     | 1,937,419,959.40    | 45,213,997.00      |
| Smoked Fish/L.Tang.     | 2,464.2          |                     | 20,813.50        | 32,675,001.60       | 652,000.00         |
| TOTAL                   | 1,506,035.5      | 40,648              | 4,257,367.95     | 6,709,429,850.65    | 220,774,313.15     |

## b) Lake Nyasa

|                     | WEIGHT IN | LIVE FISH IN | FOB VALUE IN | FOB VALUE IN  | <b>ROYALITY IN</b> |
|---------------------|-----------|--------------|--------------|---------------|--------------------|
| FISH PRODUCTS       | KGS       | PCS          | USD          | TSH           | TSH                |
| Aquarium Fish /     |           |              |              |               |                    |
| L.Nyasa             |           | 4,802        | 17,297.26    | 28,189,930.28 | 2,186,737.07       |
| Dried Dagaa/L.Nyasa | 35,365.0  |              | 38,394.25    | 49,048,217.90 | 2,487,015.00       |
| TOTAL               | 35,365.0  | 4,802        | 55,691.51    | 77,238,148.18 | 4,673,752.07       |

## c) Lake Rukwa

|                           | WEIGHT IN | LIVE FISH IN | FOB VALUE IN | FOB VALUE IN     | ROYALITY IN   |
|---------------------------|-----------|--------------|--------------|------------------|---------------|
| FISH PRODUCTS             | KGS       | PCS          | USD          | TSH              | TSH           |
| Dried Dagaa/L.Rukwa       | 12,312.0  |              | 36,936.00    | 60,144,051.00    | 494,000.00    |
| Dry salted Perege/L.Rukwa | 384,793.0 |              | 1,000,567.42 | 1,669,854,227.00 | 14,000,360.00 |
| TOTAL                     | 397,105.0 | 0            | 1,037,503.42 | 1,729,998,278.00 | 14,494,360.00 |

## d) Mtera Dam

| FISH PRODUCTS          | WEIGHT IN<br>KGS | LIVE FISH IN PCS | FOB VALUE IN USD | FOB VALUE IN TSH | ROYALITY IN<br>TSH |
|------------------------|------------------|------------------|------------------|------------------|--------------------|
| Dried Perege/Mtera dam | 3,072.0          |                  | 9,216.00         | 9,293,656.00     | 874,700.00         |
| TOTAL                  | 3,072.0          | 0                | 9,216.00         | 9,293,656.00     | 874,700.00         |

Table 59: Weight and Value of export data by country of destination for 2012

| COUNTRY OF DESTINATION | WEIGHT IN<br>KGS | LIVE FISH IN PCS | FOB VALUE IN USD | FOB VALUE IN TSH  | ROYALITY IN<br>TSH |
|------------------------|------------------|------------------|------------------|-------------------|--------------------|
| Angola                 | 1,080.0          | 0                | 8,297.00         | 12,690,000.00     | 123,000.00         |
| Australia              | 588,463.0        | 0                | 3,191,825.00     | 4,988,829,328.33  | 118,166,938.67     |
| Belgium                | 1,414,695.0      | 0                | 7,716,590.40     | 12,023,481,441.65 | 267,657,203.84     |
| Thailand               | 280.0            | 230              | 7,622.00         | 12,093,330.28     | 553,288.00         |
| Botswana               | 2,450.0          | 0                | 12,693.78        | 20,128,776.22     | 1,480,762.00       |
| Brazil                 | 4,730.0          | 0                | 1,540.00         | 2,440,900.00      | 187,430.00         |
| Brighton VIC           | 54,000.0         | 0                | 282,600.00       | 440,301,096.00    | 10,095,837.84      |
| Burundi                | 445,393.6        | 0                | 1,252,924.94     | 1,967,034,286.25  | 73,595,005.76      |
| Canada                 | 37,780.7         | 1,821            | 159,683.31       | 253,973,742.74    | 16,301,876.00      |
| China                  | 75,271.0         | 480              | 621,495.16       | 979,944,466.78    | 51,358,635.00      |
| Columbia               | 36,980.0         | 0                | 200,200.00       | 313,410,536.00    | 7,039,426.00       |
| Cuba                   | 52,800.0         | 0                | 303,600.00       | 472,606,863.96    | 9,863,099.77       |
| Cyprus                 | 280,410.0        | 0                | 1,233,345.00     | 1,926,266,796.00  | 55,862,625.83      |
| Czech Republic         | 0.0              | 766              | 4,744.00         | 7,497,406.00      | 505,507.00         |
| Denmark                | 1,485,338.0      | 911              | 7,036,787.30     | 10,975,521,578.30 | 318,620,157.08     |
| DRC                    | 4,675,797.5      | 0                | 4,233,343.45     | 6,793,742,809.99  | 195,092,722.50     |
| Spain                  | 50,400.0         | 0                | 249,000.00       | 387,703,668.00    | 9,420,540.60       |
| Ethiopia               | 26,325.0         | 0                | 105,762.00       | 167,690,860.00    | 5,756,479.03       |
| France                 | 744,564.0        | 1,486            | 3,547,019.40     | 5,556,574,122.13  | 144,155,082.77     |
| Germany                | 268,780.5        | 12,692           | 1,380,541.00     | 2,131,419,550.60  | 53,187,788.22      |
| Greece                 | 412,472.0        | 0                | 1,918,382.83     | 2,886,491,530.37  | 78,129,139.76      |
| Hong Kong              | 829,787.0        | 4,612            | 12,632,174.75    | 19,739,715,883.56 | 296,983,430.27     |
| Reunion                | 18,000.0         | 0                | 99,000.00        | 154,242,000.00    | 3,365,280.00       |
| Israel                 | 1,449,930.0      | 0                | 7,887,557.00     | 12,314,870,963.11 | 283,610,406.87     |
| Italy                  | 4,328,099.1      | 0                | 18,563,377.39    | 28,949,647,173.55 | 892,038,468.50     |
| Japan                  | 1,049,739.0      | 278              | 5,987,029.40     | 9,330,302,598.38  | 193,291,808.51     |
| Jordan                 | 504.0            |                  | 3,603.60         | 5,592,068.64      | 93,852.90          |
| Kenya                  | 8,008,621.5      | 0                | 10,787,358.51    | 16,918,535,286.60 | 784,664,155.40     |
| Malawi                 | 418,161.0        | 0                | 313,367.25       | 489,679,033.32    | 19,649,500.00      |
| Malaysia               | 33,916.0         | 572              | 228,444.00       | 356,491,037.20    | 7,053,504.11       |

| Malta          | 59,730.0     | 0       | 275,381.00     | 430,507,071.24     | 16,056,735.00    |
|----------------|--------------|---------|----------------|--------------------|------------------|
| Mauritius      | 16,800.0     | 0       | 85,680.00      | 133,755,810.55     | 3,147,196.00     |
| Mexico         | 24,000.0     | 0       | 120,000.00     | 187,374,648.00     | 4,496,992.00     |
| Murcia         | 35,952.0     | 0       | 166,729.20     | 260,843,986.57     | 6,748,225.00     |
| India          | 35,360.0     | 0       | 20,459.70      | 32,408,985.00      | 2,848,950.00     |
| Netherlands    | 3,733,694.7  | 0       | 19,028,519.89  | 29,714,682,998.81  | 784,813,105.28   |
| Norway         | 28.0         | 0       | 14.25          | 22,520.00          | 3,300.00         |
| Philipines     | 24,000.0     | 226     | 92,782.00      | 144,866,616.00     | 5,651,103.81     |
| Polland        | 750.0        | 500     | 4,170.00       | 6,513,651.20       | 493,620.00       |
| Portigual      | 1,729,634.5  | 0       | 8,193,371.51   | 12,570,660,269.10  | 489,027,128.78   |
| Romania        | 349,678.0    | 0       | 1,942,185.80   | 3,024,930,021.15   | 65,714,431.40    |
| Rwanda         | 1,128,317.0  | 0       | 1,058,537.83   | 1,666,122,180.39   | 84,064,345.19    |
| South Korea    | 26,218.7     | 987     | 198,055.83     | 314,504,204.80     | 10,992,736.00    |
| Saud Arabia    | 529,810.0    | 0       | 3,441,751.20   | 5,469,789,477.26   | 98,947,231.00    |
| Scotland       | 55.4         | 0       | 111.00         | 178,155.00         | 6,470.00         |
| Singapore      | 270,349.0    | 3,928   | 1,184,827.32   | 1,868,509,366.60   | 174,726,501.14   |
| South Africa   | 1,106.2      | 0       | 7,076.00       | 11,033,668.29      | 217,211.85       |
| Spain          | 1,389,182.0  | 0.0     | 7,467,918.3    | 11,642,340,982.0   | 236,248,243.6    |
| Sweden         | 8.0          | 764     | 3,756.13       | 5,966,162.00       | 1,110,875.29     |
| Taiwan         | 0.0          | 112     | 320.00         | 503,800.00         | 74,795.00        |
| Iran           | 89,004.0     | 0       | 530,374.60     | 913,000,000.82     | 16,632,026.76    |
| Thailand       | 5,850.0      | 0       | 99,250.00      | 156,815,001.00     | 5,374,730.00     |
| Tortola Island | 1,165,400.0  | 0       | 6,697,376.40   | 10,440,320,380.29  | 248,672,218.68   |
| Turkey         | 60,140.0     | 9,210.0 | 267,130.6      | 422,430,007.1      | 26,930,567.0     |
| UAE            | 2,427,726.8  | 200     | 17,399,671.06  | 27,142,720,084.49  | 444,010,515.64   |
| Uganda         | 354,378.0    | 0       | 487,394.52     | 760,066,299.29     | 12,054,975.00    |
| UK             | 24,414.0     | 320     | 99,621.70      | 159,140,604.00     | 1,250,640.00     |
| USA            | 180,140.0    | 5,455   | 867,348.00     | 1,377,050,817.00   | 79,015,492.00    |
| Venezuela      | 24,000.0     | 0       | 139,250.00     | 220,931,126.00     | 4,488,437.00     |
| Vietam         | 114,376.0    | 0       | 1,149,790.60   | 1,817,589,432.31   | 30,821,181.00    |
| Zambia         | 793,123.9    | 0       | 2,407,786.12   | 3,592,705,165.15   | 71,570,500.52    |
| Zimbabwe       | 42,226.0     | 0       | 59,545.70      | 94,658,472.51      | 2,560,800.00     |
| TOTAL          | 41,394,267.9 | 45,550  | 163,299,365.50 | 254,901,017,111.31 | 6,819,926,007.14 |

Table 60: List of Potential exporters of fish and fishery products for 2012

| S/N | LOCATION/REGION | NAME OF FISH PROCESSING<br>ESTABLISHMENT     | INSTALLED<br>CAPACITY<br>TONS/DAY | CURRENT<br>PROCESSING<br>CAPACITY<br>TONS./DAY | % OF ANNUALPROCESSED PRODUCTS | TYPES OF PRODUCT               |
|-----|-----------------|--|-----------------------------------|--|-------------------------------|--------------------------------|
|     |                 | Vic Fish Ltd                                 |                                   |  |                               | Nile Perch Products:           |
|     |                 | <b>ADDRESS</b> : P.0.BOX 1654                |                                   |  |                               | Frozen and Chilled fillets,    |
|     |                 | MWANZA                                       |                                   |  |                               | Headed & Gutted                |
|     |                 | TEL.+255-28-2552306/2551596                  |                                   |  |                               | and Frozen Fish maws.          |
|     |                 | FAX.+255-28-2550597                          |                                   |  |                               |                                |
| 1   | Mwanza          | E- mail:<br>admin.vicmwz@naturesbountytz.com | 140                               | 60   | 43                            |                                |
|     |                 | Nile Perch Fisheries Ltd                     |                                   |  |                               | Nile Perch Products:           |
|     |                 | ADDRESS: P. O. Box 1753,                     |                                   |  |                               | Frozen and Chilled fillets,    |
|     |                 | MWANZA.                                      |                                   |  |                               | Headed & Gutted                |
|     |                 | Tel: 255 28 2570329                          |                                   |  |                               | and Frozen Fish maws.          |
|     |                 | Fax: 255 28 2570430                          |                                   |  |                               |                                |
|     |                 | E-mail: info@nileperchfisheries.com          |                                   |  |                               |                                |
| 2   | Mwanza          |  | 100                               | 70   | 70                            |                                |
|     |                 | Tanzania Fish Processors Ltd                 |                                   |  |                               | Nile Perch Products:           |
|     |                 | ADDRESS: P. O. Box 3001,  MWANZA.            |                                   |  |                               | Frozen and Chilled fillets,    |
|     |                 | Tel: 255 28 2550105                          |                                   |  |                               | Headed & Gutted                |
|     |                 |  |                                   |  |                               | and Frozen Fish maws.          |
|     |                 | Fax: 255 28 2550482                          |                                   |  |                               |                                |
|     |                 | Mobile: 255 784 233650                       |                                   |  |                               |                                |
| 3   | Mwanza          | E-mail: tfpl@alphatz.com                     | 120                               | 80   | 67                            |                                |
|     |                 | Mwanza Fishing Industries Ltd                |                                   |  |                               | Nile Perch Products:           |
|     |                 | ADDRESS: P. O. Box 348,                      |                                   |  |                               | Frozen and Chilled fillets,    |
|     |                 | MWANZA.                                      |                                   |  |                               | Headed & Gutted                |
|     |                 | Tel: 255 28 2560868                          |                                   |  |                               | Frozen Fish maws.              |
|     |                 | Fax: 255 28 2561184                          |                                   |  |                               | and Belly Flaps, Fish<br>Chest |
| 4   | Mwanza          | Mobile: 255 784 522276                       | 120                               | 50   | 42                            | 5.1550                         |

|   |        | 255 784 521027                                     | I   |    | 1   |                             |
|---|--------|--|-----|----|-----|-----------------------------|
|   |        | E- mail: mwanzafish@africaonline.co.tz             |     |    |     |                             |
|   |        |  |     |    |     |                             |
|   |        | Omega Fish Ltd                                     |     |    |     | Nile Perch Products:        |
|   |        | ADDRESS: P.O.BOX 94                                |     |    |     | Frozen and Chilled fillets, |
|   |        | MWANZA   |     |    |     | Headed & Gutted             |
|   |        | TEL+.255-28-2560665/ 2560336                       |     |    |     |                             |
|   |        | FAX.+255-28-2560561                                | +   |    |     | and Frozen Fish maws.       |
|   |        | E-mail: omegafish@africaonline.co.tz               | -   |    |     |                             |
|   |        | <u>=</u>   |     |    |     |                             |
| 5 | Mwanza |  | 70  | 10 | 14  |                             |
|   |        | Prime Catch (Exporters Ltd) ADDRESS: P. O. Box 786 | _   |    |     | Nile Perch Products:        |
|   |        | MUSOMA.  |     |    |     | Frozen and Chilled fillets, |
|   |        | Tel: 255 28 2640002                                | _   |    |     | and Frozen Fish maws.       |
|   |        | Fax: 255 28 2640202                                | _   |    |     |                             |
|   |        | Mobile: 255 784 493970                             | _   |    |     |                             |
|   |        | E-mail: pcl@tilleygroup.com                        | 4   |    |     |                             |
| 6 | Musoma |  | 100 | 50 | 50  |                             |
|   |        | Musoma Fish Processors  ADDRESS: P. O. Box 1149,   | -   |    |     | Nile Perch Products:        |
|   |        | MUSOMA.  | +   |    |     | Frozen and Chilled fillets, |
|   |        | Tel: 255 28 2622988/9                              | -   |    |     | and Frozen Fish maws.       |
|   |        | Fax: 255 28 2622112                                | -   |    |     |                             |
|   |        | Mobile: 255 7 13 275225                            | 1   |    |     |                             |
|   |        | 255 713 298937                                     | †   |    |     |                             |
| 7 | Musoma | E-mail: mspl@alphatz.com                           | 60  | 35 | 58  |                             |
|   | Hasoma | Kagera Fish Company Ltd                            | 30  | 33 | 30  | Nile Perch Products:        |
|   |        | ADDRESS: P. O. Box 180                             | 1   |    |     | Frozen and Chilled fillets, |
|   |        | BUKOBA.  | 1   |    |     | and Frozen Fish maws.       |
|   |        | Tel: 255 744 000888/660963                         | 1   |    |     | . , ,                       |
| 8 | Bukoba | E.mail kagera@yahoo.co.uk                          | 20  | 20 | 100 |                             |

|    |        | Vic Fish Ltd                                 |    |     |    | Frozen and Chilled fillets,           |
|----|--------|--|----|-----|----|---------------------------------------|
|    |        | ADDRESS: P. O. Box 1139,                     |    |     |    | and Frozen Fish maws.                 |
|    |        | BUKOBA.                                      |    |     |    |                                       |
|    |        | Tel: 255 28 220565/41/63                     |    |     |    |                                       |
|    |        | Fax: 255 28 220566                           |    |     |    |                                       |
|    |        | Mobile: 255 784 780633                       |    |     |    |                                       |
|    |        | E-mail:<br>admin.vicbkb@naturersbountytz.com |    |     |    |                                       |
| 9  | Bukoba |  | 60 | 30  | 50 |                                       |
|    |        | -  |    |     |    |                                       |
| 10 | Mwanza | Tanzania Fisheries Development Co. Ltd.      |    |     |    |                                       |
| 11 | Mwanza | Tan Perch Ltd                                |    |     |    |                                       |
| 12 | Rukwa  | Migebuka Fisheries Ltd                       | 2  | 1.3 | 65 | Migebuka                              |
|    |        | Sea Products Tanzania Ltd                    |    |     |    | Cephalopods &Crusteceans              |
|    |        | ADDRESS: P. O Box 6131                       |    |     |    |                                       |
|    |        | Tanga  |    |     |    |                                       |
|    |        | Tel: 255272646220                            |    |     |    |                                       |
|    |        | Fax: 255 27 2646220                          |    |     |    |                                       |
|    |        | Mobile:255754487223                          |    |     |    |                                       |
|    |        | E-mail: info@seaproductstanga.com            |    |     |    |                                       |
| 13 | Tanga  |  | 6  | 1   | 17 |                                       |
| 14 | DSM    | Royal African Lobsters Tropical Ltd          | 3  | 1   | 33 |                                       |
|    |        | Alphakrust Ltd                               |    |     |    |                                       |
|    |        | ADDRESS: P.O BOX 8316                        |    |     |    |                                       |
| 15 | DSM    | DARE S SALAAM                                | 3  | 2   | 67 | _                                     |
|    |        | Bahari Foods Ltd                             |    |     |    | <b>Products:</b> Plant Frozen prawns, |
|    |        | ADDRESS: P. O Box 3978                       |    |     |    | Sword Fish, Octopus                   |
|    |        | DAR ES SALAAM                                |    |     |    | Squids,                               |
|    |        |  |    |     |    | Chilled Tuna Loins                    |
|    |        | Tel: 255 22 2602504/5                        |    |     |    | and Sea Frozen Prawns.                |
|    |        | Fax: 255 22 2602490                          |    |     |    |                                       |
| 16 | DSM    | Mobile: 255 784 780633                       | 4  | 1   | 25 |                                       |

|    |       | bhagat@vicfish.com                   | 1   |     |    |                                       |
|----|-------|--------------------------------------|-----|-----|----|---------------------------------------|
|    |       | bahari@naturesbounty.tz.com          |     |     |    |                                       |
|    |       |                                      |     |     |    |                                       |
| 17 | DSM   | Asmara Trading                       | 2   | 1.5 | 75 |                                       |
| 18 | DSM   | Siza Cold Storage                    | 2   | 1.2 | 60 |                                       |
|    |       | Tanpesca Mafia Plant Ltd             |     |     |    |                                       |
|    |       | ADDRESS: P.O Box 8316                |     |     |    | <b>Products:</b> Plant Frozen prawns, |
|    |       | DAR ES SALAAM                        |     |     |    | Cuttle Fish, Octopus,                 |
|    |       | Tel: 255 22 2128854                  | ]   |     |    | Squids, Crabs and Lobsters            |
|    |       | 255 22 2128828                       | 1   |     |    |                                       |
|    |       | Fax: 255 51 111069                   |     |     |    |                                       |
|    |       | Mobile: 255 784 900885               | 1   |     |    |                                       |
|    |       | vedagiri@alphatz.com                 |     |     |    |                                       |
|    |       | Internet :http://www.alphaafrica.com |     |     |    |                                       |
| 19 | Coast |                                      | 20  | 10  | 50 |                                       |
| 20 | DSM   | Ab Marine                            | 0.8 | 0.4 | 50 |                                       |
|    |       | Shiloh Sea Foods                     |     |     |    |                                       |
|    |       | ADDRESS: P. O. Box 36229             |     |     |    |                                       |
|    |       | DAR ES SALAAM                        |     |     |    |                                       |
|    |       | Tel: 0787 500777                     |     |     |    |                                       |
|    |       | Mail:Shilohseafoods@yahoo.com        |     |     |    |                                       |
| 21 | DSM   |                                      | 0.7 | 0.2 | 29 | Live Lobsters &Crabs                  |
| 22 | DSM   | E M Sea Foods                        | 0.9 | 0.5 | 56 |                                       |
|    |       | Kassanda Enterprises Ltd             | 4   |     |    |                                       |
|    |       | ADDRESS: P. O BOX 77172              | _   |     |    |                                       |
| 23 | DSM   | DAR ES SALAAM                        | _   |     |    |                                       |
|    |       |                                      | 0.8 | 0.3 | 38 |                                       |
| 24 | DSM   | N.F Trading Co.Limited               | 0.7 | 0.3 | 43 |                                       |
| 25 | DSM   | Hesam Oceanic Sea Products           | 0.8 | 0.6 | 75 |                                       |
| 26 | DSM   | Masaki Sea Products                  | 0.8 | 0.2 | 25 |                                       |
| 27 | DSM   | Eches Marine                         | 0.5 | 0.2 | 40 |                                       |

| 28 | DSM | Kn Enterprises                      | 0.8      | 0.6      | 75 |               |
|----|-----|-------------------------------------|----------|----------|----|---------------|
| 29 | DSM | J.S Marine                          | 0.7      | 0.6      | 86 |               |
| 30 | DSM | Marine Food Products Ltd            | 1        | 0.7      | 70 |               |
| 31 | DSM | Kayuyu Trading Co                   | 1        | 0.5      | 50 |               |
| 32 | DSM | Lim Trading Co.Ltd                  | 1        | 0.8      | 80 |               |
| 33 | DSM | Sasha Marine                        | 0.9      | 0.7      | 78 |               |
| 34 | DSM | Codex Seafoods                      | 1.2      | 0.9      | 75 |               |
| 35 | DSM | Iddom Ocean Products                | 0.7      | 0.5      | 71 |               |
| 36 | DSM | Robert Pahali                       | 0.6      | 0.3      | 50 |               |
| 37 | DSM | Joseph Mpepo                        | 0.5      | 0.2      | 40 |               |
| 38 | DSM | Nyavita Aquarium Fish Exporters Ltd | 4000 pcs | 3500 pcs | 88 | Aquarium Fish |
| 39 | DSM | Tanzania Cichlids Co. Ltd           | 6000 pcs | 5000 pcs | 83 | Aquarium Fish |
| 40 | DSM | Tanganyika Sun Shine                | 3000 pcs | 1800 pcs | 60 | Aquarium Fish |
| 41 | DSM | Nunu M. Mwamba                      | 3500 pcs | 3400 pcs | 97 | Aquarium Fish |
| 42 | DSM | Rift Valley Cichlids                | 3000 pcs | 2600 pcs | 87 | Aquarium Fish |
| 43 | DSM | Cichlid land                        | 2000 pcs | 1000 pcs | 50 | Aquarium Fish |

# **6.0 FISHERIES IMPORT DATA**

Table 61: Summary of Fish Import from 2009-2012

|                       |                  | CIF               | VALUE           |                 |  |  |  |
|-----------------------|------------------|-------------------|-----------------|-----------------|--|--|--|
| YEAR                  | WEIGHT IN<br>KGS | VALUE IN US<br>\$ | VALUE IN TSHS   | ROYALTY IN TSHS |  |  |  |
| 2009                  | 1,054,246        | 173,576,726       | 219,406,192,435 | 321,130,132     |  |  |  |
| 2010                  | 1,919,770        | 1,229,344         | 1,668,374,629   | 657,934,406     |  |  |  |
| 2011                  | 2,659,435        | 0                 | 0               | 978,402,385     |  |  |  |
| <b>2012</b> 4,885,689 |                  | 3,512,976         | 5,507,054,266   | 1,681,166,953   |  |  |  |
| TOTAL                 | 10,519,140       | 178,319,046       | 226,581,621,330 | 3,638,633,876   |  |  |  |

Table 62: Estimated fish import for 2012

| MONTH     | WEIGHT IN<br>KG | CIF IN USD   | CIF IN TSH       | ROYALTY IN TSH   |
|-----------|-----------------|--------------|------------------|------------------|
| JANUARY   | 280,920.0       | 184,059.00   | 290,529,863.00   | 112,134,161.00   |
| FEBRUARY  | 657,240.0       | 423,689.90   | 652,891,709.72   | 260,644,075.00   |
| MARCH     | 189,400.0       | 128,940.00   | 201,602,595.00   | 75,936,853.75    |
| APRIL     | 161,900.0       | 139,919.60   | 220,110,814.00   | 64,215,390.00    |
| MAY       | 210,130.0       | 434,502.00   | 690,327,820.00   | 83,405,315.00    |
| JUNE      | 159,530.0       | 230,195.20   | 363,314,063.80   | 160,204,780.00   |
| JULY      | 404,000.0       | 456,195.00   | 722,423,968.50   | 160,088,140.00   |
| AUGUST    | 1,224,170.0     | 179,570.50   | 276,451,728.00   | 133,642,030.00   |
| SEPTEMBER | 216,800.0       | 157,994.00   | 242,172,790.00   | 85,371,855.00    |
| OCTOBER   | 319,744.0       | 274,564.00   | 427,136,288.00   | 126,109,484.50   |
| NOVEMBER  | 742,035.0       | 665,654.61   | 1,047,368,383.80 | 293,130,219.00   |
| DECEMBER  | 319,820.0       | 237,692.40   | 372,724,242.00   | 126,284,650.00   |
| TOTAL     | 4,885,689.0     | 3,512,976.21 | 5,507,054,265.82 | 1,681,166,953.25 |

Table 63: Summary of Import of fish and fishery products by country of origin 2012

| Type of Fish and Fish<br>Products | WEIGHT<br>IN KG | VALUE CIF<br>IN USD | VALUE CIF IN<br>TSH | ROYALTY IN<br>TSH | COUNTRY OF ORIGIN                              |
|-----------------------------------|-----------------|---------------------|---------------------|-------------------|--|
| Dried Dagaa/L.Nyasa               | 470             | 329                 | 335,251             | 52,800            | Malawi   |
| Fresh Fish/ Mozambique            | 3,200           | 9,600               | 9,993,600           | 1,340,000         | Mozambique                                     |
| Fresh Fish/Tilapia                | 17,630          | 52,890              | 54,658,490          | 7,078,925         | Mozambique and Tanzania                        |
| Frozen Bogus                      | 11,540          | 6,000               | 9,537,900           | 4,587,150         | China  |
| Frozen Fish                       | 27,000          | 15,030              | 23,807,520          | 10,685,250        | India  |
| Frozen Horse Mackerel             | 50,380          | 51,083              | 80,918,925          | 19,931,360        | India  |
| Frozen Kwakawa                    | 27,000          | 19,200              | 30,336,000          | 10,665,000        | Yemen  |
| Frozen Mackerel                   | 1,144,150       | 145,961             | 231,106,824         | 102,176,819       | China, Korea and Yemen                         |
| Frozen Pacific Makerel            | 1,908,119       | 1,640,745           | 2,595,870,874       | 852,649,592       | Yemen, China, South Korea, Korea and Hongkong. |
| Frozen Sardines                   | 107,470         | 64,134              | 112,137,687         | 42,490,138        | Yemen  |
| Frozen Scad Mackerel              | 54,000          | 39,220              | 62,264,103          | 21,432,060        | China and Yemen                                |
| Frozen Tail Scad                  | 26,000          | 23,400              | 37,177,686          | 10,327,135        | Yemen  |
| Frozen Tilapia                    | 49,000          | 45,572              | 71,911,827          | 19,354,500        | India and Vietnam                              |
| Frozen Arabian Mackerel           | 52,000          | 31,200              | 49,543,416          | 20,641,790        | Yemen  |
| Frozen Arabic Scad                | 81,000          | 54,458              | 86,043,640          | 32,008,500        | Yemen  |
| Frozen Chub Mackerel              | 125,000         | 84,750              | 102,594,890         | 49,429,200        | Yemen  |
| Frozen Indian Mackerel            | 962,590         | 752,631             | 1,192,462,450       | 381,792,790       | Yemen, India, China, Korea and Vietnam         |
| Frozen Sardines/marine            | 26,880          | 13,440              | 21,208,320          | 10,651,200        | China  |
| Frozen Yellow Tail Scad           | 133,260         | 120,734             | 190,759,720         | 52,617,450        | Yemen  |
| Frozen Yellow Tunna               | 27,000          | 19,200              | 30,240,000          | 10,631,250        | Yemen  |
| Frozen Yelow Scad Mackerel        | 52,000          | 323,400             | 514,145,142         | 20,624,045        | Yemen and Oman                                 |
| TOTAL                             | 4,885,689       | 3,512,976           | 5,507,054,266       | 1,681,166,953     |  |

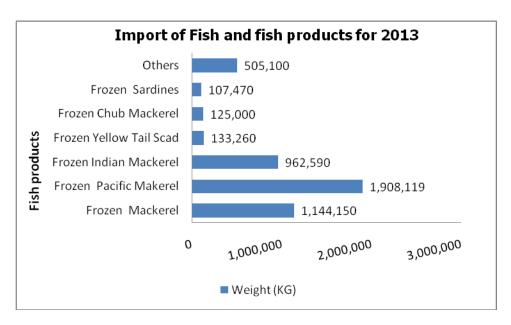


Figure 12: Import performance of fish and fish products for 2012

## 7.0 EEZ DATA

Table 64: Catch trend on Tuna and Tuna like species fisheries 2001 - 2012 (weight in metric tones)

| YEARS/TYPE | swo   | YFT      | BET     | ALB     | SKIP JACK | MARL    | SHK   | OTHERS   | TOTAL    |
|------------|-------|----------|---------|---------|-----------|---------|-------|----------|----------|
| 2001       | 208.4 | 60.2     | 23.3    | 35.9    | 1.3       | 18.5    | 0.0   | 2,158.4  | 2,506.0  |
| 2002       | 188.9 | 356.9    | 82.0    | 55.3    | 0.0       | 0.0     | 48.0  | 4,173.2  | 4,904.2  |
| 2003       | 14.4  | 3,044.7  | 180.5   | 72.4    | 1,734.0   | 0.4     | 0.0   | 9,870.2  | 14,916.5 |
| 2004       | 340.5 | 21,758.8 | 5,615.9 | 7,351.2 | 972.2     | 1,265.2 | 0.0   | 11,529.8 | 48,833.5 |
| 2005       | 55.5  | 1,979.7  | 505.6   | 293.4   | 281.0     | 13.3    | 1.1   | 9,854.9  | 12,984.4 |
| 2006       | 38.0  | 1,829.7  | 390.0   | 76.5    | 1,030.0   | 71.1    | 4.6   | 2,906.0  | 6,345.9  |
| 2007       | 38.6  | 842.5    | 209.5   | 91.7    | 3.2       | 659.2   | 137.5 | 23.2     | 2,005.3  |
| 2008       | 18.5  | 1,281.2  | 1,731.5 | 3,786.4 | 241.0     | 24.9    | 78.0  | 2,985.2  | 10,146.6 |
| 2009       |       | 350.0    | 191.0   |         | 157.0     |         |       |          | 698.0    |
| 2010       | 15.5  | 250.3    | 197.6   | 54.4    | 373.0     | 8.7     | 16.8  | 105.3    | 1,021.6  |
| 2011       | 0.0   | 272.0    | 62.0    | 0.0     | 683.0     | 0.0     | 0.0   | 0.0      | 1,017.0  |
| 2012       | 0.0   | 2,215.0  | 751.0   | 0.0     | 3,413.0   | 0.0     | 0.0   | 182      | 6,561.0  |

### KEY:

SWO - Sword fish

YFT - Yellow fin tuna

BET - Big eye tuna

ALB - Albacore

SKIP JACK - Skip jack tuna

MARL - Marlin

SHK - Sharks

Others -e.g sail fish

Table 65: Trend of EEZ Fishing Vessels (Tuna and Tuna like Species 1998-2012)

| YEAR |              | GEAF        | RTYPE   |                     | LICENSED<br>FISHING<br>VESSELS | LICENSE<br>FEES(USD) | LICENSE FEES(Tsh) |
|------|--------------|-------------|---------|---------------------|--------------------------------|----------------------|-------------------|
|      | Long<br>line | Purse seine | Trawler | Pole<br>and<br>Line | -                              |                      |                   |
| 1998 |              |             | 9*      |                     | 9*                             |                      | 12,895,986.00     |
| 1999 | 1            |             |         |                     | 1                              | 11,000.00            |                   |
| 2000 | 1            |             |         |                     | 1                              | 11,000.00            |                   |
| 2001 | 5            | 1           |         |                     | 6                              | 108,000.00           |                   |
| 2002 | 10           |             |         |                     | 10                             | 159,000.00           |                   |
| 2003 | 18           | 26          |         |                     | 44                             | 751,000.00           |                   |
| 2004 | 40           | 41          | 4       |                     | 85                             | 1,275,100.00         |                   |
| 2005 | 43           | 36          |         |                     | 79                             | 1,176,000.00         |                   |
| 2006 | 49           | 38          |         |                     | 87                             | 1,285,000.00         |                   |
|      | 6*           |             |         |                     | 6*                             |                      | 14,696,003.00     |
| 2007 | 29           | 35          |         | 2                   | 66                             | 956,000.00           |                   |
| 2008 | 15           | 20          |         |                     | 36                             | 538,500.00           |                   |
| 2010 | 16           | 34          |         |                     | 50                             | 1,297,400.00         |                   |
| 2011 |              | 38          |         |                     | 38                             | 1,222,310.00         |                   |
| 2012 |              | 36          |         |                     | 36                             | 1,305,698.00         |                   |

<sup>\*</sup> Tanzanian's citizen fishing vessels

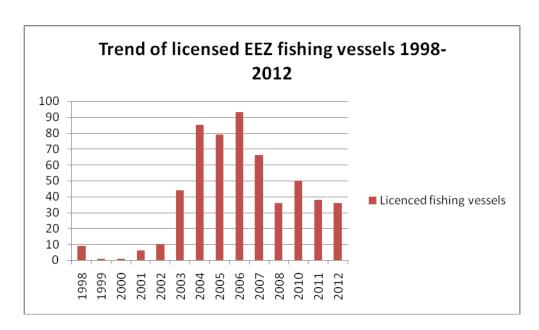


Figure 13: Trend of Licensed EEZ fishing vessels from 1998-2012

# **8.0 FISHERIES LICENSE DATA**

Table 66: Fees collected from Sport License for 2012

| SPECIES  | LICENCE NO. | LICENCE<br>FEE | DATE<br>ISSUED | REMARKS |
|----------|-------------|----------------|----------------|---------|
| FIN FISH | 933951      | 194,400        | 30/01/2012     | RENEWAL |
| FIN FISH |             | 190,800        | 4/4/2012       | RENEWAL |
| FIN FISH |             | 190,800        | 4/4/2012       | RENEWAL |
| FIN FISH |             | 190,800        | 4/4/2012       | RENEWAL |
| FIN FISH | 14682       | 190,080        | 4/5/2012       | RENEWAL |
| FIN FISH | 152975      | 190,200        | 17/05/2012     | NEW     |
| FIN FISH | C00152988   | 189,720        | 3/8/2012       | NEW     |
| FIN FISH | 152991      | 189,840        | 9/8/2012       | NEW     |
| FIN FISH | 152984      | 190,200        | 16/07/2012     | NEW     |
| FIN FISH | 218708      | 189,264        | 13/12/2012     | NEW     |
| TOTAL    |             | 1,906,104      |                |         |

Table 67: Fees collected from export License for fish and fishery products Mwanza zone 2005-2012

|       |         |     |      |                |             |              | TYPE OF F    | ISH AND FIS    | HERY PRODI    | JCTS   |       |              |             |                |       |               |
|-------|---------|-----|------|----------------|-------------|--------------|--------------|----------------|---------------|--------|-------|--------------|-------------|----------------|-------|---------------|
| Years | Fillets | H&G | Maws | Belly<br>Flaps | Fish<br>Oil | Skins&Scales | Fish<br>Meal | Fish<br>Offals | Fish<br>Chest | Kayabo | Dagaa | Fish<br>Head | Off<br>Cuts | Fish<br>Frames | Total | Fees in Tshs  |
| 2005  | 7       | 5   | 4    | 1              | 2           | 2            | 3            | 2              | 2             | 4      | 4     | 1            | 1           |                | 38    | 11,115,858.00 |
| 2006  | 4       | 3   | 4    | 1              | 1           | 3            | 2            | 1              | 2             | 3      | 4     | 1            | 2           |                | 31    | 8,625,912.60  |
| 2007  | 5       | 4   | 4    | 2              | 1           | 2            | 2            | 1              | 3             | 1      | 2     | 1            | 4           |                | 32    | 8,721,150.00  |
| 2008  | 6       | 7   | 6    | 2              | 1           | 1            | 2            |                | 3             | 1      | 2     |              | 4           |                | 35    | 8,950,179.50  |
| 2009  | 7       | 7   | 8    | 3              | 1           | 3            | 2            |                | 3             | 2      | 3     | 1            | 4           |                | 44    | 9,950,252.28  |
| 2010  | 7       | 7   | 7    | 2              |             | 4            | 1            |                | 2             | 3      | 5     | 1            | 4           | 3              | 46    | 11,402,300.42 |
| 2011  | 7       | 7   | 12   | 4              |             | 4            |              |                | 1             | 4      | 3     | 1            | 7           | 3              | 53    | 9,880,954.92  |
| 2012  | 6       | 6   | 11   | 2              |             | 4            | 1            |                | 1             | 1      | 7     | 1            | 7           | 4              | 51    | 9,820,876.07  |
| Total | 49      | 46  | 56   | 17             | 6           | 23           | 13           | 4              | 17            | 19     | 30    | 7            | 33          | 10             | 330   | 78,467,483.79 |

## 9.0 AQUACULTURE PRODUCTION

**Aquaculture production** specifically refers to output from aquaculture activities, which are designated for final harvest for consumption. Output is reported in weight (generally in tones of live weight equivalent for aquatic animals, in wet weight for aquatic plants). Aquaculture production is reported by two culture environments: freshwater and marine water.

By **freshwater** is meant waters with a consistently negligible salinity, by **marine** is meant coastal and offshore waters in which the salinity is maximal and not subject to significant daily and seasonal variation.

Aquaculture production in Tanzania is small scale (mixed sex) generally with 3 fingerlings per square meter stocking density, the average area of fish pond is  $300m^2$  (15m x 20m). From 2011-2012 the estimated number of farmers for freshwater are **17,277** while in marine water there are **1,306** farmers for milk fish, **51** farmers for prawn, **188** farmers for crabs **98** farmers for pearl culture and **2,826** farmers for sea weed farmers.

Table 68: Freshwater Production by district

| S/NO      | REGION      | DISTRICT    | NO. FISH<br>FARMERS | NO.FISH<br>PONDS | AREA (M²) | STOCKING<br>RATE | PRODUCTION<br>(KG) | SPECIES NAME             |
|-----------|-------------|-------------|---------------------|------------------|-----------|------------------|--------------------|--------------------------|
| _         |             |             | 207                 | 614              |           |                  | •                  | Oreochromis              |
| 1         |             | ARUMERU     |                     |                  | 150       | 300              | 92,100             | niloticus                |
|           |             |             | 9                   | 12               |           |                  |                    | Oreochromis              |
| 2         |             | ARUSHA      | 47                  |                  | 150       | 300              | 1,800              | niloticus                |
| 3         |             | NGORONGORO  | 17                  | 6                | 150       | 300              | 900                | Oreochromis niloticus    |
| 4         |             | KARATU      | 7                   | 7                | 150       | 300              | 1,050              | Oreochromis niloticus    |
| 5         |             | MONDULI     | 1                   | 1                | 150       | 300              | 150                | Oreochromis<br>niloticus |
|           |             |             |                     |                  |           |                  |                    | Oreochromis              |
| 6         | ARUSHA      | LONGIDO     | 6                   | 6                | 150       | 300              | 900                | niloticus                |
| SUB TOTAL | -           |             | 247                 | 646              | 900       |                  | 96,900             |                          |
| 7         |             | MOSHI (M)   | 49                  | 49               | 150       | 300              | 7,350              | Oreochromis niloticus    |
| 8         |             | MOSHI (V)   | 84                  | 132              | 150       | 300              | 19,800             | Oreochromis<br>niloticus |
|           |             | 1103111 (1) | 50                  | 52               | 130       | 300              | 13,000             | Oreochromis              |
| 9         |             | MWANGA      |                     |                  | 150       | 300              | 7,800              | niloticus                |
| 10        |             | HAI         | 18                  | 18               | 150       | 300              | 2,700              | Oreochromis niloticus    |
|           |             |             | 870                 | 720              |           |                  |                    | Oreochromis              |
| 11        |             | SAME        |                     |                  | 150       | 300              | 108,000            | niloticus                |
| 12        |             | ROMBO       | 4                   | 4                | 150       | 300              | 600                | Oreochromis niloticus    |
| 13        | KILIMANJARO | SIHA        | 13                  | 13               | 300       | 600              | 3,900              | Oreochromis niloticus    |
| SUB TOTAL |             | JIIIA       | 1088                | 988              | 1200      | 000              | 150,150            | modeus                   |
| 302 :0:7  |             |             | 55                  | 71               | 1100      |                  | 150/150            | Oreochromis              |
| 14        |             | TARIME      |                     | , -              | 150       | 300              | 10,650             | niloticus                |
| 15        |             | RORYA       | 4                   | 14               | 150       | 300              | 2,100              | Oreochromis niloticus    |
|           |             |             | 5                   | 14               |           |                  | ,                  | Oreochromis              |
| 16        |             | MUSOMA (M)  | 32                  | 32               | 150       | 300              | 2,100              | niloticus<br>Oreochromis |
| 17        |             | MUSOMA (V)  |                     |                  | 150       | 300              | 4,800              | niloticus                |
| 18        | MARA        | BUNDA       | 22                  | 24               | 150       | 300              | 3,600              | Oreochromis niloticus    |

| 19        |          | SERENGETI   | 34  | 39  | 150 | 300 | 5,850  | Oreochromis<br>niloticus |
|-----------|----------|-------------|-----|-----|-----|-----|--------|--------------------------|
| SUB TOTAL | <u> </u> | SERENGETT   | 152 | 194 | 900 | 300 | 29,100 | imoticas                 |
| 20        |          | SINGIDA (M) | -   | -   | 0   | 0   | ,      | Oreochromis<br>niloticus |
| 21        |          | SINGIDA (V) | 46  | 46  | 150 | 300 | 6,900  | Oreochromis niloticus    |
| 22        |          | IRAMBA      | 13  | 13  | 150 | 300 | 1,950  | Oreochromis niloticus    |
| 23        | SINGIDA  | MANYONI     | 6   | 6   | 150 | 300 | 900    | Oreochromis<br>niloticus |
| SUB TOTAL | <u> </u> |             | 65  | 65  | 450 |     | 9,750  |                          |
| 24        |          | CHAMWINO    | 8   | 8   | 150 | 300 | 1,200  | Oreochromis<br>niloticus |
| 25        |          | KONDOA      | 4   | 4   | 150 | 300 | 600    | Oreochromis<br>niloticus |
| 26        |          | MPWAPWA     | 18  | 18  | 150 | 300 | 2,700  | Oreochromis niloticus    |
| 27        |          | BAHI        | 4   | 4   | 150 | 300 | 600    | Oreochromis niloticus    |
| 28        |          | KONGWA      | 6   | 6   | 150 | 300 | 900    | Oreochromis niloticus    |
| 29        | DODOMA   | DODOMA (M)  | 10  | 10  | 150 | 300 | 1,500  | Oreochromis niloticus    |
| SUB TOTAL | <u>_</u> |             | 50  | 50  | 900 |     | 7,500  |                          |
| 30        |          | MTWARA (M)  | 82  | 17  | 150 | 300 | 2,550  | Oreochromis<br>niloticus |
| 31        |          | MTWARA (V)  | 396 | 33  | 150 | 300 | 4,950  | Oreochromis<br>niloticus |
| 32        |          | MASASI      | 224 | 103 | 150 | 300 | 15,450 | Oreochromis<br>niloticus |
| 33        |          | NEWALA      | 100 | 77  | 150 | 300 | 11,550 | Oreochromis<br>niloticus |
| 34        |          | NANYUMBU    | 31  | 4   | 150 | 300 | 600    | Oreochromis<br>niloticus |
| 35        | MTWARA   | TANDAHIMBA  | 43  | 24  | 150 | 300 | 3,600  | Oreochromis<br>niloticus |
| SUB TOTAL | <u> </u> |             | 876 | 258 | 900 |     | 38,700 |                          |
| 36        |          | KILWA       | 152 | 17  | 150 | 300 | 2,550  | Oreochromis<br>niloticus |
| 37        | LINDI    | LINDI (M)   | 62  | 42  | 150 | 300 |        | Oreochromis<br>niloticus |

| I         |          | 1              | 223  | 146 |      | [   |        | Oreochromis              |
|-----------|----------|----------------|------|-----|------|-----|--------|--------------------------|
| 38        |          | LINDI (V)      |      |     | 150  | 300 | 21,900 | niloticus                |
|           |          |                | 360  | 25  |      |     |        | Oreochromis              |
| 39        |          | LIWALE         | 40   | 4.4 | 150  | 300 | 3,750  | niloticus                |
| 40        |          | RUANGWA        | 48   | 11  | 150  | 300 | 1,650  | Oreochromis niloticus    |
| 40        |          | RUANGWA        | 158  | 28  | 130  | 300 | 1,030  | Oreochromis              |
| 41        |          | NACHINGWEA     | 130  | 20  | 150  | 300 | 4,200  | niloticus                |
| CUD TOTAL |          | •              | 1003 | 269 | 900  |     | 24.050 |                          |
| SUB TOTAL | <u>_</u> |                | 173  | 173 | 900  |     | 34,050 | Oreochromis              |
| 42        |          | Mvomero        | 1/3  | 1/3 | 150  | 300 | 25,950 | niloticus                |
|           |          |                | 10   | 10  | 100  | 300 |        | Oreochromis              |
| 43        |          | Morogoro (M)   |      |     | 150  | 300 | 1,500  | niloticus                |
|           |          | riorogoro (ri) | 105  | 105 | 130  | 300 | 1,500  |                          |
| 44        |          | Morogoro (V)   |      |     | 150  | 300 | 15,750 | Oreochromis niloticus    |
|           |          | Morogoro (V)   | 224  | 309 | 150  | 300 | 15,750 | Oreochromis              |
| 45        |          | Ulanga         |      |     | 150  | 300 | 46,350 | niloticus                |
|           |          |                | 51   | 12  |      |     |        | Oreochromis              |
|           |          | Ifakara        |      |     | 150  | 300 | 1,800  | niloticus                |
|           |          | V:1            | 4    | 2   | 150  | 200 | 200    | Oreochromis              |
| -         |          | Kilosa         | 24   | 27  | 150  | 300 | 300    | niloticus<br>Oreochromis |
| 46        | MOROGORO | Kilombero      | 24   | 27  | 300  | 600 | 8,100  | niloticus                |
| -         |          |                | 591  | 638 |      |     | •      |                          |
| SUB TOTAL | <u>_</u> |                |      |     | 1200 |     | 99,750 | 0                        |
| 47        |          | Mafia          | -    | -   | 0    | 0   |        | Oreochromis niloticus    |
| - 7/      |          | riana          | 158  | 21  | 0    | 0   |        | Oreochromis              |
| 48        |          | Rufiji         | 130  |     | 150  | 300 | 3,150  | niloticus                |
|           |          | _              | 35   | 7   |      |     | ·      | Oreochromis              |
| 49        |          | Kisarawe       |      |     | 150  | 300 | 1,050  | niloticus                |
| F0        |          | Mayenas        | 4    | 22  | 150  | 200 | 2 200  | Oreochromis              |
| 50        |          | Mkuranga       | 10   | 7   | 150  | 300 | 3,300  | niloticus<br>Oreochromis |
| 51        |          | Kibaha         | 10   | /   | 150  | 300 | 1,050  | niloticus                |
|           |          |                | 8    | 20  |      | 500 |        | Oreochromis              |
| 52        | PWANI    | Bagamoyo       |      |     | 150  | 300 | 3,000  | niloticus                |
| SUB TOTAL |          |                | 215  | 77  | 750  |     | 11,550 |                          |
| JOD TOTAL | _        |                | 78   | 40  | , 30 |     | 11,550 | Oreochromis              |
| 53        |          | Ukerewe        |      |     | 150  | 300 | 6,000  | niloticus                |
|           |          |                | 9    | 34  |      |     |        | Oreochromis              |
| 54        | MWANZA   | Nyamagana      |      |     | 150  | 300 | 5,100  | niloticus                |

|           |        |                     | 17    | 18    |     |     |           | Oreochromis              |
|-----------|--------|---------------------|-------|-------|-----|-----|-----------|--------------------------|
| 55        |        | Ilemela             |       |       | 150 | 300 | 2,700     | niloticus                |
| 56        |        | Kwimba              | 1     | 1     | 150 | 300 | 150       | Oreochromis niloticus    |
| 30        |        |                     | 240   | 38    |     |     |           | Tilloticus               |
|           |        | Misungwi            |       |       | 150 | 300 | 5,700     |                          |
| 57        |        | Magu                | 74    | 13    | 150 | 300 | 1,950     | Oreochromis niloticus    |
|           |        | Magu                | 419   | 144   |     | 300 |           | Tilloucus                |
| SUB TOTAL | _      |                     |       |       | 900 |     | 21,600    |                          |
| 58        |        | GEITA               | 9     | 12    | 150 | 300 | 1,800     | Oreochromis<br>niloticus |
| 59        |        | CHATO               | 22    | 17    | 150 | 300 | 2,550     | Oreochromis niloticus    |
|           |        |                     | 8     | 12    |     |     | •         | Oreochromis              |
| 60        | GEITA  | SENGEREMA           |       |       | 150 | 300 | 1,800     | niloticus                |
| SUB TOTAL | _      |                     | 39    | 41    | 450 |     | 6,150     |                          |
|           |        |                     | 123   | 124   |     |     |           | Oreochromis              |
| 61        |        | Nkasi               |       |       | 150 | 300 | 18,600    | niloticus                |
| 62        |        | Mpanda              | 50    | 48    | 150 | 300 | 7,200     | Oreochromis niloticus    |
| 02        |        |                     | 471   | 256   | 130 | 300 | 7,200     |                          |
| 63        |        | Sumbawanga<br>Mjini | ., -  | 230   | 150 | 300 | 38,400    | Oreochromis niloticus    |
|           |        |                     | 107   | 107   |     |     |           | Oreochromis              |
| 64        | RUKWA  | Sumbawanga(V)       |       |       | 150 | 300 | 16,050    | niloticus                |
| SUB TOTAL | _      |                     | 751   | 535   | 600 |     | 80,250    |                          |
| 65        |        | Tunduru             | 315   | 463   | 150 | 300 | 69,450    | Oreochromis niloticus    |
| 05        |        | Turiduru            | 951   | 1,124 | 130 | 300 | 09,430    | Oreochromis              |
| 66        |        | Mbinga              | 501   | _/ :  | 150 | 300 | 168,600   | niloticus                |
|           |        | - 60                | 1,051 | 3,571 |     |     |           | Oreochromis              |
| 67        |        | Songea (M)          | 1 227 | 2 227 | 150 | 300 | 535,650   | niloticus                |
| 68        |        | Songea (V)          | 1,327 | 3,227 | 150 | 300 | 484,050   | Oreochromis niloticus    |
|           |        | 3011900 (1)         | 200   | 44    | 130 | 300 | 10 1,030  | Oreochromis              |
| 69        | RUVUMA | Namtumbo            |       |       | 150 | 300 | 6,600     | niloticus                |
| SUB TOTAL | -      |                     | 3844  | 8429  | 750 |     | 1,264,350 |                          |
|           |        |                     | 68    | 8     |     |     |           | Oreochromis              |
| 70        |        | Kyela               | 460   | 460   | 150 | 300 | 1,200     | niloticus                |
| 71        | MBEYA  | Rungwe              | 460   | 460   | 150 | 300 | 69,000    | Oreochromis niloticus    |

| 72        |         | Mbalali    | 221  | 221  | 150  | 300 | 33,150  | Oreochromis<br>niloticus |
|-----------|---------|------------|------|------|------|-----|---------|--------------------------|
| 73        |         | Mbozi      | 41   | 89   | 150  | 300 | 13,350  | Oreochromis<br>niloticus |
| 74        |         | Ileje      | 188  | 188  | 150  | 300 | 28,200  | Oreochromis<br>niloticus |
| 75        |         | Mbeya (M)  | 20   | 20   | 150  | 300 | 3,000   | Oreochromis<br>niloticus |
| 76        |         | Mbeya (V)  | 82   | 112  | 300  | 600 | 33,600  | Oreochromis niloticus    |
| SUB TOTAL | _       |            | 1080 | 1098 | 1200 |     | 181,500 |                          |
| 77        |         | Iringa (M) | 154  | 5    | 150  | 300 | 750     | Oreochromis<br>niloticus |
| 78        |         | Iringa (V) | 64   | 6    | 150  | 300 | 900     | Oreochromis<br>niloticus |
| 79        |         | Kilolo     | 405  | 405  | 150  | 300 | 60,750  | Oreochromis niloticus    |
| 80        | IRINGA  | MUFINDI    | 1500 | 1804 | 150  | 300 | 270,600 | Oreochromis<br>niloticus |
| SUB TOTAL | _       |            | 2123 | 2220 | 600  |     | 333,000 |                          |
| 81        |         | Babati (M) | 25   | 54   | 150  | 300 | 8,100   | Oreochromis<br>niloticus |
| 82        |         | Babati (V) | 44   | 51   | 150  | 300 | 7,650   | Oreochromis niloticus    |
| 83        |         | Mbulu      | 8    | 8    | 150  | 300 | 1,200   | Oreochromis niloticus    |
| 84        |         | Hanang     | 55   | 15   | 150  | 300 | 2,250   | Oreochromis<br>niloticus |
| 85        | MANYARA | Kiteto     | 8    | 16   | 150  | 300 | 2,400   | Oreochromis<br>niloticus |
| SUB TOTAL | _       |            | 140  | 144  | 750  |     | 21,600  |                          |
|           |         | Kilindi    | 63   | 19   | 150  | 300 | 2,850   |                          |
| 86        |         | Mkinga     | 23   | 6    | 150  | 300 | 900     | Oreochromis<br>niloticus |
| 87        |         | Handeni    | 40   | 45   | 150  | 300 |         | Oreochromis<br>niloticus |
| 88        |         | Lushoto    | 120  | 293  | 150  | 300 | 43,950  | Oreochromis<br>niloticus |
| 89        |         | Pangani    | -    | -    | 0    | 0   |         | Oreochromis<br>niloticus |
| 90        | TANGA   | Korogwe    | 2    | 7    | 150  | 300 | 1,050   | Oreochromis niloticus    |

| I         |           | 1                                     | 1   | 1              |     |     |        | Oreochromis              |
|-----------|-----------|---------------------------------------|-----|----------------|-----|-----|--------|--------------------------|
| 91        |           | Tanga jiji                            |     |                | 150 | 300 | 150    | niloticus                |
|           |           |                                       | 210 | 164            |     |     |        | Oreochromis              |
| 92        |           | Muheza                                | 205 | F4.6           | 150 | 300 | 24,600 | niloticus                |
| SUB TOTAL | L         |                                       | 396 | 516            | 900 |     | 70,650 |                          |
|           |           |                                       | 135 | 154            |     |     | •      | Oreochromis              |
| 93        |           | Kasulu                                |     |                | 150 | 300 | 23,100 | niloticus                |
| 0.4       |           |                                       |     |                |     | 0   |        | Oreochromis              |
| 94        |           | Kibondo                               | 150 | 120            | 0   | 0   | -      | niloticus<br>Oreochromis |
| 95        | KIGOMA    | Kigoma Vijijini                       | 150 | 120            | 150 | 300 | 18,000 | niloticus                |
|           |           | ragoria vijijini                      | 285 | 274            |     | 300 | •      | Tilloticus               |
| SUB TOTAL | _         | _                                     |     |                | 300 |     | 41,100 |                          |
| 06        |           | I loo wale a                          | 50  | 40             | 150 | 200 | 6.000  | Oreochromis              |
| 96        |           | Urambo                                | 5   | 18             | 150 | 300 | 6,000  | niloticus                |
|           |           |                                       | 5   | 18             |     |     |        | Oreochromis              |
| 97        |           | Tabora Mjini                          |     | 2.4            | 150 | 300 | 2,700  | niloticus                |
| 98        |           | Naga                                  | 54  | 31             | 150 | 300 | 4,650  | Oreochromis              |
| 96        |           | Nzega                                 | 41  | 26             | 150 | 300 | 4,030  | niloticus<br>Oreochromis |
| 99        |           | Igunga                                | 71  | 20             | 150 | 300 | 3,900  | niloticus                |
|           |           | -3090                                 | 44  | 78             |     |     |        | Oreochromis              |
| 100       |           | Sikonge                               |     |                | 150 | 300 | 11,700 | niloticus                |
|           |           |                                       | 7   | 7              |     |     |        | Oreochromis              |
| 101       | TABORA    | Uyui                                  |     |                | 150 | 300 | 1,050  | niloticus                |
| SUB TOTAL | L         |                                       | 201 | 200            | 900 |     | 30,000 |                          |
|           |           |                                       | 35  | 80             |     |     | •      | Oreochromis              |
| 102       |           | Muleba                                |     |                | 150 | 300 | 12,000 | niloticus                |
| 400       |           |                                       | 22  | 17             | 150 | 200 | 2 552  | Oreochromis              |
| 103       |           | Chato                                 | 20  | 22             | 150 | 300 | 2,550  | niloticus                |
| 104       |           | Biharamulo                            | 20  | 22             | 150 | 300 | 3,300  | Oreochromis niloticus    |
| 104       |           | Diriaramulo                           | 176 | 39             | 130 | 300 | 3,300  |                          |
| 105       |           | Pulsaba viiiiini                      | 170 | 33             | 150 | 200 | F 0F0  | Oreochromis              |
| 105       |           | Bukoba vijijini                       | 85  | 54             | 150 | 300 | 5,850  | niloticus<br>Oreochromis |
| 106       |           | Karagwe                               | 65  | 5 <del>4</del> | 150 | 300 | 8,100  | niloticus                |
| 100       |           | · · · · · · · · · · · · · · · · · · · | 36  | 34             | 130 | 200 | 3,100  | Oreochromis              |
| 107       | KAGERA    | Bukoba mjini                          |     |                | 150 | 300 | 5,100  | niloticus                |
| SUB TOTAL | <u> </u>  |                                       | 374 | 246            | 900 |     | 36,900 |                          |
|           |           |                                       | 20  | 18             |     |     | •      | Oreochromis              |
| 108       | SHINYANGA | Kahama                                |     |                | 150 | 300 | 2,700  | niloticus                |

|           |                  | 1             | 10     | 13     |        |      |           | Oreochromis              |
|-----------|------------------|---------------|--------|--------|--------|------|-----------|--------------------------|
| 109       |                  | Shinyanga (v) |        |        | 150    | 300  | 1,950     | niloticus                |
| 110       |                  | Kishapu       | 1      | 1      | 150    | 300  | 150       | Oreochromis<br>niloticus |
|           |                  |               | 31     | 32     | 450    |      | 4,800     |                          |
| 111       |                  | Ilala         | 14     | 25     | 150    | 300  | 3,750     | Oreochromis<br>niloticus |
| 112       |                  | Temeke        | 52     | 49     | 150    | 300  | 7,350     | Oreochromis<br>niloticus |
| 113       | DAR ES<br>SALAAM | Kinondoni     | 16     | 36     | 150    | 300  | 5,400     | Oreochromis<br>niloticus |
| SUB TOTAL | L                |               | 82     | 110    | 450    |      | 16,500    |                          |
| 114       |                  | BARIADI       |        |        | 0      | 0    | -         | Oreochromis niloticus    |
| 115       |                  | MEATU         |        |        | 0      | 0    | -         | Oreochromis niloticus    |
| 116       |                  | MASWA         |        |        | 0      | 0    | -         | Oreochromis niloticus    |
| 117       | SIMIYU           | BUSEGA        |        |        | 0      | 0    | -         | Oreochromis niloticus    |
| SUB TOTAL | L                |               |        |        |        |      |           |                          |
| 118       |                  | WAGING'OMBE   | 985    | 1015   | 150    | 300  | 152,250   | Oreochromis<br>niloticus |
| 119       |                  | MAKETE        | 1360   | 127    | 150    | 300  | 19,050    | Oreochromis<br>niloticus |
| 120       |                  | LUDEWA        | 461    | 461    | 150    | 300  | 69,150    | Oreochromis<br>niloticus |
| 121       | NJOMBE           | NJOMBE        | 450    | 1049   | 150    | 300  | 157,350   | Oreochromis<br>niloticus |
| SUB TOTAL | <u>L</u>         |               | 3,256  | 2,652  | 600    | 1200 | 397,800   |                          |
| TOTAL     |                  |               | 17,277 | 19,794 | 17,400 |      | 2,913,000 |                          |

 Table 69:
 Mariculture Production by district

| REGION           | Milk fish    |                |              |                     | Pra          | awns           | С            | rabs           | P       | earl Cultı | ıre            | Seaweed        |                   |
|------------------|--------------|----------------|--------------|---------------------|--------------|----------------|--------------|----------------|---------|------------|----------------|----------------|-------------------|
| MTWARA           | No.<br>Ponds | No.<br>Farmers | Area<br>(m²) | Production<br>(Kgs) | No.<br>Ponds | No.<br>Farmers | No.<br>Cages | No.<br>Farmers | Oysters | Pearls     | No.<br>Farmers | No.<br>Farmers | Production (tons) |
| Mtwara Mjini     | 80           | 82             | 900          | 144,000             | 1            | 30             | 430          | 7              | 1000    | 967        | 11             | 241            |                   |
| Mtwara Vijijini  | 34           | 520            | 900          | 61,200              |              |                | 11           | 58             |         |            |                |                |                   |
| LINDI            |              |                |              |                     |              |                |              |                |         |            |                |                |                   |
| Lindi Mjini      | 4            | 62             | 900          | 7,200               |              |                |              |                |         |            |                | 100            |                   |
| Lindi Vijijini   | 13           | 223            | 900          | 23,400              |              |                |              |                |         |            |                | 1782           |                   |
| Kilwa            | 17           | 152            | 900          | 30,600              |              |                | 160          | 7              |         |            |                |                |                   |
|                  |              |                |              |                     |              |                |              |                |         |            |                |                | <u>-</u>          |
| PWANI<br>Mafia   | 10           | 147            | 900          | 18,000              | 30           | 1              |              |                | 320     | 254        | 65             | 280            |                   |
| Bagamoyo         | 2            | 6              | 900          | 3,600               |              |                |              |                | 200     |            | 12             | 58             |                   |
| Rufiji           | 12           | 104            | 900          | 21,600              |              |                | 10           | 60             |         |            |                |                |                   |
| Mkuranga         | 39           | 7              | 900          | 70,200              |              |                |              |                |         |            |                |                |                   |
| DAR ES<br>SALAAM |              |                |              | -                   |              |                |              |                |         |            |                |                | -                 |
| Ilala            |              |                |              | -                   |              |                |              |                |         |            |                |                |                   |
| Kinondoni        |              |                |              | -                   |              |                |              |                |         |            |                |                |                   |
| Temeke           |              |                |              | -                   |              |                | 22           | 12             |         |            |                | 20             |                   |
| TANGA            |              |                |              | -                   |              |                |              |                |         |            |                |                |                   |
| Tanga City       | 13           | 2              | 900          | 23,400              | 4            | 4              |              |                |         |            |                | 160            |                   |
| Pangani          | 22           | 1              |              | -                   | 3            | 16             | 150          | 44             |         |            |                | 68             |                   |
| Mkinga           |              |                |              | -                   |              |                |              |                | 259     | 5          | 10             | 117            |                   |
| GRAND<br>TOTAL   | 246          | 1,306          |              | 403,200             | 38           | 51             | 783          | 188            | 1,779   | 1,226      | 98             | 2,826          | 651               |