



Training Manual for Community- based Fish Stock Management in Freshwater Lakes

Pilot Region: Lake Tana, Ethiopia



Imprint

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Abbreviations

ARARI	Amhara Region Agriculture Research Institute
BDU	Bahir Dar University
BOA	Bureau of Agriculture
ANRS	Amhara National Regional State
FA	Food and agricultural organization
CoPA	Cooperatives promotion agency
PTF	Part time fishers
Spp	Species
NA	Not available

Executive Summary

FAO defines food security as existent “[...] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”. Sustainable development meets the current needs without compromising the ability of future generations to benefit from the ecosystems. Fisheries require a relatively high energy input in locating, harvesting, transporting, and processing of fish. Currently, Lake Tana is under heavy pressure and threat from illegal fishing gears, fishers fishing at breeding grounds and during breeding seasons and degradation of important breeding habitats, such as wetlands, through recession agriculture, settlement, overgrazing, pumping, excessive nutrient load and herbicides around tributary rivers and surrounding wetlands. The appropriate gillnet has been replaced by the destructive monofilament net (2,958,500 meters). The total number of fishers has increased from 1,800 to 5,403 (unpublished data, 2017). Human interferences, such as settlement, recession agriculture systems, deforestation, by free overgrazing activities and unlimited pumping in the tributary rivers are currently threatening breeding grounds. In addition to that major dams that have been planned recently will make a sustainable production of fish in Lake Tana more difficult. Hence, appropriate mitigation measures have to be prepared and implemented as soon as possible. Lake Tana fisheries are utilizing a limited natural resource with a risk of overexploitation.

An important point that has to be considered is that the world's food production needs to be doubled by 2050, because population is expected to increase to a number of approximately 9 billion. Food security not only includes enough food for everyone but also different preferences. The consumption of meat and fish will probably increase significantly. But fisheries in Lake Tana region are not regulated according to national fishery legislations and regional fishery directives. It needs scientific knowledge about the resources to develop useful management strategies. The aim of these strategies will be to encourage the active role of the fishery, considering effective legislations and directives.

1. Introduction

At 12°N, 37°15'E, and 1830 m altitude, Lake Tana is situated on the basaltic plateau of the north-western highlands of Ethiopia covering an area of about 3,500 km². Seven large permanent rivers feed the lake as well as around 40 small seasonal rivers. The lake is bordered by low plains in the North (Dembia), East (Fogera) and South-west (Kunzila) that are often flooded during rainy seasons and by steep rocks in the West and North-west. Wetlands are to find all around the lake except in the Northeast. Together they build the largest wetland system in the country and integral parts of the complex Lake Tana ecosystem. The lake is characterised by high nutrient concentrations and a low water transparency due to the high amount of silt and nutrient in the inflowing rivers. During rain seasons (June to August) chemical and organic fertilizers reach the lake because of floods from water catchments.

The sub-basins of Lake Tana with the above diverse ecosystem (the lake, the wetland and the rivers) are home to unique endemic fish species in the country. 20 of the 28 fish species of Lake Tana are endemic to the Lake Tana catchment. This speciation was possible, because the incipient lake offered new habitats for adaptive radiation and maintained its isolation for the past 5 million years.

Despite the unique fish biodiversity and its high economic value, fish resources are threatened by illegal fishing and habitat destruction (wetlands, rivers and the lake itself) due to human intervention. Most of the fish species (> 7 species of *Labeobarbus* spp.) breed in the tributary rivers while about 8 species, including commercially important species *O. niloticus* and *C. Gariepinus*, use the wetlands and the lake as breeding areas. To preserve the variety of species in Lake Tana region, it is necessary to implement effective management measures.

2. Fish biology, feeding and breeding strategies in Lake Tana fisheries

Lake Tana is one of the few African lakes, which have not yet been damaged by introduced fish species or major sources of pollution. 20 of the 28 fish species of Lake Tana are endemic, because the lake has been isolated for the past 5 million years on one side by the 40m high falls of the lower Blue Nile basin and on the other side by the 30 km downstream from the Blue Nile outflow (Nagelkerke and Sibbing, 2000). There is one cichlid family, *Oreochromis niloticus* (Nile tilapia), which is the most widespread tilapia species in Africa. This species is predominantly an herbivore, feeding on macrophytes, algae and detritus (Table 3). The catfish family (Clariidae) is also presented by one species, *Clarias gariepinus* (African catfish), which is the most

common member of its genus. This species is a facultative piscivore, feeding occasionally on fish as well as on zooplankton, benthic invertebrates and algae. The obscure loach, *Nemacheilus abyssinicus* (Balitoridae), is very rare in the lake but was also observed in a small stream close to Lake Tana and in large parts of the Ethiopian high plateau (Dgebuadze et al., 1994).

The largest fish family in the lake is the family of the cyprinids, which is represented by four genera: *Varicorhinus*, *Garra*, *Labeobarbus* and *Barbus*. *Varicorhinus* is represented by the single species *Varicorhinus Beso*, which scrapes algae from substrates, and which is a common species in the rivers and lakes of the Ethiopian highlands. The genus *Garra* is represented by four species in Lake Tana: *Garra dembecha*, which is common and generally distributed in the Ethiopian highlands, *G. Dembeiansis*, found on the northern part of Lake Tana and two endemic species, *G. microstoma* and *G. tana*, recently described by Getahun (2000). All these species are herbivorous. Fifteen large hexaploid barbs (*Labeobarbus* spp.) belong to a unique species flock of endemic cyprinids of which eight are piscivores (Nagelkerke and Sibbing, 2000). The adult *Labeobarbus* spp. is generally pelagic, whereas the juveniles are usually living in the littoral zone with macrophytes and/or in the adjacent wetlands. There is also one non-endemic *Labeobarbus* species present: The *L. Intermedius* is a generalist that feeds mainly on macro fauna and benthic invertebrates and can be found all over Ethiopia in lakes and rivers. The fish community contains furthermore three diploid species of small (< 10 cm) barbs: *Barbus humilis*, *B. pleurogramma* and the recently discovered *B. tanapelagious* (de Graaf et al., 2003). The last two species are endemic in L. Tana, *B. pleurogramma* is mainly present in the wetlands around the lake, *B. humilis* is a littoral species, whereas *B. tanapelagious* is common in the large pelagic zone of the lake.



Figure 1 Sixteen large *Labeobarbus spp*, of which fifteen unique species are endemic to Lake Tana (Negelkerke, 1997)

The species of the *Labeobarbus* belongs to a unique species flock endemic to Lake Tana which constitutes about 15% of fishers' catch composition. Due to unsustainable fishing methods such as using narrow mesh sized gillnet, using monofilament gillnets, seining, chase and trap methods, fishing at breeding grounds and seasons fish stock activities declined year after year. In most cases of this days fishing are mainly possible during their aggregation for upstream spawning migration processes at tributary river mouths and other specific sites along the length of rivers and at shore areas of the lake. Juvenile fishes of these species have been affected by unlimited pumping of pooled waters for irrigation

activities. In addition to that, sand mining activities have negative impacts on baby fish of this species. Additional threats have occurred when people used poisonous material like *Malletia ferggunia* (Birbira) in water pools of tributary rivers of the lake during the dry season of a year to easily catch fish.



Figure 2 *Oreochromis niloticus* (herbivours) fish species in Lake Tana

The species of the *Oreochromis niloticus* (herbivours) constitutes 65% of the fishers catch composition. Fishing activities are mainly conducted during breeding seasons and on the grounds of *O. niloticus*, particularly on fogera flood plains and in every wetland found at shore areas of the lake. As a result, the number of catches and the average length and weight of caught fish by fishers decreased at an alarming rate which indicates that both recruitment and growth overfishing are huge problems in Lake Tana.



Figure 3 *C. gariepinus* and *Varicorhinus beso* fish species from left to right respectively

It is concluded in the way that Lake Tana is one of the few African lakes, which have not yet been damaged by introduced fish species or major sources of pollution. As a result the lake comprises 20 endemic species of the total 28 fish species found in the lake. Some of which used in the food chain process to keep the life of other species. Some are carnivores, some

herbivores and others opportunistic feeders. All of them breed by laying eggs at specific sites of tributary rivers, shore area of the lake and on other connected wetlands.

3. Fish Stock Management

There are hot spots to start fish stock management of Lake Tana fisheries. For instance, suitable areas are where *Labeobarbus* spp, spawns especially river mouths, vegetation covered shore areas (wetlands), seasonal flooded reservoirs like Shesher and Wellala, pooled river waters where juveniles grow up. And other destructive fishing activities which mentioned in the above parts of this manual are critical points to start implementation of management program.

Results indicated that Nile tilapia (*Oreochromis niloticus*), African catfish (*Clarias gariepinus*) and species flock of endemic, large *Labeobarbus* spp. were the three main species groups targeted by commercial gillnet fishery of Lake Tana and form 65%, 20% and 15% of the annual catch composition of fish species during the study period respectively (Dereje T., 2015). There have been significant variabilities among sampling years encompassing temporal aspects. Especially the commercial catch of *O. niloticus* increased significantly until 2007 and declined afterwards. The most likely explanations for the declining catch of *O. niloticus* and others are the illegal use of undersized monofilament gillnet, imported from Sudan town (Gelabat), and the harmful increase of the commercial gillnet fishery targeting the spawning aggregations of *Labeobarbus* spp. and *C. gariepinus* in the river mouths and littoral areas. The observed decline of the commercial catch of *O. niloticus* and others require urgent management plans to overcome these problems.

The maximum sustainable yield for Lake Tana fishery is only about 4 kg per hectare (for the whole lake: 7,000-10,000 tons), which is low compared to the Ethiopian Rift Valley Lakes (about 10 kg per hectare) and other tropical African lakes of similar depth (10-100 kg per hectare). This could be because at the time of production potential estimation Lake Tana was categorized under Oligotrophic lakes, which means less productive in terms of photosynthetic activities which is due to high suspended soil particles getting in to the lake through erosion that inhibit light penetration in the columns of lake water depth. Traditionally, Lake Tana fisheries consisted of mainly artisanal predominantly subsistence fishery conducted from papyrus reed boats (*tankwa*'s) which resemble those of ancient Egypt. The fishermen, who were using mainly fish traps and small gill nets, were almost exclusively members of the *Negada* tribe. Currently, Lake Tana fish resources are exploited by modern fishing gears and motorized boats mainly for marketing purpose. But the way they fish is illegal (e.g. unlimited number of fishers without licensing and inappropriate fishing gears used). This needs urgent over all management plan to utilize the resource in a sustainable manner.

Only in 1986, motorized commercial gillnet fishery was developed by Amhara fishermen in cooperation with fishermen in Urk (Netherlands). Commercial catches of large barbs in Lake Tana over the last decade have sharply decreased due to overfishing in river mouths during fish migration to their spawning rivers (de Graaf et al., 2004). However, at the 4th Pan

African Fisheries and Fish Association (PAFFA) conference, held in September 2008 at Addis Ababa, habitat degradation on the breeding ground of fish (rivers, tributaries and wetlands) contributed to the sharp decline more than overfishing activities.

The three main species groups targeted by this fishery are a species flock of endemic, large *Labeobarbus* spp., African catfish (*Clarias gariepinus*) and Nile tilapia (*Oreochromis niloticus*). The commercial gillnet fisheries were monitored during 1991-1993 and in 2001 in conjunction with an experimental trawling program (de Graaf et al., 2006). In the commercial catch large specimens of African catfish (>50 cm) and Nile tilapia (>20 cm) have decreased significantly during the last 10 years, but recruitment of young fish to the adult populations was not negatively affected. During the same period the commercial catch of riverine spawning *Labeobarbus* spp. declined about 75%. In the experimental fishery a similar decrease has been observed and the populations of juvenile *Labeobarbus* in the littoral area (length range: 5-18 cm) has decreased by more than 85% (de Graaf et al., 2006). The major reason for the collapse of these fish species is the destructive fishing during their spawning season and the destruction of the river ecology that serves as a spawning ground. These species form aggregations in the river mouths in August-September when they are targeted by the commercial gillnet fishery. It is clear that in case of the migrating *Labeobarbus* recruitment overfishing is taking place and that the seven species of this unique species flock are critically threatened.

Species composition changed during the last ten years, e.g. total specimen caught declined 10 times from which it was in ten years ago (Dereje T., 2012). As seen in sampling data, some species have declined significantly during the last years (eg *L. dainalli* and *L. gorgori*). Currently the number of fish that is caught has decreased compared to how it was before. The fish are also smaller and lighter. Fish are only caught from shore areas and not from open water areas during the breeding season.

Besides the individual effort of a few woreda fishery experts, the fishery management committees of both kebele and woreda level have no possibilities to overcome the existing fishery problems, above all the wide spread use of monofilament gillnets. The woreda level administration side does not pay enough attention to these problems which is the reason why fishery is not raised as an issue during any forum of evaluation.

4. Fishing gears and type of fishing used by commercial fisheries of Lake Tana

Every fisherman in Lake Tana, irrespective of whether they are organized in cooperatives or act as individual fishers, use illegal fishing methods and fishing gears. Almost all fishers take part in fishing activities during the breeding seasons

targeting individual species at particular breeding sites such as shore areas, wetlands, river mouths and along each tributary river of the lake. Very common are monofilament gillnets which have been brought to Ethiopia illegally from Egypt through the Sudanese market. By using these nets, fishers are able to catch fish of every size by any contact of its single twine. Some fishers used these gillnets to practice chase and trap systems along the shore areas of the lake. In areas with less vegetation most fishers used seining systems. In areas with thick vegetation and in associated wetlands, they used locally made traps named hives, Angafra, Magafefia. Others used Adafnie/Menze/castnet which are more narrow than it is recommended, e.g. stretched mesh size 5cm. During dry season, some fishers add poisonous plant materials to water pools to easily catch fish. Hence, to preserve the fish species, it is necessary to prohibit any fishing activities for at least two months in a year.



Figure 4 Catch of commercial gillnet fishery from Enfranz River mouth, during *Labeobarbus spp.* spawning season



Figure 5 Monofilament gillnet introduced to Lake Tana commercial gillnet fishery from Sudanese market (Gelabat)

Fishing by monofilament gillnet is performed mostly in the morning up to 10 a.m. which causes a disturbance of spawning grounds because of the use of sticks to kick the surface water. The illegal nets are mainly used because of the demand of fish

from small fish populations. These fish are brought from Lake Tana to Addis Ababa and Sudan as well as different towns of the country by fish traders. Another practice which has become more common recently is the use of small meshed nets (usually < 4 cm) used at the shore sides of Lake Tana especially during *O. niloticus* spawning seasons (Fig. 5).



Figure 6 Fishing with 4-5 cm stretched mesh size cast nets, monofilament gillnets and seining at shore sides of Lake Tana and along tributary rivers during the breeding seasons

As a conclusion remark illegal fishing methods and not recommended fishing gears, fishing activities during the breeding seasons targeting individual different species at particular breeding sites, such as shore areas, wetlands, river mouths and along each tributary river of the lake including destruction of wetlands and tributary rivers has to be stopped.

Nº	List of woredas	Major kebeles engaged in fishing	
1	Fogera	<ul style="list-style-type: none"> • Nabegageorgis 	<ul style="list-style-type: none"> • Wagetera
2	Libo kemkem	<ul style="list-style-type: none"> • Tezamba • Kab 	<ul style="list-style-type: none"> • Agidkirigna
3	Gonder zuria	<ul style="list-style-type: none"> • Mitreha Abawerka • Firka Dangurie 	<ul style="list-style-type: none"> • Cheha Gomengie • Lemba
4	Dembia	<ul style="list-style-type: none"> • Tana Woina • Jarjar • Achera • Serabadablo • Wawa • Mangie 	<ul style="list-style-type: none"> • Abrjeha • Fentay • Debirzuria • Tezeba • Gurandie
5	Alefa	<ul style="list-style-type: none"> • Ahcha Mangur • Dengel Ber • EseyDebir 	
6	Bahirdar Zuria	<ul style="list-style-type: none"> • Dek • Derbanta • Gobat 	<ul style="list-style-type: none"> • Lijoy • Robit • Sekelet • Woonjeta
7	Bahir Dar town	<ul style="list-style-type: none"> • Zegie • Oura • Woramit • Yiganda 	<ul style="list-style-type: none"> • Shimbte • Zenzelma • Sefeneselam
8	Dera	<ul style="list-style-type: none"> • Mitseli • Korata • Mirafemariam 	
9	Takusa	<ul style="list-style-type: none"> • Delgy • Mekonta • Chankie 	<ul style="list-style-type: none"> • Achera • Chemera • Chachinaalwa
10	NorthAchefer	<ul style="list-style-type: none"> • Chinba • Legdia • Estumit 	<ul style="list-style-type: none"> • Kunzila • Wenberaeyesus

Table 1 List of Kebeles with high potential for fishery in ten Woredas around Lake Tana

Nº	Woredas	Nº of fishery potential kebeles	Nº of fishers	Fishing gear type	Total length of monofilament	Fishing boat type	Type of engagement	License provision
1	Bahirdarzuria	7	477	monofilament	238500	477 Reed boat	Full=43 Part time =423 Seasonal=11	NA
2	Bahir dartown	7	190	monofilament	190000	52 Motor 86 Reed	Full time=190	NA
3	Semenachefer	5	146	monofilament	73000	146 Reed	Full time= 146	34
4	Alefa	3	129	monofilament	64500	129 Reed boat	Full=39 Part time=51 Seasonal= 39	NA
5	Dembiya	11	481	monofilament	240500	481 Reed boat	Full= 81 Part and seasonal=400	NA
6	Takusa	6	270	monofilament	297000	1 Motor 269 Reed	Full= 160 Part and seasonal= 110	NA
7	Gonderzuria	4	658	monofilament	329000	656 Reed and 2 Motor	Full=149 Part and seasonal=509	220
8	Libokemkem	3	2284	monofilament	1142000	2281 Reed 3 Motor	Full= 1230 Part/seasonal= 1054	NA
9	Fogera	2	532	monofilament	266000	352 Reed 60 Motor	Full= 210 Part and Seasonal=322	2
10	Dera	3	236	monofilament	118000	80 Reed 78 Motor	Full=232 Part time=4	NA
	Total	44	5,403		2,958,500 m	4,957 Reed 196 Motor	Full=2,480 Part and seasonal=2,923	256

Table 2 Number of fishers, motor and reed boats and the length of fishing gears in each Woreda

5. Current major challenges of Lake Tana ecosystem and its fishery resource

- Illegal fishing activities by both fisher cooperatives and individual fishers, using illegal fishing gears such as monofilament gillnets imported from Sudanese market, locally made traps called “Angafira” and small meshed gillnets)
- Intensive fishing activities during breeding seasons
- Destruction of important breeding and nursery sites such as wetlands around Lake Tana (such as change of land use, free overgrazing and encroachment by invasive weeds)
- Drainage of wetlands for crop cultivation which are important for breeding sites of fish (examples: “Shesher” and “Wellala”)
- Invasive weed (examples: Water hyacinth, Azola, Water lettuce)
- Temporary nutrient and silt load increment that may contribute to a change of fish taste and to an increasing eutrophication (algal bloom)
- Mining at breeding sites and pumping river waters without considering the fisheries
- Recession of agriculture around the lake as a result of the loss of buffer zones
- The use of poisonous plant materials and chemicals in Fogera woreda in both rivers of Mamza as well as in the Rib, Bebeks and Gumara River
- Fishing activity by seining around Delgy, Fogera, Dembia and Alefa by fishers who came from elsewhere (example from Gorgora areas)
- Using Kilabo and Birbira plant poisoning materials at different tributary rivers during the pooled periods of a year (examples: Alefa and Delgi)
- Using chemical-soaked monofilament gillnets (examples: Alefa and Delgi)
- Due to heavy encroachment (examples: Alefa and Delgi) former submerged plants and dense mollusks, observed at beaches, disappeared within the last five/six years

The illegal monofilament gillnets were first introduced in 2008 (Dereje T., 2010). This fishing gear caused a striking dissemination not only around Lake Tana but also around the South Wollo lakes Lugo and Ardibo. This destructive way of fishing is also practiced in the artificial lake “Tekeze dam” by former Lake Tana fishers.

With the support of FAO during 2013, aco-management strategy at kebele and woreda level has been developed in order to address directives of the fishery legislation with the aim of prohibiting monofilament gillnets. Until now there have not been undertaken enough measures to implement this strategy due to the following problems:

1. Both woreda as well as kebele council administrators do not pay enough attention to the fishery sector.

2. The kebele based committee does not see any advantage of sustainable fishing methods and has therefore no interest in implementing any regulations.
3. Either woreda or kebele level management bodies do not have any forum to discuss the progress or the challenges they are facing during the implementation.
4. The existence of transboundary or migratory fishing activities makes it difficult to contain illegal fishing methods.
5. There are not enough licensed fishers and fish traders.
6. The demand of small sized fishes caught by illegal small mesh sized fishing gears is still very high.
7. Fish traders do not have to pass control stations on their way from the border to the center of the country.
8. Fishers, who have already been caught by the committee, are still able to warn others of strict inspectors.
9. Although few fishers admit the use of illegal nets and are willed to change their fishing methods, other fishers often steal their fishing gears.
10. Actions have not been undertaken at the same time all around the lake, so that it brought less trust to the concerned groups.
11. Currently there is not enough money to buy a boat for the fishing inspectors which makes it difficult to examine the fishing activities regularly.

A new position for fishery inspectors has been created a few years ago. But Takusa, Bahir Dar and Dera are the only towns which offer these job placements at the moment. In the other seven woredas, it has not been implemented yet due to low attention given by the administration to allocate the budget and to review the career structure at woreda level. Even in areas where fishing inspectors are employed, the required logistics are not available.

6. Impacts of ecosystem dynamics on fish populations and river mouth management

Around Lake Tana, there is a tremendous number of wetlands which are destructed by human activities such as recession agriculture, settlement, pumping water for irrigation, deforestation for different purposes, overgrazing and importing invasive weeds (e.g. water hyacinth). Important wetlands which currently suffer from activities named above are: Infranz River Mouth, Mesenta, Ameluk, Wonjeta, Ambo Bahir, AbbayLata, RasAbbay, Zegielganda, Infranz springs, GelgelAbbay River mouth, Koga Dam, Cheliya, Legdiya, ShobelaBakusite, Estumit, ArenoSarno River mouth, Kurt Bahir, Rib River mouth, Dem Bahir, Shesher, Wallala, Gumara River mouth, Agid Kirigna, Bebekes, Delgi and Megech River mouth. The difference between the function and the value of a wetland is that functions are properties that a wetland naturally provides while values are wetland properties that are valuable for humans.

6.1 Wetland: Physical, Hydrological and Chemical Functions/Values

Wetlands serve as flood control, coastal protection, sediment traps and atmospheric equilibrium and recharge the ground water.

6.1.1 Flood Control

Wetlands act as protective natural sponges by capturing, storing and slowly releasing water over a long period of time, thereby reducing the impact of floods.

6.1.2 Coastal Protection

Coastal marshes, littoral zone swamps and other estuarine wetlands act as effective storm buffers. Studies have proved that more than half of the normal wave energy is dissipated within the first 3 meters of encountering marsh vegetation. The erosive nature of waves is also dampened by wetland plants because their roots prevent soil movement and their stalks reduce the destructive energy of waves and wind.

6.1.3 Ground water Recharge

Wetlands' role in recharging groundwater varies widely, but it is clear that wetlands often contribute to groundwater and can be important in recharging aquifers. Its primary source is rainwater that filters through hundreds of feet of sand and rock.

6.1.4 Sediment Traps

Wetlands help to improve the water quality by acting as sediment sinks or basins. They are especially effective at trapping sediments in slow moving water. The wetland vegetation slows the water velocity and the release of particles.



Figure 7 Recession agriculture around Gumara River mouths which aggravates siltation and pollution

6.1.5 Atmospheric Equilibrium

Scientists also point out that the atmospheric maintenance is an additional wetland function. Wetlands store carbon in living and preserved (peat) plant biomass instead of releasing it into the atmosphere as carbon dioxide, a greenhouse gas affecting global climates. Therefore, wetlands help to moderate global climatic conditions on an international level. But filling, clearing and draining wetlands releases carbon dioxide instead of storing it.

6.2 Wetland: Chemical Functions

a) Waste Treatment/Pollution interception, b) Biogeochemical Cycling Wetlands reduce pollution due to the absorption of waste.

6.2.1 Waste Treatment

Wetlands act as filters and sponges. Water that enters a wetland is filtered through the substrate and wetland plants which remove nutrients (nitrogen and phosphorous) and toxins.

6.2.2 Biogeochemical cycling

The biogeochemical cycling involves the biological, physical, and chemical transformations of various nutrients in the biota, soil, water and air. In anaerobic (non-oxygenated) and chemically reduced wetlands soil and the muddy sediments of aquatic habitats, such as estuaries, lakes and streams, support microbes that function in nitrogen and sulfur cycling.

6.3 Wetland Function – Nurseries

Because they produce so much plant biomass and host invertebrate life, river mouths and their littoral inland marshes serve as important nursery areas for the young of many *O. niloticus*, *C. gariepinus*, and *Labeobarbus spp.*

6.4 Wetland Function – Habitat

Wetlands provide habitats for upland mammals, such as Pigs and Sala, as well as for wetland dependent species, such as the *C. gariepinus* and *O. niloticus* and many bird species.

6.5 Wetland Function – Endangered Species

The U.S. Fish and Wildlife Service estimates that the survival of up to 43% of the federally threatened and endangered species depends directly or indirectly on wetlands.

6.6 Wetland Function – Migration

Wetlands provide valuable stop-over sites for migratory birds and are also a necessary habitat for all waterfowl. Migratory waterfowl, including ducks, geese, and crown cranes, use the inland wetlands as resting, feeding, breeding, or nesting grounds for at least certain parts of the year.



Figure 8 Highly populated birds and remnant dead fishes eaten by birds in the highly shrunked and almost dried Welala wetlands due to unlimited furrow irrigation systems

6.7 Wetlands: Value

Values are properties of a wetland that are beneficial to humans. Values of wetlands are: socioeconomic functions/benefits, food, commercial animal populations, fuel, timber and fiber production, recreation, aesthetics, and education.

6.7.1 Food

Wetlands produce food that is beneficial to humans. Examples are rice, zea maize, teff, suff flower, grass pea, lentils, fruits and vegetables. Wetlands are habitats for commercial fish species, hippopotami and birds as well as reptiles such as alligators.

6.7.2 Fuel

Wetlands are still used as production areas for fuel.

6.7.3 Timber and Fiber Production

Wetlands are used as timber and fiber production areas. In most cases, remnant forests have been seen only around wetlands. As a result, traditional timber for draft power function and household materials are obtained from wetlands. In Lake Tana region, timber is used to build reed boats and thatches and to make different hand crafts.



Figure 9 Wetland values around Lake Tana used to make reed boats, different hand crafts, thatches and other products

6.8 Commercial Animal Populations

Fishing and animal husbandries as well as the access to clean water in Ethiopia and especially in Lake Tana region depend on functioning wetlands. Wetlands are important breeding areas not only for fishes, but also for cattle breeds which use the area for feeding.

While it is a common occurrence to let cattle feed in the wetlands, it greatly endangers the survival of the wetland, due to overgrazing etc. Wetlands weakened by cattle overgrazing lose their beneficial qualities, e.g. they do not filter the water any longer, or are much more easily affected by the invasive water hyacinth, etc. Cattle feeding in wetlands should therefore be limited.



Figure 10 Cattle production increasing pressure on sensitive ecosystem

6.9 Recreation, Aesthetic, Education

Wetlands are used as recreation sites all over the world. In the United States, more than half of all the adults (98 million) enjoy watching birds, or photographing the wildlife, spending annually a total of \$59.5 billion. There is a high potential to develop recreational activities in the Lake Tana wetlands, if they are conserved and protected from overgrazing etc. in the future.



Figure 11 Hippopotamus aggregation on some remnants hippo grass from water hyacinth dominance around Dirma River mouth

6.10 Birding

Great parts of the nature-based tourism involve birds, many of which are wetland-dependent. Each year, about \$20 billion dollars are spent on seed, travel, and equipment by birders. Birding has increased more quickly than any other outdoor recreation activity.



Figure 12 Welala and Shesher wetlands are unique sites for Ecotourism and fisheries

“Looking after our wetland so that our wetland can look after us”

7. The Regional proclamation and regulation of Lake Tana fisheries resource and its implementation plan for law-enforcement

7.1 Licensing of commercial fishers

The Livestock Agency needs to implement the two directives by providing a fishing license and ensuring an employment of fishing inspectors as soon as possible based on the number of landing sites. After recruiting fishing inspectors, the Livestock Agency has to organize a workshop for the fisher representatives, the Woreda fishery officers, the fish inspectors, the Woreda and Kebele administrators and the Kebele Fishery Management Committee members. At the workshop, the two directives should be presented to the participants aiming to create a common understanding of the importance of sustainable fishing methods.

One of the Woredas that introduced a fishing license till the compilation of this document is South Achefer, which has been given a license for 34 fishers who organized themselves in a cooperative in Estumit Kebele. In this Woreda as well as in the Alefa Woreda fishing with motor boats is prohibited; all fishing activities are done by reed boat. In other parts of Lake Tana, the fishing methods are not controlled strictly enough. This is because of the effort it takes to recruit experts and assistants from the respective administrations. The Fogera Woreda gave license to 5 fishers whereas the Gonder Zuria Woreda licensed about 220 fishers around Mitreha Abawerka Kebele by reorganizing themselves as a new cooperative. In other Woredas licensing has not been realized yet due to different operational bottlenecks. In many cases it is not clear who meets the criteria to receive a license.

To get the license every unit of fishers has to do it for commercial purposes. A motorized boat and a traditional reed boat, which are used by fishing units working for commercial purposes, should be licensed for fishing. A license commits the fishers to respect the fishery regulation. The Livestock Agency and other responsible institutions should implement the directives by granting a fishing license to individual appropriate fishers together with local communities. It is important that the working hours of every fisherman is documented constantly. This data is available now in this document, though it needs refinement. The number of licensed fishers should be determined by the Livestock Agency and other concerned and responsible stakeholders.

Currently, there are about 5,403 fishers around the lake who are fishing for commercial purposes. First, full time fishers need to be licensed before considering distributing and accepting any new ones. Receiving a license also depends on the working time of the fishers and the living circumstances (those who are landless and have a low income are rather entitled to get a license) There source status has to be monitored for two years because providing a new license depends on the resource base. It is not advisable at all to give a fishing license for riverine fishery.

The license will limit the number of gillnets per boat and the number of fishing days per week. For commercial motorized boats, 25 gillnets with a length of 100m are recommended for a boat. For reed boat fishers, a maximum of 3 gillnets per boat is proposed. They are supposed to fish only 3 times per week during the non-restricted fishing season.

7.2 Fishery cooperatives in Lake Tana

A total of 5,403 fishers are involved in fishing activities around Lake Tana (unpublished data) of which only 10 fishers' cooperatives are found at different districts of the lake boundaries. To achieve an effective implementation of a well-grounded management plan which includes fetching a better price for their catch, having access to credits for quality products and a better extension service, the fishers around ten Woredas must organize themselves in cooperatives after receiving their license.

The current evaluation and monitoring systems have to be revised because they are abused by representatives, e.g. as happened around Mitrehaabawerka, where about 630 cooperative members disintegrated due to malfunction of the management system. If it is possible from cooperative perspective, try to adjust the existence of independent marketing system as an alternative solution. There will be 10 cooperatives around Lake Tana. These cooperatives will be organized by the Woreda Cooperative Promotion Agency and the Woreda Office of Agriculture. Then, the Livestock Agency with its Woreda Office will issue individual fishing licenses for members of the cooperatives.

7.3 Closed breeding seasons and areas

It has been proved that overfishing is already a major indicator for commercially important fishes of *Labeobarbus*, *O. niloticus* and *C. gariepinus* stocks in Lake Tana. It is, therefore, very important to reduce the fishing pressure during breeding seasons and on aggregated populations on breeding grounds. To achieve this, fishing in the inflowing rivers of Lake Tana and within a radius of 5 kilometer including river mouths and wetlands around Lake Tana such as Wolala and Shesher, should be closed for fishing every year from July to the end of October. The whole lake should be closed for any fishing activities for two months (June and July) every year. Poly filament gillnets, which are above 8cm stretched mesh size and a cast net above 5cm are allowed for fishing. But seining, chasing-trapping and poisoning is strictly forbidden since they are non selective and destructive types of fishing. Destructive fishing such as poisoning (plant poisoning and chemicals), explosive sand fishing practices that can hinder the free movement of spawning stocks on spawning migrations such as fencing the rivers, beach seines and trawls are strictly forbidden to use in the region. The fish inspector has the duty to check any of these destructive fishing methods.

7.4 Mesh size regulations.

The aim is to allow immature fish to escape the gillnets. The regulation allows 8 cm and above stretched mesh size of gillnets for fishing. In order to avoid illegal mesh size and monofilament gillnets, the Livestock Agency should issue a license for gillnet-producing associations. As far as we know, gillnet-producing associations around Lake Tana are not more than four. Organizing these associations will be the responsibility of CoPA. The aim is that all fishers owning a fishing license need to buy only from the registered net makers. The fish inspector needs to check whether a gillnet is from a licensed net maker. The illegal monofilament small size gillnets, imported from Sudan, need to be destroyed immediately by the Livestock Agency. The importers of monofilament gillnets have to be punished based on the directives.

7.5 Recruitment of Fishery Inspectors

Lake Tana is surrounded by 10 Woredas. In order to enforce the above management measures, 10 fish inspectors (1/Woreda) need to be assigned by the government. These inspectors must be experienced fishers with practical knowledge and must be able to write and read. In order to patrol the lake in their respective Woreda, they need to have 10 boats including the running costs. The initial price of the boat with the outboard engine is about 150,000 ETB per Woreda. In total, the Livestock Agency needs to cover 1,500,000 ETB initial investments costs to equip the inspector. The salary of the inspectors is estimated to be about 1,500 birr per month and it is assumed that the cost will be covered by the respective Woreda. For inspectors, one month training should be organized by the BoA at Bahir Dar. The training module should contain the following aspects: fish biology and ecology, fishing gears, fishery management tools, fishery proclamation regulation and directives, and fish processing and marketing. Trainers on various aspects of the module will be set by BoA, ARARI, BDU and others if necessary.

7.5.1 Powers and Responsibilities of a Fishery Inspector according to Proclamation No 92/2003

With the aim of ensuring the implementation of the proclamation and regulations as well as directives that answer to the proclamation, a fishery inspector without a court warrant shall:

- a. Stop and search any fisher found on any water body and inspect the fishing boat as well as gears.
- b. Demand any person suspected of contravening the proclamation, regulation or the directives to tell his/her name and address, to show his/her identification card, fishing license and give any other relevant information if asked.
- c. Seize any fish, if the inspector has sufficient and reasonable grounds to believe that the fish has been caught, transported, gas been marked, imported in to the region or prepared for export out of the region in contravention of the proclamation.
- d. Seize any fishing boat and gear, if there is any proof that those have been used in contravention of the proclamation.
- e. Destroy any fish which is proved to be diseased or contaminated.
- f. Demand any fisher to provide information regarding the gears used, the type and quantity of fish caught, as well as the fishing ground from which the fish were caught.
- g. Inspect any aquaculture, fish processing, storage, transport and marketing facilities as well as the equipment and cause measures to trade registration and licensing laws.

Any fishery inspector has to:

- a. Show, upon request, a legal identification card, which claims that he/she is a fishery inspector.
- b. Provide a written receipt for the seizure of any movable properties pursuant of the proclamation.

Ten fishery inspectors should be trained as boat operators with the kebele community police officers or militias. These inspectors, who act as boat operators, must be experienced fishers with good practical knowledge and able to write and read.

7.5.2 Additional duties and responsibilities of fishery inspectors

The fish inspector will have the following duties and responsibilities as stated in the new directive that is issued by the Regional Livestock Agency:

- Performing routine manual work in the operation and maintenance of a motor boat
- Operating a boat in the lake and main inflowing rivers of Lake Tana
- Carrying other groups that would like to conduct monitoring activities
- Maintaining boats and equipment
- Checking the fuel tank, oils and lubricants before departure
- Performing other related tasks if required

Education and experience: A fishery inspector should have completed at least grade 10 and have considerable experience in the field of boat operation mainly from commercial fishing communities. He/She should provide evidence that he/she is a fisher from his Kebele and preferably live in the particular area.

Knowledge and skills: Considerable knowledge of the practices of swimming including navigation, water wave movements, lake safety, fishing, and boat operations is required. The ability to react quickly in the case of emergencies and the ability to understand and follow oral and written instructions is seen as a basic requirement. The fish inspector is expected to have skills in carrying out necessary minor and emergency repairs of the lake equipment and the harbor.

7.6 The Kebele Committee on Fishery Management

The Kebele Committee on Fishery Management has to assist the fish inspectors and the subcommittee (formulated by five members from fishers at each kebele) mainly by observing illegal fishing activities in rainy seasons, under-sized mesh sizes and restricted seining, chase, trap and poisonous activities. In tributary rivers feeding the lake, the Kebele Committee will take full responsibility to monitor the resource and bring unlawful fishers to the respective Woreda Judge based on information given by the subcommittee and the fishery inspector. The committee has no power to take any legal action since only the inspector and the justice department are vested with the respective powers. The administrator of the Woreda will assign the Kebele Committee members.

7.6.1 Composition of the Kebele Fishery Management Committee

No.	Committee	Position
1	Kebele Administrator	Chair person
2	- Elder fisher representative	Member
3	Community policing	Member
4	Kebele justice	Member
5	Livestock development agent	Member (secretary)
6	Land use and administration	Member

Table 3 composition of the members of the Kebele fishery management committee

The committee will be active at all seasons of the year and will monitor any activity around the water body once a week. Moreover, the committee will address any report or complain from the community on any destructive fishing activity throughout the year towards a task force organized under Woreda level. All prohibited actions must be reported to the Woreda administrators (management committee members). Every committee member is instructed to document his or her contribution to the above assignment on the annual plan and should schedule to hold an evaluation forum at least two times per year.

In each Kebele, there should be a subcommittee selected from fishers of the cooperative. The subcommittee will have five members who are directly responsible for the fishery inspector and the Kebele fishery management committee. They will hold monthly meetings on general issues and activities in Lake Tana region.

Every year, the Kebele Committee on Fishery Management will receive awareness training by the Livestock Agency in Bahir Dar. The training will give attention to the fishery management, proclamations, regulations and directives. A total of 100 participants including 10 fish inspectors are expected to participate. The trainers will be drawn mainly from the Livestock Agency, BDU and ARARI.

7.6.2 The Woreda Task Force

It is proposed that a Woreda Task Force on enforcement of fishery legislation is established or strengthened with the following members:

No	Office	Position in the committee
1	Woreda administration	Chairperson
2	Woreda Justice office	Member
3	Woreda Trade and Industry Office	Member
4	Woreda Agriculture office	Member
5	Livestock/Fishery office	Member

Table 4 composition of the Woreda task force members

The Woreda Task Force will receive reports from the Kebele Committee on monthly basis and try to solve problems beyond the fishery inspector and Kebele Committee capacity. The Woreda Task Force will monitor and evaluate the implementation of the legislations, directives and guidelines of fishery resources within its constituency.

The Livestock Agency will receive reports of the Woreda Task Force, analyze the performance and provide feed backs. The Woreda Task Force needs to report for the Bureau of Agriculture on quarterly basis. The Livestock Agency will report to the stakeholders once in a year during the progress review meetings.

The progress review meeting will be held for 2 days during the rainy season on the regional level. The progress review will involve Woreda administrators, the Woreda Office of Agriculture, fish inspectors, region and zone experts as well as justice and trade office task force representatives. The Woreda Task Force and the Livestock Agency will present their activities for

comment and approval. It will be facilitated by the Livestock Agency. This review meeting will also serve as a monitoring and evaluation platform.

8. Post-harvest management and marketing

Post-harvest handling and processing protocols in Lake Tana fisheries are almost nonexistent. Normally the fishers do not take their time to ensure the freshness of their catches. In some areas the catches are being dried by solar systems or salt drying systems, which cause a bad smell and only sell at cheap prices at the Sudanese market. Some of the fishers deliver their daily catch to fish collector boats which again take many hours and in addition to that this system is not supported by ice package systems. Because of that the fish loses a high percentage of its nutrition, and easily spoils causing food poisoning etc. Fishers and other middle actors in fish marketing systems use dirty water to clean their catch. In most cases the fish is rolled on the ground during the filleting process. The materials as well as the container used to hold their catch are unhygienic.

For example, in addition to the bacteria that decompose the fish and cause a strong smell there are chemicals in the fish which are called enzymes. They are used by the fish to digest its own food in its stomach. Enzymes are also found in the muscle or meat of the fish.

After the death of the fish the bacteria and enzymes continue to work and digest the fish. A simple measure to reduce the number of bacteria in the fish is to wash it in clean water. By removing the stomach of the fish, many bacteria and enzymes are removed as well. This must be done in a clean environment.





Figure 13 Traditional fresh fish market with direct sunlight at Bata site around Bahir dar city (poor quality)



Figure 14 Huge post-harvest losses both nutritional and physical losses in the catches of Lake Tana

Fishers, gear and boat owners, processors and all fishery stakeholders need to be trained in order to be able to explain the importance of fish as food and as a source of income and know what can make fish go bad or spoil and harm the consumer.

They should learn what causes the fast rotting of fish and how to prevent this and how to make sure that the fish is as fresh as possible and safe to eat. They will also know how to recognize and distinguish rotten from high quality fish.

Advantages of undertaking measures to improve post harvest management:

- Higher prices for fish can be achieved
- Satisfied and healthy consumers
- Higher chance of regular customers
- The fish will have a longer shelf life (can be sold longer)

Although fish is an important and cheap source of animal protein, it is one of the most perishable goods, as it is a suitable medium for growth of microorganisms after death (Ojutiku *et al.*, 2009). Spoilage occurs due to the presence of enzymes and bacteria, and chemical oxidation of fat which causes rancidity.

There is considerable fish post-harvest value loss due to different improper handling, processing and marketing problems. According to Brihan Mohammed (2011) fish post-harvest loss in Lake Tana is more than 30% which is similar to fish post-harvest loss in other African countries more than 20 years ago (40%; FAO, 1989). Most fishery communities are engaged in fish harvesting, processing, and marketing have been experiencing significant economic loss. Losses occur because of flows in the handling, storage, distribution, processing and marketing of fish products using traditional methods.

In order to prevent spoilage of fish, it is possible to use different preservation methods (freezing, smoking, drying, salting and fermentation methods). Preservation is based on slowing down or preventing spoilage by microorganisms. Preservation has two effects: retention of the original quality and properties of the foods and radical change which results in a new product with completely different qualities and properties.

Much can be achieved by simple improvements in handling and processing methods (Bolorunduro *et al.*, 2005). The basic requirement is to take more care. Fish is easily damaged and easily spoiled. Careless procedures will accelerate spoilage and increase losses. Careful methods will retard spoilage, reduce losses and improve the quality of the marketed produce.

Use of ice for fresh fish handling, distribution and marketing: Chilling with ice is an extremely effective means of reducing spoilage in fresh fish (Akintola and Bakare, 2011). Ice is an ideal cooling medium; it is harmless, it has a very large cooling capacity for a given weight or volume, it is comparatively cheap and it is able to cool the fish quickly by intimate contact with the fish. Although, chilling can never prevent spoilage, the lower the temperature at which the fish is held, the greater is the reduction of bacterial and **enzymatic activity**.

Ice on shore: If fish is iced at sea, then it is important to maintain its quality by keeping it in ice during distribution and marketing. If it is not iced at sea, it is even more important to prevent further spoilage by icing it as quickly as possible. Insulated boxes may be used for transporting the fish to market. Often, fish is loaded in ice in bulk, in open lorries. Large insulated ice boxes may be useful at landing sites where fish has to be kept for a time before being taken to market.

Open air sun drying of fish has many limitations. These include the fact that long periods of sun shine without rain are required, drying rate are low in the area of high humidity and it is often difficult to dry the fish sufficiently. The quality of open air (Rack) dried fish is likely to be low due to slow drying, insect damage and contamination from air born dust and it is difficult to obtain a uniform product (Trim and Curran,1983). Thus, in search for the use of improved drying methods using naturally abundant solar energy, the use of solar tent has been investigated as alternative to traditional open- air sun drying methods.

Solar tent dryer has means of concentrated solar radiation with the result increased temperature in the tent and in turn lower humidity is achieved for drying. When using solar tent, the drying rate can be increased, lower moisture content can be attained and the product quality is higher. Solar tent dryer are less susceptible to variation in weather, although the drying rate is slower during bad weather (low temperature, high humidity and low wind speed). Solar tent prevent entry of rain and higher internal temperature prevents pests and can be lethal for those entered (Trim and Curran,1983).

9. Current fishing proclamation, regulation and directives of the region

Based on repeated feedbacks from the fishery sector expertise and recognizing the danger posed on most water bodies of the country, a National Fishery Proclamation was ratified by the Federal Parliament in 2003. It provides broad guidelines related to resource conservation, food safety and aquaculture. This document puts considerable emphasis on the regulation, permits and on the role of the fishery inspector. It is intended that the regional administration should then use this as a broad framework within which their own proclamations are developed. Accordingly, Amhara Region was the first region to develop its Regional Fishery Proclamation as Proclamation No 92/2003 and its directives as Regulation No 50/2007 (See Annexes I and II).

10. References

- Dereje Tewabe: Spatial and temporal distributions and some biological aspects of commercially important fish species of Lake Tana, Ethiopia. Proceedings of 4th EFASA conference held on February 17-18, 2012; Addis Ababa University, Ethiopia
- Dereje Tewabe and Goraw Goshu: *Status of Lake Tana Commercial Fishery, Ethiopia*. Proceedings of EFASA second conference held on Feb, 2010, Bahirdar, Ethiopia
- Degraaf M, van Zwieten, P.A.M., Machiels M.A.M., Lemma, E., Wudneh T., Dejen, E. & Sibbing F.A. 2006. Vulnerability to a small-scale commercial fishery of Lake Tana's (Ethiopia) endemic *Labobarbus* compared with African catfish and Nile tilapia: An example of recruitment-overfishing? *Fisheries Research* 82: 304-318.
- Degraaf, M., Marcel, AM, Machiels, M., Tesfaye Wudneh and Sibbing, FA. 2004. Declining stocks of Lake Tana's endemic *Barbus* species flock (Pisces: Cyprinidae): natural variation or human impact? *Biol. Cons.* 116: 277-287.
- Degraaf, M. 2003. Lake Tana's Piscivorous Barbs (Cyprinid, Ethiopia) PhD thesis. Wageningen University. The Netherlands.
- Getahun, A. 2000. Systematic studies of the African species of the genus *Garra* (Pisces: Cyprinidae). PhD thesis, City University of New York.
- Nagelkerke, L. 1997. The barbs of Lake Tana, Ethiopia. Morphological diversity and its implications for taxonomy, trophic resources partitioning, and fisheries. PhD thesis, University of Wageningen, The Netherlands.

Annexes

Annex I: Amhara National Regional State Fisheries Resource Development, Protection and Utilization Proclamation, Proclamation No.92/2003.

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Of the Council of the Amhara National Regional State
in the Federal Democratic Republic of Ethiopia

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<p>አዋጅ ቁጥር 92/1996 ዓ.ም በአማራ ብሔራዊ ክልላዊ መንግሥት የዓሳሪ ሀብት ልማት ጥበቃና አጠቃቀም ለመወሰን የወጣ አዋጅ</p> <p>ክልሉ ለምግብነትና ለኢኮኖሚያዊ ጠቀሜታ የሚውል የዓሳሪ ሀብት ክምችት ያለው በመሆኑ ይህን ሀብት በዘላቂነትና ሀብረተሰቡን ባሳተፈ መልክ ለማልማት ለመጠበቅና ለመጠቀም የሚያስችል አመች የመቆጣጠሪያ ስርዓት መዘርጋት አስፈላጊ ሆኖ በመገኘቱ፤</p> <p>የዓሳሪ ሀብት ክምችት በሚገኝባቸው የውሃ አካላት በሙሉ ሀብቱ ተገቢው ትኩረት ተሰጥቶት በአግባቡ እንዲለማገገን ለመጫወት ትውልድ እንዲተላለፍ ለማስቻል ቀደም ሲል ወጥቶ የሚሰራበት የዓሳሪ ሀብት አጠቃቀም ህግ ባለመኖሩ፤</p> <p>የአማራ ብሔራዊ ክልል ምክር ቤት በተሻሻለው የብሔራዊ ክልሉ ስጋ-መንግስት አንቀጽ 49 ንዑስ አንቀጽ 3(1) እና በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ የዓሳሪ ሀብት ልማትና አጠቃቀም አዋጅ ቁጥር 315/1995 ዓ.ም. አንቀጽ 20 ንዑስ አንቀጽ 2 ድንጋጌዎች ስር በተሰጠው ሥልጣን መሠረት ይህንን አዋጅ አውጥቷል፡፡</p>	<p><u>Proclamation No. 92/2003</u> <u>A Proclamation to provide for the Determination</u> <u>Fisheries Development, prevention and its utilization</u> <u>the Amhara National Regional State.</u></p> <p>WHEREAS, as the Region has fisheries potential which utilized for consumption and economic benefits, it is necessary to devise a suitable controlling system to develop prevent and utilize this resource suitably and with participation of the public;</p> <p>WHEREAS, since law of utilizing fisheries resource does not exist so far in order to properly develop prevent transform the resource to the coming generation being given appropriate attention in water bodies where fish potential is available;</p> <p>NOW, THEREFORE, the Council of the Amhara National Region, in accordance with the power vested in it under provisions of Article 49 sub-Article 3(1) of the Constitution of the National Region and with the Federal Democratic Republic of Ethiopia Fisheries Development and Utilization Proclamation No. 315/2003 Article 20 Article 2, hereby issues this proclamation.</p>

- 9. «ለንግድ ዓሳ ማስገር» ማለት በሙሉ ወይም በከፊል ለመሸጥ ወይም ለመለወጥ ሥልጣን ካለው አካል ሕጋዊ ፈቃድ አውጥቶ ዓሳ ማስገር ነው።
- 10. «ለመዝናኛ ዓሳ ማስገር» ማለት ለመዝናኛ ተብሎ ለሙጥ የሆነ ነጠላ መንጠቆና የናይላን ወይም የሌላ ማናቸውንም አይነት ክር በመጠቀም የሚካሄድ ዓሳ ማስገር ነው።
- 11. «ለምርምር ዓሳ ማስገር» ማለት ለሳይንሳዊ ምርምር፣ ለሙከራ፣ ለሌሎች ጥናታዊ ሥራዎች ወይም ዓሳን በማንኛውም የውሀ አካል ለመጨመር በማሰብ መያዝንና ለመርዕዩ ገንዳ ወይም ለቤተ መዝክር ዓሳ መሰብሰብን ይጨምራል።
- 12. «ጥብቅ የዓሳ ሀብት ልማት ክልል» ማለት በማንኛውም የውሀ አካል ውስጥ የዓሳውን ዝርያ ለመጠበቅ ወይም ለሌላ ተግባር ሲባል በሙሉ ወይም በከፊል የተከለለና ለምርምር ካልሆነ በስተቀር ለማንኛውም የዓሳ ማስገር ሥራ የተከለከለ አካባቢ ነው።
- 13. «ዓሳ ማስገሪያ ጀልባ» ማለት ለዓሳ ማስገር ሥራ ክብረት፣ ከጣውላ፣ ከእንጨት፣ ከቀርኮሃ፣ ከደንገል ወይም ከመሳሰሉት ጥሬ ዕቃዎች ወይም ማቴሪያሎች የተሰራ ማንኛውም ተንሣፋፊ አካል ነው።
- 14. «የዓሳ ማስገሪያ መሣሪያ» ማለት ለዓሳ ማስገር ሥራ የሚያገለግል ማንኛውም መረብ፣ ወጥመድ፣ ወንፊት፣ ነጠላ ናይላን ክር፣ መንጠቆና እንዲሁም ሌላ ተመሳሳይ መሣሪያ ነው።
- 15. «ቢሮ» ማለት የአማራ ብሔራዊ ክልላዊ መንግስት ግብርና ቢሮ ሲሆን የተዋረድ አካላትን ይጨምራል።
- 16. «የዓሳ ሀብት ተቆጣጣሪ» ማለት ይህንን አዋጅና በአዋጁ መሠረት የሚወጡ ደንቦችንና መመሪያዎችን ለማስፈጸም ኃላፊነት የተሰጠው ማናቸውም ሰው ነው።
- 17. «የውሀ አካል» ማለት በክልሉ ውስጥ የሚገኝ ማናቸውም ወንዝ፣ ሐይቅ፣ ኩሬ፣ ግድብ፣ ጅረት ወይም ረገረጋማ ሥፍራ ሲሆን ትርጓሜው በውስጡ የዓሳ ዝርያ የሚገኝበትንም ሆነ የማይገኝበትን ያጠቃልላል።

- 9. "Commercial Fishing" means fishing for the purpose of commercial or monetary gain where all or part of the catch will be destined for sale or bartering with issuance of license from an authorized body.
- 10. "Recreational Fishing" means fishing solely for the purpose of pleasure using single hook and monofilaments nylon or any other kind of lines.
- 11. "Research Fishing" means fishing for the purpose of scientific, experimental, and other studies or for the purpose of stocking fish in to any water body including collecting fish for aquarium or museums.
- 12. "Protected Fishery Area" means a fully or partially demarcated geographical area of any water body where, except for research, fishing is prohibited for the protection of the inhabiting fish species or for other purposes.
- 13. "Fishing Boat" means any floating vessel made of steel timber, wood, bamboo, and reed or of similar raw items or materials.
- 14. "Fishing Gear" means any net, trap, sieve, monofilament nylon line, hook and any other similar equipment used for fishing.
- 15. "Bureau" means the Amhara National Regional State Agriculture Bureau, including its hierarchical bodies.
- 16. "Fishery Inspector" means any appropriate person duly vested with responsibility to implement this proclamation as well as regulations and directives to be issued in accordance with the proclamation.
- 17. "Water Body" means any river, lake, pond, dam, stream or swampy area found in the Region and the definition includes wherein fish species is available or unavailable.

3. ዓላማዎች

አዋጁ የሚከተሉት አበይት አላማዎች ይኖሩታል፡-

1. የዓሣ ብዝሃ ሀይወትና አካባቢው እንዲጠበቅ፣ የዓሣ ሀብቱ አግባብ በሆኑ የማስገሪያ መሣሪያዎች እንዲመረጡ ሆነ ከሚገባው በላይ እንዳይመረጡ መከላከልና መቆጣጠር፤
2. ተፈጥሯዊና ሰው ሰራሽ በሆኑ የውሀ አካላት የላሣ ግብርና ልማትን በማስፋፋት የላሣ ሀብት ለፈጣን የኢኮኖሚ ዕድገት ተገቢው አስተዋጽኦ እንዲኖረው ማድረግ፤
3. ጥራቱና ንፁህናው የተጠበቀ የዓሣ ምርት አቅርቦትን ማሳደግና ለምግብ ዋስትና የሚያበረክተውን አስተዋጽኦ በዘላቂነት ማድረግ፤
4. የዓሣ ሀብቱ የሚገኝበት አካባቢ ሕብረተሰብ ክልላዊ ተጠቃሚ የሚሆንበትንና የሥራ ዕድል የሚያገኝበትን አመቺ ሁኔታ መፍጠር፡፡

4. የተፈጻሚነት ወሰን

ይህ አዋጅ በክልሉ የግዛት ወሰን ዓሣ በሚረባባቸውና በሚመረጡበት የውሀ አካላትና የላሣ ምርት ዝግጅት ግብይት በሚካሄዱበት ቦታዎች ሁሉ ተፈጻሚነት ይኖረዋል፡፡

ክፍል ሁለት

የዓሣ ሀብት ልማት፣ አጠባበቅና አጠቃቀም

5. ከተፈጥሮና ሰው ሰራሽ የውሀ አካላት ስለሚገኝ የዓሣ ሀብትና አስግሮቲ

1. ሕጋዊ የዓሣ ማስገር ፈቃድ ያልያዘ ማንኛውም ሰው ከማናቸውም የውሀ አካል ለንግድ ሥራ ዓሣ ማስገር አይችልም፡፡
2. ማንኛውም ሰው ከቢሮው ፈቃድ ካላገኘ በስተቀር ከጥብቅ የዓሣ ሀብት ልማት ክልሎች ለፍጆታ ለንግድ ወይም ለመዝናኛ ዓሣ ማስገር አይችልም፡፡

3. Objectives

The proclamation shall have the following main objectives:

1. Conserve fish biodiversity and environment, cultivate fisheries resource with appropriate fishing equipment as well as prevent and control over exploitation the fisheries resource;
2. Cause fisheries development to have proper contribution to speed, economic growth through the expansion of aquaculture development in natural and man-made water bodies;
3. Increase the supply of safe and good quality fish and ensure a sustainable contribution of the fisheries forwards for security;
4. Create conducive condition that the community found in areas of fisheries resource is to become beneficial and job opportunities.

4. Scope of Application

This proclamation shall be applicable to water bodies where fish are bred and cultivated and all areas where fishing, preparing and market takes place within the boundary of the Region

PART TWO

Fisheries Resource Development, Conservation and Utilization

5. Capture Fisheries from Natural and Man-Made Water Bodies

1. Any person who does not hold a legal fish permit shall not undertake commercial fish from any water bodies.
2. Any person shall not undertake subsistence fishing, commercial fishing or recreational fishing with in protected fishery resource areas without acquisition of a permit from the Bureau.

3. ማንኛውም ሰው ከቢሮው ፈቃድ ካላገኘ በስተቀር ከማንኛውም የውሃ አካል ለእርባታም ሆነ ለሌላ ተግባር የአሳ ጫጫቶችን ማስገር አይችልም።
4. ማንኛውም የውጭ ሀገር ዜጋ ለመዝናኛ ዓሳ ለማስገር የሚችለው ከቢሮው ፈቃድ ሲያገኝ ብቻ ይሆናል።
5. ማንኛውም ሰው በልዩ ውል የመጠቀም መብት ከተሰጠው ሰው በትድሚያ ፈቃድ ሳያገኝ ለፍጆታ ለገንደገ ለመዝናኛ ወይም ለምርምር በዚህ አዋጅ አንቀጽ 6 በተጠቀሰው መሠረት ይኸው ውል ከሚመለከተው የውሀ አካል ዓሳ ማስገር አይችልም።
6. ማንኛውም ሰው ሕጋዊ ከሆኑ የማስገሪያ መሳሪያዎች በስተቀር በፈንጂ፣ በጦር መሳሪያ፣ በመርዝና በአደንዛዥ እጭት ወይም በኢሌክትሪክ ሞገድ በመጠቀም ከማንኛውም የውሀ አካል ዓሳ ማስገር አይችልም። ዝርዝሩ ቢሮው በሚያወጣው መመሪያ ይወሰናል።
7. ማንኛውም ሰው በክ.ል.ሉ የግብርና ምርምር ተቋም እውቅና ካላገኘ በስተቀር ከክ.ል.ሉ የውሀ አካል ለምርምር ዓሳ ማስገር አይችልም። ሆኖም የምርምር ፕሮጀክቱ ለክ.ል.ሉ ጠቃሚ መሆኑ ታምኖበት ዕውቅና ከተሰጠው ቢሮው የማስገር ፍቃዱን ሊሰጠው ይችላል።
8. ማንኛውም ሰው ከቢሮው የጽሑፍ ፈቃድ ሳይሰጠው በክ.ል.ሉ ውስጥ ከሚገኝ አንድ የውሃ አካል ወደ ሌላው የውሃ አካል የዓሳ ዝርያ እንዲያዘዋውር ወይም ከሌላ አካባቢ ወደ ክ.ል.ሉ እንዲያስገባ ተከልክሏል።
9. ማንኛውም ሰው በክ.ል.ሉ በሚገኙና መልማት በሚችሉ የውሃ አካል የአሳ ግብርና ለማት ለማካሄድ ከሚመለከተው አካል ፈቃድ በማውጣት አልምቶ ተጠቃሚ እንዲሆን ይበረታታል።
10. በዚህ አዋጅ መሠረት ፈቃድ ለመጠየቅ የሚቀርብ ማመልከቻ ለውሳኔ አሰጣጥ እንዲያመች ተፈላጊ ማስረጃዎችን ያሟላ መሆን አለበት። ዝርዝሩ ይህንን አዋጅ ለማስፈጸም በሚወጣ መመሪያ ይገለጻል።

3. Any person shall not undertake the fishing of fingerlings for breeding or any other purpose with out acquisition of a permit from the Bureau,
4. Any foreign national can undertake recreational fishing only upon acquisition of a permit from the Bureau.
5. Any person, without the acquisition of a prior permit from a person granted a right to utilization under special agreement, shall not undertake fishing for subsistence, commerce and recreation or research from water body with which this agreement concerned pursuant to Article 6 mentioned in this proclamation.
6. Any person shall not undertake fishing from water bodies using explosives, ammunitions, poisons and narcotizing plant or electric current except fishing using legal materials. Particulars shall be determined by a directive to be issued by the Bureau.
7. Any person shall not undertake fishing for research from the Regional water bodies without getting recognition from the Regional Agricultural Research Center. However, the Bureau may give him a fishing permit when the research project is believed to be important for the Region and provide with recognition thereof.
8. Any person shall be forbidden to transfer fish species from one water body to another water body in the Region or to import same from another place into the Region without being given a written permit from the Bureau.
9. Any person shall be encouraged to be advantageous through undertaking aquaculture development on exploitable water bodies in the Region by getting a license from a concerned body.
10. An application submitted, in accordance with this proclamation, to request for a license shall fulfill necessary evidences in order to be suitable for decision making. Particulars shall be stated by a directive to be issued for the implementation of this proclamation.

6. የዓሳ ግብርና

1. ከቢሮው የሙያ ፈቃድ ካልተሰጠው በስተቀር ማንኛውም ሰው ለንግድ ሥራ የዓሳ ግብርና ተቋም መገንባት ወይም የዓሳ ግብርና ማካሄድ አይችልም።
2. ዝርዝሩ በመመሪያ የሚወሰን ሆኖ ለንግድ ሥራ የዓሳ ግብርና ተቋም መገንባት ወይም ማካሄድ ለሚሻ ማንኛውም ሰው ፈቃድ የሚሰጠው፡-
 - ሀ. በቂ መሬት ያለውና ለሥራው የሚያስፈልገውን የውሀ መጠን ለመጠቀም ወይም ከመሬት ውስጥ ለማውጣት ወይም በተፈጥሮ የውሀ አካላት ላይ ለመጠቀም አግባብ ካላቸው የውሀ ግብት አካላት የድጋፍ ወይም የውሀ ግብት መግለጫ ከከለሉ ፈቃድ የሚሰጠው መሆኑ፤
 - ለ. የተቋሙ የዓሳ ግብርና ተቋም አካባቢን የማይበክል ወይም በተፋሰሱ ባሉ የውሀ አካላት በሚገኙ የዓሳ ዝርያዎች ላይ ጉዳት የማያስከትል መሆኑ ሲረጋገጥ ብቻ ነው።
3. የዓሳ ግብርናና የግብርና ተቋሙን ግንባታና አጠቃቀም ደረጃዎችን በተመለከተ ቢሮው እንደአስፈላጊነቱ መመሪያ ያወጣል።
4. ለንግድ ሰራ የሌላ ግብርና ፈቃድ ከቢሮው የወሰደ ማንኛውም ሰው በምርምር የተደገፉ የሌላ ዝርያዎችን በማራባት ጫጩቶችን ለሌሎች ተጠቃሚዎች የማስራጨት ሀላፊነት አለበት። ለዚህም ቢሮው ተገቢውን የሙያ ምክር አገልግሎት ይሰጣል።
5. የዓሳ በሽታ ከዓሳ ግብርና ተቋሙ ወደ አካባቢው ሊዛመት ይችላል ተብሎ ሲታመን ቢሮው አስፈላጊውን እርምጃ ይወስዳል።

የዓሳ ሀብትን ከልዩ ውል በማመንጭ መብት ስለመጠቀም

ቢሮው በአንድ የውሃ አካል የሚገኝ የዓሳ ሀብት ለአንድ ወይም ለብዙ ሰዎች በልዩ ውል የሚሰጥበትንና የዓሳ ሀብቱ በዘላቂነት መልማቱን የሚቆጣጠርበትን ስርአት በመመሪያ ይወስናል።

6. Aquaculture

1. Any person shall not build aquaculture facility or undertake aquaculture for commercial purpose without getting work permit from the Bureau.
2. As particulars shall be determined by a directive, a permit shall be issued to any person who seeks to build an aquaculture facility or undertake aquaculture;
 - a. Where he has sufficient land and there acquisition of statement of support agreement from relevant Regional State bodies to utilize the required amount water or extract water from the ground to make utilization on natural water bodies
 - b. When only confirmed that establishment the aquaculture facility does not pollute the surrounding environment or cause damage on the fish species inhabiting the water bodies in the basing.
3. The Bureau shall, as may be necessary, issue directive regarding standards for establishment and utilization of aquaculture and aquaculture facilities.
4. Any person who takes aquaculture license commercial fishing shall have responsibility to breed fish species substantiated by research and to distribute same to other user. The Bureau shall render the required professional skill counseling service.
5. The Bureau shall take an appropriate measure when it is believed that there is a risk that fish disease in the aquaculture facility may spread into the surrounding.

7. Utilization of Fisheries Resource From special Agreement with issuance of concession

The Bureau shall determine by directive the issuance of concession of fisheries resource present in water body to one or more than one person as well as regulation system for sustainable development of

- ለ. ይህንን አዋጅና በዚህ አዋጅ መሠረት የወጡትን ደንቦችና መመሪያዎች ጥሷል ተብሎ የተጠረጠረ ማንኛውም ሰው ስሙንና አድራሻውን መታወቅያውንና ሌሎች ከዚህ ጋር አግባብነት ያላቸውን መረጃዎች እንዲሰጠው መጠየቅ፤
- ሐ. ማንኛውም ዓሣ የተያዘው የተጓዝው ለገበያ የቀረበው ወደ ክልሉ እንዲገባ የተደረገው ወይም ከክልሉ እንዲወጣ የተዘጋጀው ይህንን አዋጅ በመጣስ ነው ብሎ በቀና አጥጋቢ በሆነ ምክንያት ሲያምን ዓሣውን መያዝ፤
- መ. ማንኛውም የዓሣ ማስገሪያ ጀልባና መሣሪያ ይህንን አዋጅ በሚፃረር ሁኔታ ጥቅም ላይ መዋሉን አጥጋቢ በሆነ ሁኔታ ሲያረጋግጥ እነዚህን መሣሪያዎች መያዝ፤
- ሠ. ማንኛውም ዓሣ መታመሙ ወይም መበከል በማስረጃ ሲረጋገጥ ዓሣው እንዲወገድ ማድረግ፤
- ረ. ማንኛውም ሰው ስለተጠቀመበት ማስገሪያ መሣሪያ ስለያዘው ዓሣ አይነትና መጠን እንዲሁም ዓሣውን ስለአሰገረበት አካባቢ መረጃ እንዲሰጠው መጠየቅ፤
- ሰ. ማንኛውም የዓሣ ግብርና የዓሣ ማደራጃ ማከማቻ ማንጓገጥና መሸጫ ተቋማትና መሣሪያዎችን መፈተሽና ተፈላጊውን ደረጃ አሟልተው በማይገኙት ላይ በንግድ ምዝገባና ፈቃድ ስጦታ መሠረት ከሚመለከተው አካል ጋር በቅንጅት እርምጃ እንዲወሰድ ያደርጋል።

ማንኛውም የዓሣ ሀብት ተቆጣጣሪ፡-

- ሀ. በሚጠየቅበት ጊዜ የዓሣ ሀብት ተቆጣጣሪ መሆኑን የሚገልጽ ሕጋዊ የሆነ መታወቂያ ማሳየት፤
- ለ. በዚህ አዋጅ መሠረት ለሚያዙ ማንኛውም ተንቀሳቃሽ ንብረቶች የጽሑፍ ደረሰኝ መስጠት አለበት።

ስለተያዘ ዓሣ የማስገሪያ መሣሪያና ሌሎች ዕቃዎች

የዓሣ ሀብት ተቆጣጣሪ፡-

- ሀ. በዚህ አዋጅ መሠረት የተያዘና ለገበያ መቅረብ የሚችል ማንኛውም ዓሣ እንዳይበላሽ ለመከላከል በሀገራዊ መንገድ እንዲሸጥ፤ አለበለዚያም ወዲያውኑ እንዲወገድ ያደርጋል።

- b. Demand any person suspected contravening this proclamation a regulations as well as directives issued pursuant to this proclamation to give his name and address, his identification card and any other relevant information.
- c. Seize any fish which the inspector has sufficient and reasonable grounds to believe that the fish has been caught, transported, is being marked, imported to the Region or prepared for export out of the region in contravention of this proclamation.
- d. Seize any fishing boat and gear, which the inspector has reasonable grounds to prove that the same has been used in contravention of this proclamation.
- e. Destroy any fish, which is proved to be evidence that it is diseased or contaminated.
- f. Demand any fisher to provide information regarding the gears used, the type and quantity of fish caught, as well as the fishing ground from which the fish were caught.
- g. Inspect any aquaculture, fish processing, storage, transport and marketing facilities as well as equipment and cause measures to be taken being integrated with the concerned body pursuant to the Registration and Licensing laws.

2. Any fishery Inspector shall have to:

- a. Show, upon request, a legal identification card which claims that he is a fisheries inspector;
- b. Provide a written receipt for the seizure of any movable properties pursuant to this proclamation.

12. Regarding seized Fish, Fishing Gear and other Goods

The fishery Inspector shall:

- a. Make any seized and marketable fish pursuant to this proclamation be sold legally in order to protect the fish from spoilage, or else make the fish be disposed;

ለ. በዚህ አዋጅ መሠረት የተያዘ የማስገሪያ መሣሪያ ወይም የማጓጓዣ ሌሎች ዕቃዎች ሙሉ ኢንሱራንስ ለውጭ ድረስ በጥንቃቄ እንዲቆይ ማድረግ ይኖርበታል።

ሐ. የተያዘ ዓሣ፣ የማስገሪያ መሣሪያ ወይም ሌላ ዕቃ አይነትና መጠን፣ የተያዘበትንና ዓሣው የተሸጠበትን ወይም የተወገደበትን ቀን እንዲሁም ከሸያጭ የተገኘውን ገንዘብ መጠን የሚገልጽ ደረሰኝ ለተያዘበት ሰው ይሰጣል።

መ. በዚህ አዋጅ መሠረት ዓሣ የተያዘበት ሰው ተቃራኒ ሙሉ ኢንሱራንስ ለውጭ ድረስ ካላወጣ ወይም ከሰ መመስረቱን እስከ ሶስት ወር ድረስ ካላወጣ ከዓሣው ሸያጭ የተገኘውን ገንዘብ ለመንግስት ዝቢ ያደርጋል።

ከፍል አራት

ልዩ ልዩ ድንጋጌዎች

13. ወንጀሎች

ማንኛውም ሰው፡-

1. ዝርዝሩ በመመሪያ የሚወሰን ሆኖ ዓሣ ለማስገር፣ በማንኛውም የውሀ አካል ላይ ጎጂ የሆኑ የማስገሪያ መሣሪያዎችን፣ አደንዛኝ ወይም ሙርዛማ ዕቅዶችን፣ ፈንጂዎችን ወይም የኢሌክትሪክ ንዝረት የሚያስከትሉ መሣሪያዎችን ከተጠቀመ፤
2. ዓሣ እንዳይሰጠው ሙሉ በሙሉ፣ በክፍል ወይም ለተወሰኑ ወቅቶችና ወራት በተከለከሉና በታገዱ የውሀ አካላት ላይ እንዳውን በመጣስ ማስገሩ ከተረጋገጠ፤
3. ያለፈቃድ ወይም ከተሰጠው ፈቃድ ተቃራኒ በሆነ ሁኔታ ህይወት ያለው ዓሣ ወይም የዓሣ ዕንቁላል ከውጭ ሀገር ካስገባ፣ በክልሉ የውሀ አካላት ከጨመረ፣ ከክልሉ ካስወጣ ወይም ከአንዱ የውሀ አካል ወደ ሌላው የውሀ አካል ካዛወረ፤
4. በኬሚካል የደረቀ ወይም የተጠበቀ ዓሣ ያለፈቃድ ከክልሉ ካስወጣ፤
5. ጥብቅ የዓሣ ሀብት ክልሎችን የሚመለከቱ ማንኛውንም ደንቦችና መመሪያዎች በሙተላለፍ ዓሣ ካስገረ፤

b. Ensure that the fishing gears or transport or other equipment seized pursuant to the proclamation, are well taken care of until decision is made upon them;

c. Give the person, from whom the fish, fishing gears or other type and quantity of goods were seized, a receipt stating the date of seizure, sale or disposal as well as the amount realized from the sale;

d. Unless the person from whom the fish seized pursuant to this proclamation brings an opposing court ruling or notifies that he files a charge until three months, the proceeds of the fish seized shall be confiscated.

PART FOUR

Miscellaneous Provisions

13. Offences

Any person who:

1. Makes use of, as particulars determined by directive, harmful fishing equipment, narcotic or poisonous plants, ammunitions or device causing electric shock for fishing in any water body;
2. Is confirmed that he undertakes fishing in breach of the sanction in water bodies where fishing is forbidden and prohibited completely, partially or for certain seasons and months;
3. Imports live fish or fish eggs from abroad and introduces same in to the Regional water bodies, sends same out of the Region or transfers same from one water body to another without a permit or in contravention to the terms of the permit;
4. Sends out of the Region without a permit the fish which is dried up or kept by chemicals;
5. Undertakes fishing in violation of an regulations and directives concerned with protected fishery areas;

- 6. ፈቃድ ሳይኖረው ወይም በተሰጠው ፈቃድ ላይ የተገለጹትን ሁኔታዎች በመተላለፍ ከተፈጠረ የውሀ ለካላት ዓሣ ካመረተ ወይም ለንግድ የዓሣ ግብርና ተቋም ከገነባ ወይም ካካሄደ፤
- 7. የተመጋቢውን ጤንነት ሊያውክ የሚችል የተበከለ ወይም የተመረዘ ዓሣና የዓሣ ውጤቶችን ሲያጓጉዝ ከተገኘ፤ ለገበያ ካቀረበ፤ ለሀብረተሰቡ ከሸጠ ወይም ከሰጠ፤
- 8. በዚህ አዋጅ ድንጋጌዎች መሠረት የሚፈለገውን መረጃ ተጠይቆ ሳይሰጥ ከቀረ ወይም ሀሰተኛና ለላላች መረጃ ከሰጠ፤
- 9. የዓሣ ሀብት ተቆጣጣሪ ሥራውን እንዳይሰራ ካሰናከለ፤ ካሰፈራራ ወይም ጉዳት ካደረሰ፤
- 10. ይህንን አዋጅ ወይም በዚህ አዋጅ መሠረት የሚወጡትን ደንቦችና መመሪያዎች ከተላለፈ ወይም አፈፃፀማቸውን ካደናቀፈ ወንጀል እንደሰራ ይቆጠራል።

- 6. Cultivates fish from natural water bodies builds or undertakes commercial aquaculture without having a permit or in breach of conditions stated in the given license;
- 7. Is found transporting, supplying for market, selling or providing for the market contaminated or poisoned fish as well as fish products, which can disturb consumer's health;
- 8. Fails to provide the required information demanded or gives false and misleading information pursuant to provisions of the proclamation;
- 9. Makes trouble, threatens or causes damage to a fishery inspector in order not to carry out his task;
- 10. Breaches this proclamation or regulations or directives to be issued pursuant to the proclamation or troubles the implementation of the same, he is presumed to have committed an offence.

ሰለ ቅጣት

በዚህ አዋጅ አንቀጽ 13 ሥር ከተዘረዘሩት ወንጀሎች መካከል አንዱን ወይም ሌላኛውን የፈፀመ ማናቸውም ሰው ድርጊቱ በማስረጃ ሲረጋገጥ ከአንድ አመት በማያንስና ከሶስት አመት በማይበልጥ እስራት ወይም እስከ ብር አስር ሺ በሚደርስ መቀጮ ወይም በሁለቱም ይቀጣል።

14. Penalty

When any person who has committed one or other offences among those specified in Article 13 of this proclamation, he shall be punished upon confirmation of the act by evidence with imprisonment for not less than a year and exceeding three years or with a fine up to 10,000(ten thousand Birr) or with both.

ሌሎች ተጨማሪ እርምጃዎች

- 1. ማንኛውም ሰው በዚህ አዋጅ መሠረት ወንጀል ፈጽሟል ተብሎ ጥፋተኝነቱ ሲረጋገጥ በተከሰቡ ላይ ከሚወሰነው ማናቸውም አይነት ቅጣት በተጨማሪ ፍርድ ቤቱ፡-

15. Other Additional Sanctions

- 1. Where any person is convicted of an offence in contravention of this proclamation the court shall, in addition to any other penalty imposed on the accused, order:

ሀ. ለወንጀል ተግባር የዋሉት ማናቸውም ጀልባና ወይም የዓሣ ማስገሪያ መሣሪያዎች እንዲወረሱ፤

a. The forfeiture of any fishing boat and/or gear used in the commission of the offence;

ለ. የተያዘ ማናቸውም ዓሣና የዓሣ ውጤት ወይም የተሸጠ ከሆነ ገንዘቡ እንዲወረስ፤

b. The forfeiture of any seized fish and fish products or money if same is sold;

ሐ. ሕገ ወጥ በሆነ መንገድ የዓሣ ማስገር ሥራ ለማካሄድ የዋለ ማናቸውም መርዝ፣ ፈንጂ ወይም ሌላ አይነት መሣሪያ እንዲወረስ፤

መ. የዓሣ አስጋሪነት ሥራ ወይም የንግድ ፈቃዱ እንዲታገድ ወይም እንዲሰረዝ ትዕዛዝ ሊሰጥ ይችላል።

2. የጥፋተኝነት ውሳኔ ከተሰጠ በኋላ የተያዙት ዕቃዎች እንዲወረሱ ትዕዛዝ ካልተሰጠ በስተቀር ውሳኔው በተሰጠ በ30 ቀናት ውስጥ የገንዘብ ቅጣቱ ካልተከፈለ የተያዙት ዕቃዎች ተሸጠው ከሸያፎኔ በሚገኘው ገንዘብ መቀራጫው እንዲሸፈን ይደረጋል።

3. የወንጀል ክስ ከተመሠረተ በኋላ ተከላሹ በነጻ ቢለቀቅ የተያዘበት ዓሣ ወይም የሸያፎጭ ዋጋ እንዲሁም የተያዘው የማስገሪያ መሣሪያ ወይም ሌላ ዕቃ ለተከላሹ ይመለስሉታል።

16. የመተባበር ግዴታ

ማንኛውም ሰው ለዚህ አዋጅ ተግባራዊነት አግባብነት ካላቸው አስፈጻሚ አካላት ጋር የመተባበር ግዴታ አለበት።

17. ተፈጻሚነት ስለማይኖራቸው ሕጎች

ማንኛውም ህግ፣ ደንብ፣ መመሪያ ወይም የተለመደ አሠራር ከዚህ አዋጅ ጋር የሚቃረን ከሆነ በዚህ አዋጅ ውስጥ በተገለጹት ጉዳዮች ላይ ተፈጻሚነት አይኖረውም።

18. ደንብ የማውጣት ሥልጣን

የክልሉ መስተዳድር ምክር ቤት ለዚህ አዋጅ ሙሉ ተፈጻሚነት የሚያስፈልጉትን ደንቦች ሊያወጣ ይችላል።

19. መመሪያ የማውጣት ሥልጣን

ቢሮው ይህንን አዋጅና በአዋጁ መሰረት የሚወጡትን ደንቦች ለማስፈጸም የሚያስፈልጉትን መመሪያዎች ሊያወጣ ይችላል።

c. The forfeiture of any poison explosive or other equipment which has been unlaw used for fishing;

d. The suspension or cancellation of any fis activity or fish trade permit.

2. Where, following a conviction, any goods se are not ordered to be forfeited and if any remain unpaid with in 30 days of the convi such goods may be sold and the proceeds such goods may be sold and the proceeds be used to cover the fines.

3. Where following a prosecution, when an acc person is acquitted, any seized fish or proc realized from the sale of same as well as fis gear or over goods shall be returned to person.

16. Duty to cooperate

Any person shall have duty of cooperation relevant executive bodies for implementation of this proclamation.

17. Inapplicable Laws

Any law, regulation, directive or custo practice inconsistent with this proclam shall not applicable on matters stated in proclamation.

18. Power to Issue Regulation

The Council of the Regional Government issue regulations necessary for the implementation of this proclamation.

19. Power to Issue Directive

The Bureau may issue directives necessary the implementation of this proclamation regulations to be issued pursuant to proclamation.

20. አዋጅ የሚጻፍበት ጊዜ

ይህ አዋጅ በክልሉ ዝክረ ስግ ጋዜጣ ታትሞ
ከመጣበት ቀን ጀምሮ የፀና ይሆናል።

ባህር ጳር
ታህሳስ 7 ቀን 1996 ዓ.ም

ዮሴፍ ረታ
የአማራ ብሔራዊ ክልል
ፕሬዚዳንት

20. Effective Date

This proclamation shall come into for
the date of its publication in the *Zd
Gazetta* of the Region.

Done at Bahir Dar
This 17th day of December, 20

Yosef Retta
President of the Amhara Nation
Region

Annex II: Amhara National Regional State fisheries Resource Development, Protection and Utilization Proclamation enforcement, Regulation No 50/2007.

12ኛ አመት ቁጥር 13
12th Year No 13



ባሕር ዳር ሚያዝያ 12 ቀን 1999 ዓ.ም
Bahir Dar 20th, April 2007

**በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፑብሊክ
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ዝክራ-ሕግ**

ZIKRE-HIG

**OF THE COUNCIL OF THE AMHARA NATIONAL REGIONAL STATE
IN THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA**

የአንድ ዋጋ ብር 5 Price	በአማራ ብሔራዊ ክልላዊ መንግስት ምክር ቤት የወጣ	ISSUED UNDER THE AUSPICES OF THE COUNCIL OF THE AMHARA NATIONAL REGIONAL STATE	THE THE THE P.O. Box 312
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<u>ማጠቃለያ</u> <u>ደንብ ቁጥር 50/1999 ዓ.ም</u> በአማራ ብሔራዊ ክልላዊ መንግስት የዓጣ ሀብት ልማት፣ ጥበቃና አጠቃቀም አዋጅ ማስፈጸሚያ ክልል መስተዳድር ምክር ቤት ደንብ	<u>CONTENTS</u> <u>Regulation No.50/2007</u> The Amhara National Regional State Fisheries Resource Development, Protection and Utilization proclamation Enforcement, Council of Regional Government Regulation.
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ደንብ ቁጥር 50/1999 ዓ.ም
በአማራ ብሔራዊ ክልላዊ መንግስት የዓጣ ሀብት ልማት፣ ጥበቃና አጠቃቀም አዋጅ ማስፈጸሚያ ክልል መስተዳድር ምክር ቤት ደንብ

REGULATION NO.50/2007
A COUNCIL OF REGIONAL GOVERNMENT REGULATION ISSUED TO PROVIDE FOR THE ENFORCEMENT OF THE FISHERIES' RESOURCE DEVELOPMENT, PROTECTION AND UTILIZATION PROCLAMATION IN THE AMHARA NATIONAL REGIONAL STATE

በብሔራዊ ክልሉ ውስጥ ተፈጻሚነት የሚኖረው የዓሣ ሀብት ልማት፣ ጥበቃና አጠቃቀም አዋጅ የወጣ በመሆኑ፤

WHEREAS, a proclamation has been issued with regard to the Fisheries' Resource Development, Protection and Utilization to be applicable throughout the Regional State;

በክልሉ ውስጥ ከሚገኝ ከማናቸውም የውሀ አካል ሊመረት የሚገባው የዓሣ ምርት የሀብቱን አጠቃላይ ክምችት ማያናጋና ባግባቡ የተወሰነውን ዓመታዊ የምርት መጠን ማያልፍ እንዲመረት ለስራው የሚያገለግሉትን የሰው ሀይል፣ የማምረቻ መሣሪያዎችና የአመራረት ዘዴዎች መወሰን ተገቢ ሆኖ በመገኘቱ፤

WHEREAS, it has been found appropriate to determine the manpower, fishing equipment and productive methods which are necessary for the activities of the fish cultivation to be normally harvested without jeopardizing the overall potential resource and not exceeding the amount of annual produce dully prescribed beforehand, form any water body in the Regional State;

እምቅ ሀብቱ ማይጎዳ በተጣይነት አገልግሎት እንዲሰጥና የአጠቃቀሙ ደረጃ እንዲሻሻልም ሆነ የምርቱ ጥራት እንዲጠበቅ ብሎም ከማምረቻ ስፍራው እስከ ተመጋቢው ሀብረተሰብ በሚተላለፍባቸው ሂደቶች ከብልሽት በፀዳ አኳኋን ዓሣንና የዓሣ ውጤቶችን ለማምረት፣ ለመጠበቅና ለገበያ ለማቅረብ የሚያስችል ዝርዝር የአሠራር ስርዓት መዘርጋት በማስፈለጉ፤

WHEREAS, it has become necessary to put in place a specific working system enabling to harvest, preserve and avail to the market, fish and fish products, with no harm done to the potential resource in an effort to provide the service sustainably with the standard of its utilization having been improved as well as its quality maintained and thereby free from spoilage during the processes of its passage from the harvesting locality upto the destination of the consumer community thereof;

ከዚህ ጎን ለጎን ዓሣ አምራቹ በማምረቱ ሂደት ሊከተላቸውና ሊያከብራቸው የሚገቡትን ቅድመ ጥንቃቄዎች በመወሰንና የግል ባለሀብቱም በዚህ የኢንቨስትመንት ዘርፍ ተሰማርቶ ራሱን ጠቅሞ ለክልሉ ኢኮኖሚያዊ ዕድገት የበኩሉን አስተዋጽኦ ሊያበረክት የሚችልበትን ምቹ ሁኔታ መፍጠር አስፈላጊ ሆኖ በመገኘቱ፤

WHEREAS, alongside with this, it has, by determining the appropriate precautions that the fish harvester may be bound to follow and observe during the harvesting process, been found necessary to create favorable conditions so that the private investor may, by engaging in the same investment sector, benefit himself and thereby contribute his part to the economic development of the regional state thereto;

የአማራ ብሔራዊ ክልል መስተዳድር ምክር ቤት በቀጽ 40 ስም የብሔራዊ ክልሉ ሀገ- መንግሥት አንቀፅ 58 ንዑስ አንቀጽ 7 እና በዓገ ሀብት ልማት፣ ጥበቃና አጠቃቀም መወሰኛ አዋጅ ቁጥር 92/1996 ዓ.ም አንቀፅ 18 ድንጋጌዎች ስር በተሰጠው ስልጣን መሠረት ይህንን ደንብ አውጥቷል።

NOW, therefore, the council of the Amhara Nattonal Regional Government, in accordance with the powers vested in it under the provisions of art.58, sub-art 7 of the revised Regional Constitution and art.18 of the Fisheries' Resource Development, Protection and Utilization Determination Proclamation No. 92/2003, hereby issues this regulation.

**ክፍል አንድ
ጠቅላላ**

**PART ONE
GENERAL**

1. አጭር ርዕስ

1. Short Title

ይህ ደንብ "የዓገ ሀብት ልማት፣ ጥበቃና አጠቃቀም አዋጅ ማስፈጸሚያ ክልል መስተዳድር ምክር ቤት ደንብ ቁጥር 50/1999 ዓ/ም" ተብሎ ሊጠቀስ ይችላል።

This regulation may be cited as "The Fisheries Resource Development, Protection and Utilization proclamation enforcement Council of Regional Government Regulation No. 50/2007."

2. ትርጓሜ

2. Definitions

1. "ዓገ" "የዓገ ሀብት"፣ "ዓገ ማስገር"፣ "ዓገ አሰጋሪ"፣ "ለግል ፍጆታ ዓገ ማስገር"፣ "ለንግድ ዓገ ማስገር"፣ "ለመዝናኛ ዓገ ማስገር"፣ "ለምርምር ዓገ ማስገር"፣ "የዓገ ማስገሪያ ጀልባ"፣ "የዓገ ሀብት ተቆጣጣሪ"፣ "የውሃ አካል"፣ "ቢሮ" እና "ሰው" የሚሉት ቃላትና ሀረጎች በክልሉ የዓገ ሀብት ልማት፣ ጥበቃና አጠቃቀም መወሰኛ አዋጅ ቁጥር 92/1996 ዓ/ም አንቀጽ 2 ስር የተሰጣቸው ትርጉም ይኖራቸዋል።

1. The terms and phrases such as "Fish", "Fisheries' Resource", "Fishing", "Fisher", "Subsistence-Fishing", "self-consumption fishing"/, "Commercial Fishing", "Recreational Fishing", "Research Fishing", "Fishing Boat", "Fishery Inspector", "Water Body", "Bureau" and "Person" shall have the meanings given to them under art.2 of the Fisheries' Resource Development, Protection and Utilization Determination Proclamation No.92/2003.

2. የቃሉ አገባብ ሌላ ትርጉም የሚያሰጠው ካልሆነ በስተቀር በዚህ ደንብ ውስጥ፡-
ሀ/ "ዓገ ማምረት" ማለት ከተፈጥሮም ሆነ

2. Unless the context otherwise requires, in this regulation:
A. "Fish harvesting" means the production

ከሰው ሰራሽ የውሃ አካላት ጉልበትንና ጊዜን ተጠቅሞ በተፈቀዱ የማምረቻ መሣሪያዎችና ስልቶች እየታገዙ ዓሣን ማምረት ነው።

ለ/ "ሕጋዊ የዓሣ ምርት" ማለት ፈቃድ ባላቸውና በግል፣ በማህበር ወይም በድርጅት ስር በሚሰሩ አምራቾች እማካኝነት ከተፈጥሮና ከሰው ሰራሽ የውሃ አካላት በህጋዊ መንገድ የተገኘ የዓሣ ምርት ነው።

ሐ/ "ሕጋዊ የዓሣ አምራች" ማለት በግል፣ በማህበር ወይም በድርጅት ስር ሆኖ ከተፈጥሯዊና ሰው ሰራሽ የውሃ አካላት ዓሣን ለማምረት ይቻለው ዘንድ ህጋዊ ፈቃድ ያለውና በተፈቀዱ የማምረቻ መሣሪያዎች፣ በታዎችና ወቅቶች ዓሣንና የዓሣ ውጤቶችን የሚያመርት ሰው ነው።

መ/ "ሕጋዊ የዓሣ ማምረቻ መሣሪያዎች" ማለት በዓሣ ሀብቱ ላይ ጉዳት የማያስከትሉና ዓሣን በባህላዊ መንገዶች ወይም በተሻሻሉ ዘዴዎች ለማምረት ያገለግሉ ዘንድ የተፈቀዱ መሣሪያዎች ሲሆኑ እንደ ጀልባ፣ ታንኳ፣ ድግን፣ ወይም ተወርወሪ መረብ፣ የጅ መረብ፣ አንጋፍራ፣ ቀፎ፣ መንጠቆና የመሳሰሉትን ይጨምራሉ።

ሠ/ "የዓሣ ምርት መጠን" ማለት አጠቃላይ የሀብት ክምችት መጠን ሳይኖር ከአንድ የውሃ አካል በተወሰነ ጊዜ ውስጥ ሊመረት የሚችለውና ለምግብነት የደረሰው ዓሣ ምርት መጠን ነው።

of fish with the help of those permitted fish-harvesting equipment and methods by employing labor and time inside the natural and man-made water bodies.

B. "Legal fish produce" means an output of fish obtained from natural and man-made water bodies via-cultivators licensed either privately or organized in the form of associations or enterprises alike.

C. "Legal fish cultivator" means a person who is licensed to harvest fish from natural and man-made water bodies under a private arrangement, an association or enterprise and thereby harvests fish and fish products using permitted harvesting equipment, places and seasons.

D. "Legal fish-harvesting gears" means those instruments permitted with the view to harvesting fish in traditional ways or improved methods which do not cause any harm to the fisheries' resource and may include boat, canoe, gill or cast net, hand net, 'angaфра', as well as traps, hooks and the like.

E. "Amount of fish produce" means that amount of fish readily-mature for consumption and thereby harvestable within a defined period of time from a water body without adversely affecting its overall potential resource.

ረ/ "አዋጅ" ማለት የክልሉ የዓሣ ሀብት ልማት፣
ጥበቃና አጠቃቀም መወሰኛ አዋጅ
ቁጥር 92/1996 ዓ.ም ነው።

F. "Proclamation" means the Amhara
National Regional State Fisheries'
Resource Development, Protection and
Utilization Determination proclamation
No. 92/2003.

ክፍል ሁለት

**ዓሣ ስለሚመረትበት ሁኔታና ስለማምረቻ
መሣሪያዎች**

PART TWO

**CONDITIONS OF FISH HARVESTING
AND FISHING GEARS**

3. ስለ ዓሣ አመራረት

3. Fish Harvesting

1. በክልሉ ውስጥ ከሚገኝ ከማናቸውም የውሀ አካል ሊመረት የሚችለው ዓሣ ከዚህ አካል በዓመት ሊመረት ከሚገባው ከፍተኛ የዓሣ ምርት መጠን ማለፍ አይኖርበትም።
2. ከክልሉ የተፈጥሮና ሰው ሰራሽ የውሀ አካላት የሚመረተው የዓሣ ምርት ዓይነትና መጠን ቢሮው በሚያወጣው መመሪያ መሠረት እንዲመረት ከተወሰነው ዝቅተኛ የዓሣ ቁመትና ከብደት መጠን በታች መሆን የለበትም።
3. ማንኛውም የዓሣ አምራች እንዲመረት ከተፈቀደው ዝቅተኛ የዓሣ ቁመትና ከብደት በታች የሆነና ለመራባት ያልደረሰ ዓሣ በድንገት የያዘ እንደሆነ ወዲያውኑ ወደውሃው የመመለስ ግዴታ አለበት።
4. ቢሮው የዓሣ ሀብት ከምችቱ ሊናጋና ሊጠፋ ይችላል ብሎ ሲያምን፣ አካባቢው የመዋለጃ ስፍራ መሆኑ ሲረገጥና ይልቁንም በመራቢያና በመዋለጃ ወቅቶች፣ የዝርያ መመናመን ሲከሰት እንደ አስፈላጊነቱ በማንኛውም የውሃ አካል ላይ

1. Fish that may be harvested from any water body in the regional state may not exceed the maximum amount of the fish catch which ought to appropriately be produced from the same water body within a year.
2. The type and size of the fish to be harvested from the natural and man-made water bodies in the regional state shall not be less than the height and weight of the fish prescribed for production in accordance with a directive issued by the Bureau.
3. Wherever any fish harvester, by chance, captures fish, whose size is less than the height and weight of the one permitted to be harvested and thus immature to breed, shall be duty-bound to return same into the water forthwith.
4. The Bureau may, partially or fully cause the activity of fish production be terminated, as deemed necessary, at any water body whenever it believes that the potential of the fishery's resource may be disturbed and thereby be extinct, the area is ascertained to

የዓሳ ማምረት እንቅስቃሴ በከፊል ወይም በሙሉ እንዲቆም ማድረግ ይችላል።

be that of delivery and reproduction, especially during breeding seasons, or where there happens to be a dwindling of the species of fish thereof.

4. ስለ ዓሳ ማምረቻ መሣሪያዎች

4. Fish Harvesting Gears

1. ከአንድ የውሃ አካል ዓሳን ለማምረት በስራ ላይ መዋል የሚገባቸው የማምረቻ መሣሪያዎች ብዛትና ዓይነት ክምችቱ ማይናጋ የዓሳ ሀብቱን ለማምረት መኖር ከሚገባው ከፍተኛ የማምረቻ መሣሪያዎች ቁጥር መብለጥ የለበትም። ቢሮው በየውሃ አካላቱ ጥቅም ላይ እንዲውሉ የሚፈቀዱትን መሣሪያዎች አይነት ማሟላት ከሚገባቸው መሰፈርት ጋር የያዘ ዝርዝር የአፈፃፀም መመሪያ ሊያወጣ ይችላል።

1. The number and type of the fish harvesting Gears to be appropriately used in the activity of producing fish from a certain water body shall not exceed the maximum number of harvesting instruments which should be employed to cultivate the fisheries resource without affecting the potential of same. The Bureau may issue a specific guideline containing the type of instruments to be permitted for use in each water body along with the requirements to be complied with.

2. ማንኛውም የዓሳ አምራች ለምርት ተግባር የሚጠቀምበት የዓሳ ማስገሪያ ዓይነትና ብዛት በሚሰጠው ሕጋዊ የማስገር ፈቃድ ላይ መመዝገብ አለበት። በተመዘገቡት የማስገሪያ መሣሪያዎች ላይ የዓይነትም ሆነ የመጠን ለውጥ በሚያደርግበት ጊዜ ሁሉ ይህንኑ ለቢሮው ማሳወቅ ይኖርበታል።

2. Any fish cultivator shall register the type and number of fishing gears used for harvesting activity on the fishing license granted to him, and wherever any variation of type or size occurs as to the registered fishing gears, the licensee shall notify same to the Bureau.

3. በዚህ ደንብ የተፈቀዱት የዓሳ ማምረቻ መሣሪያዎች ከዚህ በታች የተመለከቱት ይሆናሉ:-

3. The fish harvesting Gears permitted for use under this regulation shall be those indicated hereinbelow;

- ሀ/ ድግን መረብ፤
- ለ/ ተወርዋሪ መረብና ወጥመድ ቀፎ፤
- ሐ/ መንጠቆ።

- A. gill net
- B. cast net and local trap
- C. hook

4. በማንኛውም የውሃ አካል ጥቅም ላይ ሊውል የሚችለው የድግን መረብ ወንጠፍት ስፋት እንደየ ዓሳው ዝርያና አስተዳደግ ሁኔታ

4. The size of meshes of the gill net that may be used in any water body shall, being varied and determined depending on the species of

እንዲሁም እንደ ውሳኔው አካል ንድፍ የሚለዩና የሚወሰን ሆኖ በአብዛኛው ንግ በሚሰጥባቸው የውሀ አካላት ከ8 ሻ.ሚ. በላይ መሆን አለበት። መረቡ የሚሠራበት ክር ውፍረትም ከ210/4-6 ይሆናል።

5. የውሀት ክምችቱን በማይጉዳ እኳን ከማንኛውም የውሀ አካል ላይ ተወርዋሪ መረብና ወጥመድ ተርን በመጠቀም ንግ ማምረት የሚቻለው የተጠቀሱት መሣሪያዎች የወንጠፍት ስፋት ከ8 ሻ.ሚ. ሚትር በላይ ከሆነ ብቻ ነው።

6. ንግ እንዲሰጥባቸው በተረቀቁ በማንኛውም የውሀ አካላት ላይ ህጋዊ ተቀባይነት ያላቸውን መንጠቆዎች በነጠላና በብዛት መጠቀም ይቻላል።

7. በንግ ሀብት ክምችቱ ላይ ጉዳት አለማድረግቸው በሚመለከተው ባለሙያ ሲረጋገጥ ባህላዊ የንግ ማምረቻ መሣሪያዎች በህጋዊ መንገድ ንግን ለማምረት በተግባር ላይ ሊውሉ ይችላሉ።

8. ለንግ ምርት ተግባር የሚውሉ መሣሪያዎችን የሚረብሱ ድርጅቶች የሚያዘጋጁባቸው የማስገሪያ መሣሪያዎች በንግ ሀብቱ ላይ ጉዳት የማያስከትሉ መሆኑ በቢሮው መረጋገጥ ይኖርበታል።

5. ስለተከለከሉ የንግ ማምረቻ መሣሪያዎች

ከዚህ በታች የተመለከቱትን በማናቸውም የውሀ አካል ለንግ ማጥመጃ መሣሪያነትም ሆነ ለሌላ ለማናቸውም ዓላማ መጠቀም በዚህ ደንብ መተከልከል፡-

1. ጠባብ የወንጠፍት ስፋት ያላቸው መረቦች፤
2. በሰው ኃይል ወይም በጀልባ እየተጎተቱ ወይም እየተጎበኙ ንግን ለማስገር የሚውሉ ተጎታችና ወይም ስራውል መረቦች፤

fish and its developmental condition as well as the type of water body, be over 8 cms in width. The thickness of the thread from which the net is made, shall as well be 210/4-6

5. Fish harvesting shall be carried out by using cast net and local trap in any water body in such away as to not to damage the resource potential, only if the size of meshes of the aforementioned instrument is over 8 cms in width.

6. It may be possible to utilize legally-acceptable hooks, both singularly or abundantly, in any one of the water bodies where fishing is permitted.

7. Traditional fish harvesting gears may be used to harvest fish in a lawful way where it is confirmed by the pertinent expert that the said instruments do not cause harm on the fisheries resource potential.

8. It shall be ascertained by the Bureau that the Fishing gears manufactured by those enterprises which fabricate same don't cause harm on the fisheries resource.

5. prohibited fish harvesting Gears

It is hereby prohibited Under this regulation to use the following, either as fish harvesting gears or for any other purpose in any water body:-

1. nets, whose size of meshes is narrow in width;
2. pulling and/ or trawl nets which may be hauled or pulled by manpower or boat for the purpose of fishing;

- 3. ዝርዝሩ በርጅም በሚያወጣው መመሪያ የሚወሰን ሆኖ አደንባብ ወይም ውሃን የሚበክሉ ዕዕዋትና ኪሚካሎች፤
- 4. ፈንጂዎች፣ ደማሚቶች ወይም የኤሌክትሪክ ንገረትን የሚያስከትሉ ሌሎች መሣሪያዎች።

6.ሰለ ዓሣ አምራቾች መብቶችና ግዴታዎች

- 1. ከአንድ የውሃ አካል ዓሣ እንዲያመርት ሕጋዊ የዓሣ ማምረት ፈቃድ የተሰጠው ማንኛውም ሰው ዓሣ ማምረት ይችላል።
- 2. ማንኛውም ዓሣ አምራች ሕጋዊ ፈቃድ እስካገኘ ድረስ በግል፣ በቡድን፣ ወይም በማህበር በቋሚነትም ይሁን በጊዜያዊነት ዓሣ የማምረት መብት ይኖረዋል።
- 3. ዓሣ እንዲሰገርበት በተፈቀደ የውሃ አካባቢ ነዋሪ የሆነ ማንኛውም ሰው ለግልም ሆነ ለቤተሰብ ፍጆታ የሚያውለው በተን እስከ 3 ኪ.ግ. ዓሣ በነጠላ መንጠቆ በመጠቀም መያዝ የሚችል ሲሆን የተያዘውን ዓሣ ለገበያ በማቅረብ መሸጥ አይችልም።
- 4. ለስፖርት ዓላማ ዓሣ እንዲያጠምድ ፈቃድ የተሰጠው ማንኛውም ሰው በነጠላ መንጠቆ በመጠቀም በተፈቀደለት የውሃ አካል የተፈቀደለትን የዓሣ ዓይነትና መጠን በተን ከ3 ኪ.ግ. ሳይበልጥ ማጥመድ የሚችል ሲሆን የተያዘውን ዓሣ ለገበያ ማቅረብ አይችልም።
- 5. በአንድ የውሃ አካል ውስጥ በዓሣ ምርት ተግባር ላይ ሊሰማራ የሚችለው የአስጋሪ ኃይል ቁጥር የውሃ አካል ሊሸከም ይችላል ተብሎ

- 3. With the details to be determined by a directive issued by the Bureau, narcotic or polluting plants and chemicals;
- 4. Explosives, dynamites and other devices causing an electric shock.

6. Rights and Obligations of Fish Harvester

- 1. Whosoever has been granted fishing license to produce fish from a water body may produce same therefrom.
- 2. Any fish harvester shall, having acquired a lawful license, have the right to harvest fish either permanently or temporarily, in an individual, group or associational Capacity thereof.
- 3. Any person dwelling nearby a water body, wherein it is permitted to undertake fishing, shall have the right to capture up to 3 kg fish using a single hook for his personal or household consumption; provided, however, that he may not avail same to market and sell thereof.
- 4. Any person granted license to trap fish for sporting purposes may capture fish, the type and size of which is permitted for catch, not exceeding 3 kgs of fish per day using a single hook in a water body where he is permitted to do so; Provided, however, that he may not avail same to market thereof.
- 5. The number of fish harvesters who may engage themselves in the activity of fish production in a certain water body shall be

በሚገመተው የክምችት መጠን የሚወሰን ይሆናል።

6. እንደ ዓሣ አምራች ለኖረው የሚችለው የዓሣ ማጥፊያ መሣሪያ ዓይነትና ብዛት ከውሃ አካሉ የዓሣ ክምችት እኳያ ታይቶ በቢሮው ይወሰናል።

7. በዓሣ ማምረት ሥራ ላይ የተሰማራ ማንኛውም ሰው የሚያመርተውን የምርት ዓይነትና መጠን የሚጠቀምበትን የማምረቻ መሣሪያ ዓይነትና ብዛት፣ የሚያጠምድበትን አካባቢና ሌሎች መረጃዎችን መዝገቦ በመያዝ በአቅራቢያው ለሚገኘው የግብርናና ገጠር ልማት ዋና ጽ/ቤት የማቅረብ ኃላፊነት ይኖርበታል።

ክፍል ሦስት

የዓሣ ሀብት ስለሚጠበቅበት፣

ስለሚጓጓዝበትና ለንግድ ሥራ

ስለሚውልበት ሁኔታ፣

7. ስለ ዓሣ ሀብት ጥበቃና እንክብካቤ

1. በማንኛውም የውሃ አካል ውስጥ የሚገኘውን የዓሣ ሀብት ለመንከባከብና ለመጠበቅ እንዲቻል አስተድመው በተከለሉ የዓሣ መራቢያ አካባቢዎችና ወቅቶች ዓሣን የማስገር ተግባር ሊከናወን አይችልም። እንዲህ ያሉት የመራቢያ ቦታዎችና ወቅቶች በጥናት ተለይተው የውሃ አካላቱ በከፊልም ሆነ በሙሉ ሊዘጉ ይችላሉ።

2. ዓሣ ሀብት ላይ ጉዳት ሊያስከትሉ የሚችሉ

determined by the amount of the fish potential which is assumed to exist therein.

6. The type and number of the fish harvesting gears that a fish cultivator may possess shall be determined by the Bureau, taking into account the fisherys' resource potential available in the water body concerned.

7. Any person engaged in the activity of fish harvesting shall, having registered and kept the type and amount of his produce, the number and type of the harvesting gears he utilizes, his fishing area and other information, have the responsibility to submit same to the nearby Agriculture and Rural Development main Office.

PART THREE

CONDITIONS OF CONSERVATION

TRANSPORTATION AND

COMMERCIALIZATION OF THE

FISHERY RESOURCE

7. Conservation and care of the Fishery Resource

1. With the view to conserving and caring for the fishery resource available in any water body, fishing may not be undertaken in those fish-breeding areas and seasons designated beforehand. On condition that such breeding areas and seasons are specified in the course of study, the water bodies pertaining thereto may partially or fully be closed thereof.

2. It is thereby a prohibited act to cause the

የአንድ-ስትራፊ፣ የግብርና የማረታያም፣ የከተማና ሌሎች ፍላጎቶች ወደ ማናቸውም የውሃ አካል እንዲፈሱ ወይም እንዲገቡ ማድረግ የተከለከለ ተግባር ነው።

3. ማንኛውም የውሀ አካል ለመስኖ ልማት፣ ለኃይል ማመንጫ ለውሃ ላይ ትራንስፖርት፣ ለቱሪዝምና ለመሳሰሉት አገልግሎቶች እንዲውል ከመወሰኑ በፊት በዓሳ ሀብት ከምችቱ ምርት ጥራትና ንፅፅር ላይ ጉዳት የማያደርስ መሆኑ መረጋገጥ ይኖርበታል።

4. በተፈጥሮም ሆነ በሰው ሰራሽ ኩራዎች አካባቢ መርዛማና አደንዛኝ ፅዕዎችን ማብቀል ወይም መትከል የተከለከለ ነው።

8. ስለዓሳ ምርት ጥራት አጠባበቅ

1. የዓሳን ምርት ለመሰብሰብ ወይም ለመረከብ የሚሰማራ ጀልባ የዓሳ ማስተመጫ ክፍሉ ለሀሐይ ያልተጋለጠ፣ ንፅፅር የተጠበቀ፣ በቂ በረዶና የዓሳ ማጓጓዣ ሣጥን ያሟላ ሆኖ እንደ ናፍጣና ሌሎች ዓሳውን ሊያበላሹ ከሚችሉ ነገሮች ጋር ንክኪ ያለው መሆን አይኖርበትም።

2. የዓሳ ምርትን ለመረከብ ወይም ለመሰብሰብ የሚሰማራ ጀልባ ከሚረከባቸው ምርቶችና መገልገያ መሣሪያዎች በስተቀር ሰውም ሆነ ሌላ ጭነት ጨምሮ መያዝ አይፈቀድለትም።

3. የዓሳን ምርት በመረከብ የሚሰራ ማንኛውም ሰው ተገቢውን የግል ንፅፅር ያሟላ መሆን አለበት።

flow or drainage of industrial, agricultural or maritime, urban and other sewage, possibly entailing harm to the fishery resource into any water body thereof.

3. Prior to any decision having been taken to utilized any water body for the purpose of irrigation development, generation of an electric power, water transportation, tourism and the like services, it shall be ascertained, that no harm may be done to the product and quality as regards the potential of the fishery resource.

4. It is hereby prohibited to sprout or grow poisonous and narcotic plants around natural and man-made ponds.

8. Quality maintenance of Fish Products

1. The storage room of a boat deployed to collect and receive fish products shall not be one which may have been exposed to the sun, with its cleanliness upheld as well as furnished with sufficient amount of ice and fish transporting box, not to mention that It should remain free from contact with such things as gas oil, and the like which may contaminate the fish.

2. A boat designated to collect and receive fish products may not be permitted to additionally take on board human passengers and any another cargo with the exception of products and service facilities at its disposal as of start.

3. Any person engaged in receiving fish Products shall be responsible to take care of his personal hygiene.

4. የዓጣ አምራቾች ያመረቱትን ምርት በተገቢው መንገድ ከፀሐይ በመከላከል እንዲቀመጡ ለአካባቢው እስኪፈጸም ድረስ በጥላ ስር ወይም በተዘቃዘቃ ሥፍራ በማቆየት ንፅፅናውን ጠብቀው ማይበላሽ ለተገልጋዮች ማሰራጨት አለባቸው።

5. በዓጣ ማዘጋጃ አካባቢ ዓጣው ከተዘጋጀ በኋላ ይቆይ የሚያስችሉ ተረፈ ምርት ለአካባቢው ሀብረተሰብ የጤና ጠንቅ በማያስከትል መልኩ መወገድ አለበት። ተረፈ ምርቱን መልሶ ወደ ጣህ እኩል መባል ፈጽሞ የተከለከለ ነው።

9. የዓጣ ምርት ስለሚጓጓዝበት ሁኔታ

1. ዓጣና የዓጣ ልማት ስራዎችን ለማጓጓዝ የሚውል ለማናቸውም ተሽከርካሪ ለጤና ጠንቅ ከሆኑት ተሞላሪያን የፀዳ ሽፋኑ አባራን የማያስገባ ለብልሽት የሚያጋልጡ ነገሮች የሌሉበትና ንፅፅናው በሚገባ የተጠበቀ መሆን አለበት።

2. ዓጣና የዓጣ ልማት ስራዎችን የሚያጓጓዙ ተሽከርካሪ ላይ ከምርቱ መገልገያ ውጭ ምንም ዓይነት ሌላ ጭነት መጫን አይፈቀድም።

3. ዓጣና የዓጣ ልማት ስራዎችን የሚያጓጓዙ ማንኛውም አሽከርካሪ በጉዞ ወቅት በቂ በረዶ በማድረግ የዓጣ መያዣ ማጥናትና የሚታዘቡ መሣሪያዎችን አሟልቶ የመያዣና የመንቀጋጠስ ግዴታ አለበት።

4. ዓጣና የዓጣ ልማት ስራዎችን የሚያጓጓዙ ማንኛውም ግለሰብ ወይም ድርጅት በተጠየቀበት ቦታ ሁሉ ስለሚያጓጓዘው ዓጣና ልማት ስራ ለአካባቢው

4. Fish-hrvesters shall have the duty to distribute fish products to various consumers in a proper way, having transported same they have harvested by preventing it from the sun and by storing it in a cool place or under the shade, with its cleanliness maintained and thereby free from spoilage until its handover is so executed thereof.

5. The by-product remaining after the preparation of the fish at the processing area shall be disposed of in a manner that it may not cause harm to the health of the local community. It is totally prohibited to drop same back into the water body high away.

9. Transportation of Fish Products

1. Any vehicle used to transport fish and fish products shall have to be free from anti-health germs with its cover not allowing dust to enter therein and liberated from spoiling matters as well as exhibit proper sanitation thereof.

2. It may not be permitted to load any other cargo on the vehicle used to transport fish and fish products, with the exception of the processing devices therewith.

3. Any driver instructed to transport fish and fish products shall be duty-bound to carry with him complete fish container boxes and refrigerators by adding sufficient ice while in the trip.

4. Any private person or enterprise charged with the transportaion of fish and fish products shall be duty-bound to allow an

የዓሳ ሀብት ተቆጣጣሪና ለሌሎች አግባብነት ላላቸው አካላት አስፈላጊውን መረጃ የመስጠትና የማስመርመር ግዴታ አለበት።

5. የዓሳ ጥራት፣ ክብደትና ቁመት መስፈርቶችን ያላሟላና በሕጋዊ ዓሳ አምራቾች ያልተመረተ የዓሳ ምርት ሲጓጓዝ ቢገኝ በአዋጁ አንቀጽ 14 እና 15 ድንጓጌዎች መሠረት የሚያስጠይቅ ተግባር ይሆናል።

10. ስለ ዓሳ ማቆያ፣ ማዘጋጃና መሸጫ ቦታ

1. ማናቸውም የዓሳ ማቆያ ማዘጋጃና መሸጫ ድርጅት ወለሉና ግድግዳው በቀላሉ ሊፀዳና በቂ ብርሃን ሊያስገባ የሚችል ሆኖ ንፁህ ውሃ፣ የተሟላ የንፁህና አገልግሎት መስጫ፣ የማቀዝቀዣና የቆሻሻ ማሰወገጃ ክፍሎችንና መሣሪያዎችን አሟልቶ መገኘት አለበት።

2. ከዓሳ ምርት ማዘጋጃና መሸጫ አካባቢ የሚወጣ ማናቸውም ፍሳሽ ቆሻሻ የአካባቢውን ሕብረተሰብ ምቹትና ጤንነት በማያውክ ሁኔታ መወገድ ይኖርበታል።

3. በዚህ ደንብ መሠረት የሚከማች ወይም በቅርብ ዕርቀት የሚጓጓዝ ትኩስ ዓሳ በቂ ቅዝቃዜን ሊሰጥ በሚችል የማቀዝቀዣ መሣሪያ መጠበቅ ወይም በንፁህ በረዶ ታጅሎ በዓሳ ሣጥን መቀመጥ ይኖርበታል።

investigation as and where required and thereby provide necessary information about his transportable fish and fish products to the local fishery's inspector as well as other pertinent bodies.

5. If a fish product, which has not been harvested by legal fish cultivators and thus fail to comply with the requirements pertaining to quality, weight and height of the fish resource, is somehow encountered while in transportation, it shall be an indictable act pursuant to the provisions of Arts. 14 and 15 of the proclamation.

10. Storage, Processing and Selling Place of Fish

1. Any fish storage, processing and marketing enterprise shall have easily-cleanable floor and walls allowing sufficient light to enter therein and be satisfactorily furnished with clean water and complete sanitary service providing, refrigerating as well as sewage disposal rooms and facilities.

2. Any liquid waste resulting from the preparation and sale's area of fish products shall be disposed of in such away as not to affect the comfort and health of the surrounding community.

3. Fresh fish having been stored or transported to the nearby destination shall, in accordance with, this regulation, be preserved in a refrigerating facility capable of providing sufficient cold or placed in a fish-box by coating it with ice.

4. በዓሣ ዝግጅት ሥራ ላይ የተሰማሩ ሠራተኞች የተሟላ ጤንነት ያላቸውና የግል ንፅህናቸውን የጠበቁ መሆን ይኖርባቸዋል።

4. Workers engaged in the fish processing activities shall be of full health and have satisfied the requirements of proper care for their personal hygiene.

11. በዓሣ ንግድ ሥራ ላይ ስለመስማራት፤

11. Engagment in Fish business

1. በዓሣ ንግድ ሥራ ላይ ለመስማራት የሚፈልገውን ማንኛውም ሰው በሀገራዊ መንገድ የተመረተን ዓሣና የዓሣ ሠራተኞች የጥራት ደረጃቸውን ጠብቆ ለገበያ ለማቅረብ ብቁ መሆኑ በቤርው የተረጋገጠ እንደሆነ ስልጣን ባለው አካል ተመዝግቦና የንግድ ፈቃድ አውጥቶ ሊሰራ ይችላል።

1. Any person who wishes to engage in fish trading activities may be able to have himself registered with a competent authority and carry out the business under license issued for him. Where it has been ascertained by the Bureau that he is capable of marketing legally-harvested fish and fish products thereof in compliance with the requirements pertaining to their quality standards.

2. በዓሣ ትርጉሞች ንግድ ሥራ ላይ ለመስማራት መፈለጉን ገልጾ ጥያቄ የሚያቀርብ ማንኛውም ሰው የጠየቀውን የንግድ ፈቃድ ከማግኘቱ በፊት ከአምራቾች ወይም ከጅምላ ነጋዴዎች የሚረከበውን ዓሣና የዓሣ ምርት ሠራተኞች ንፅህናና የጥራት ደረጃቸውን ጠብቆ ለተመጋቢው ህብረተሰብ ለመሸጥ የሚያስችለው የተሟላ የዓሣ መሸጫ ሰብ እንዳለው በቅድሚያ መረጋገጥ ይኖርበታል።

2. where any person applies for a retail-trade license in fish, it shall, prior to the acquisition of the business license, so requested for, have to be ascertained that he already possesses a facilitated shop enabling him to store and sell to the consumer community fish and fish products collected from the harvesters or whole-salers with due care for their sanitation and quality standards.

12. የዓሣ ነጋዴ ግዴታዎች

12. Obligations of the Fish Merchant

1. ማንኛውም የዓሣና የዓሣ ሠራተኞች ነጋዴ ለምግብነት ያልደረሱ ዓሣዎችን ከአምራቾች መረከብም ሆነ ለገበያ ማቅረብ አይችልም።

1. Any trader in fish and fish products may not receive from harvesters fish which are immature for consumption and thereby supply same for marketing purposes.

2. ንፅህናውና የጥራት ደረጃው ተጠብቆ ለተመጋቢው ህብረተሰብ ፍጆታ በውቅቱ

2. Acts resulting in an improper spoilage or squander of fish and fish products which

መቅረብ የሚገባው ዓሣና የዓሣ ተዋዕኔ ከአትምበላይ ባልሆነ ምክንያት ወይም በግዴታ ለሽንት አላገባብ እንዲበላሽ ወይም እንዲባከን ማድረግ በዚህ ደንብ መሠረት ህጋዊ ሀላፊነትን ያስከትላል።

- 3. ዓሣና የዓሣ ሙጢቶችን የመነገድ ሕጋዊ ፈቃድ ያለው ማንኛውም ነጋዴ የዓሣ ጥራት ተቆጣጣሪ ባለሙያ የድርጅቱን አቋምና የዓሣውን ምርት ይዞታ ለመቆጣጠር ወደ ድርጅቱ በሚመጣበት በማናቸውም ጊዜ ይህንኑ የማሳየት፣ የማስረዳትና የማስመርመር ግዴታ አለበት።

ክፍል አራት

ለዓሣ አስጋሪዎች ፈቃድ ስለሚሰጥበት

ሁኔታ

13. ለግልና ለቤተሰብ ፍጆታ ዓሣን ስለማስገር

በክልሉ ውስጥ ዓሣ ማስገር ከተፈቀደበት ከየትኛውም የውሃ አካል ጋር በሚዋሰን ቀበሌ ውስጥ መደበኛ ነዋሪ የሆነ ማንኛውም ሰው በነጠላ መንጠቆ ተጠቅሞ ለግል ወይም ለቤተሰብ ፍጆታ የሚያውለው በቀን ከሦስት ኪሎ ግራም የማያልፍ ዓሣ ያለፈቃድ ማስገር ይችላል። ሆኖም ይኸው መጠን ባጋጣሚ ሊያዙ የሚችሉ ግዙፍ ዓሣዎችን አይጨምርም።

ought to be provided on time to the consumer community with its sanitation and quality maintained, due to reasons, not attributable to force-majeure or because of recklessness, shall entail legal responsibility pursuant to this regulation.

- 3. Where an expert in charge of the fish quality inspection appears to inspect the position of his enterprise and the status of fish and fish products therein at any time, any trader having acquired a business license to trade in fish and fish products shall have the duty to get same scrutinized and provide explanations thereof.

PART FOUR

CONDITIONS OF GRANTING

LICENSE TO FISHERMEN

13. Fishing for individual and household consumption

Any person who happens to be a permanent resident in a kebele adjacent to any water body, wherein fishing is permitted, and hence located in the regional state may undertake fishing without license up to the amount of three k.g.s of catch per day to the satisfaction of his personal and household consumption; Provided, however, that the said amount shall not as of necessity include any huge fish which might have been captured by mere chance.

14. ዓሳን ለገበያ የማምረት ፈቃድ

ስለሚሰጥበት ሁኔታ፡

1. በክልሉ ውስጥ ከሚገኝና ዓሳ ከሚሰጥበት ክፍትኛውም የውሀ አካል ጋር ተዋሳኝነት ባለው በማናቸውም ቀበሌ ውስጥ መደበኛ ነዋሪ የሆነና ኑሮውን በዓሳ ማምረት ስራ ለመስማራት የሚፈልግ ማንኛውም ሰው በተናጠል ወይም በተደራጀ መንገድ ሲጠይቅ በዚህ ደንብ መሠረት ዓሳ ለገበያ የማምረት ፈቃድ በሚመለከተው አካል ሊሰጠው ይችላል።
2. በዚህ አንቀጽ ንዑስ አንቀጽ 1 ስር የተመለከተውን ፈቃድ የሚሰጠው አግባብ ያለው የውሃ አካል የሚገኝበት ወረዳ ግብርናና ገጠር ልማት ዋና ጽ/ቤት ሲሆን የፈቃድ መጠየቂያ፣ መስጫና የውል ግዴታ መግቢያ ቅጾች ከዚህ ደንብ ጋር አባሪ ሆነው እንዲሰራባቸው ተያይዞዋል።
3. በዚህ ደንብ መሠረት የተሰጠን ለገበያ ዓሳን የማምረት ፈቃድ ለሌላ ሰው አግልፎ መስጠት የተከለከለ ነው።
4. ዓሳን ለገበያ የማምረት ፈቃድ አግኝቶ የማምረት ሥራ የጀመረ ማንኛውም ሰው ስለተመረተው የዓሳ ምርት ዓይነትና መጠን በአቅራቢያው ለሚገኘው የወረዳ ግብርናና ገጠር ልማት ዋና ጽ/ቤት በአንድ ወር ጊዜ ውስጥ የማሳወቅ ኃላፊነት አለበት።

14. Conditions of Granting License to Harvest Fish for Marketing

1. Any person who happens to be a permanent resident in any kebele adjacent to any water body, wherein fishing is exercised and hence located in the regional state, and wishes to earn his livelihood by engaging in fish-harvesting activities may be granted a license in enabling him produce fish for marketing purposes by the pertinent body upon request for same, be it in a private or an organize manner, pursuant to this regulation.
2. The license specified under sub-Art.1 of this Article hereof shall be issued by the Agriculture and Rural Development main office of the woreda wherein the concerned water body is embraced and the forms regarding the request for and delivery of the said license as well as the entrance of contractual obligations are attached therewith to be part of this regulation for the purpose of implementation.
3. It is hereby prohibited to transfer to a third party a license to harvest fish for marketing granted as per this regulation hereof.
4. Any person having acquired a license to of harvest fish for marketing and so commenced the activity shall have the Agriculture duty to notify to the nearby woreda and Rural Development main office as to the amount and type of fish he has produced within a month's time.

15. ዓሣን ለመዝናኛ አላማ የማስገር ፈቃድ ስለመስጠት

1. በክልሉ ውስጥ በሚገኙና የዓሣ ማስገር በተፈቀደባቸው የውሃ አካላት ዓሣን ለመዝናኛ ዓላማ ማስገር የሚያስችል ፈቃድ በቢሮው ሊሰጥ ይችላል።
2. በዚህ ደንብ መሠረት ዓሣን ለመዝናኛ ዓላማ እንዲያስገር የተፈቀደለት ማንኛውም ሰው የዓሣ ማስገርን ተግባር ሊያከናውን የሚችለው በአጠቃላይ መንጠቆ በመጠቀም ብቻ ይሆናል።
3. ከማንኛውም የውሃ አካል ለመዝናኛ ዓላማ የሚሰገረው ዓሣ መጠን በቀን ከሶስት ኪሎ ግራም መብለጥ አይኖርበትም።
4. በዚህ ደንብ መሠረት ለመዝናኛ ዓላማ በተሰጠ ፈቃድ አማካኝነት የሚሰገርንና የሚያዝን ዓሣ ለገበያ ማዋል የተከተለክል ነው።
5. ለመዝናኛ ዓላማ የተሰጠን ዓሣ የማስገር ፈቃድ ለሶስተኛ ወገን አላልፎ መስጠት አይችልም።

16. ለምርምር ዓላማ ዓሣን ስለማስገር

1. የክልሉ ግብርና ምርምር ተቋም የትድሚያ ፅሑፍና ድጋፍ ያለው ማንኛውም ሰው በክልሉ ውስጥ ዓሣን ለሳይንሳዊ ምርምርና ጥናት ያስገር ዘንድ በዚህ ደንብ መሠረት ሊጠይቅና የማስገሪያ ፈቃድ ቢሮው ሊሰጠው ይችላል።
2. በዚህ አንቀጽ ንዑስ አንቀጽ 1 ስር የተጠየቀው ፈቃድ የተሰጠ እንደሆነ የምርምር መርሃግብሩ አስኪጠናቀቅ ድረስ ባለው ጊዜ ውስጥ ለዚህ

15. ISSUANCE OF Fishing License for Recreational Purposes.

1. There may be granted by the Bureau a license enabling one to carry out fishing for recreational purposes in those water bodies located throughout the regional state and hence officially open for such an activity.
2. Any person licensed to undertake fishing for recreational purposes pursuant to this regulation shall carry out same using only a single hook.
3. No amount of catch resulting from fishing for recreational purposes in any water body shall exceed 3kgs per day.
4. It is hereby prohibited to market the catch captured as the result of fishing for recreational purposes under license granted pursuant to this regulation.
5. It shall not be possible to transfer to a third party the license granted to carry out fishing for recreational purposes .

16. Fishing for Research Purposes

1. Any person having prior recognition and support of the Regional Agricultural Research Institute may, pursuant to this regulation, apply for a license enabling him to fish in the Regional State for the purpose of scientific research and study and thereby obtain same from the Bureau thereof.
2. Where the license requested under sub. Art.1 of this Article has been so granted, he shall have the duty to notify to the licensing

ዓላማ የሚያዘውን የዓሳ አይነትና መጠን በየጊዜው ለፈቃድ ሰጭው አካል ማግኘት ግዴታ አለበት።

3. በምርምር ወቅት የተያዘን ዓሳ ከተፈቀደለት አገልግሎት አልፎ ለገበያ ማቅረብ የተከለከለ ነው።

17. በዓሳ ግብርና ሥራ ስለመስማራት

1. በዓሳ ግብርና ስራ ለመሠማራት የሚፈልግ ማንኛውም ሰው በአዋጁ አንቀጽ 6 እና በዚህ ደንብ ድንጋጌዎች መሠረት ለሥራው ያዘጋጀውን የፕሮጀክት ሰነድ ከተገኘ የአካባቢ ተፅዕኖ ግምገማ ጥናት መግለጫ ጋር ለቢሮው በማቅረብ ፈቃድ መጠየቅ ይኖርበታል።

2. በክልሉ ውስጥ በሚገኙት ሀይቆች፣ ግድቦች፣ ወንዞችና ሌሎች የውሃ አካላት ላይ የኬጅ ካልቸር ለማካሄድ የሚፈልግ ሰው ሰራውን ማከናወን ያለበት ለዚህ ዓላማ በመረጠው የውሃ አካል ውስጥ የሚገኘውን የዓሳ ዝርያ በመጠቀም ብቻ ይሆናል።

3. በዚህ አንቀጽ ንዑስ አንቀጽ 2 ስር በተደነገገው መሠረት ለኬጅ ካልቸር አገልግሎት የሚውለው የዓሳ መኖር በነባር የዓሳ ዝርያዎች ላይ አሉታዊ ተፅዕኖ የማያስከትል ስለመሆኑ በቅድሚያ መረጋገጥ ይኖርበታል።

4. የዓሳ ግብርና ለማካሄድ በሚታሰብበት ጊዜ ያለ በቂ ጥናት በሌላ ክልል ወይም በባህር ማዶ ከሚገኝ የውሀ አካል ማናቸውንም አይነት የዓሳ ዝርያ በክልሉ ወደ ሚገኙት የውሀ አካላት

body as to the type and amount of the fish captured for this purpose from time to time up until the completion of the research program.

3. It is hereby prohibited to market fish captured during the research program, way beyond its authorized service.

17. Engagement in Fish-farming

1. Any person who wishes to engage himself in fish farming activities shall, by having submitted a project document he may have so prepared for the said Business along with a complete statement of environmental impact assesment study to the Bureau pursuant to the provisions of Art. 6 of the proclamation and this regulation hereof, apply for a work permit persae.

2. A person who desires to undertake cage-culture in lakes, dams, rivers and other water bodies in the Regional state shall carry out the activity only by using the fish species available in the water body he may have selected for the purpose thereof.

3. It shall beforehand be ascertained that the fish fodder employed for the purpose of the cage- culture as provided for under sub-Art.2 of this Article hereof, does not cause adverse harm to the indigenous or native fish species.

4. Whenever it is proposed to undertake fish farming, it is prohibited to import any type of fish species from a water body of another region or overseas and spread same into any

ማስገባትና ማሠራጨት የተከለከለ ነው።

water of the regional state without an adequate study having been conducted thereof.

ክፍል አምስት

PART FIVE

ልዩ ልዩ ድንጋጌዎች

MISCELLANEOUS PROVISIONS

18. ተፈጻሚነት ስለማይኖራቸው ሀገሮች

18. Inapplicable Laws

ይህንን ደንብ የሚቃረን ማናቸውም ሌላ ደንብ፣ መመሪያ ወይም የተለመደ አሰራር በዚህ ደንብ ውስጥ በተመለከተ ጉዳዮች ላይ ተፈጻሚነት አይኖረውም።

Any other regulation, directive or customary practice coming into conflict with this regulation may not apply to matters provided for therein.

19. መመሪያ የማውጣት ስልጣን

19. Power to Issue Directives

ቢሮው ለደንቡ ሙሉ ተፈጻሚነት የሚያስፈልጉትን መመሪያዎች ሊያውጣ ይችላል።

The Bureau may issue directives necessary for the full implementation of the Regulation

20. ደንቡ የሚፀናበት ጊዜ

20. Effective Date

ይህ ደንብ በክልሉ መንግሥት ገዢ ሀገ. ጋዜጣ ታትሞ ከወጣበት ቀን ጀምሮ የፀና ይሆናል።

This regulation shall come into force as of the date of its publication in the Zikre-hi Gazette of the Regional State

ባህር ዳር

Done at Bahir Dar,

ሚያዝያ 12 ቀን 1999 ዓ.ም

This 20th day of Arpil,2007

አያሌው ጎበዜ

Ayalew Gobze

የአማራ ብሔራዊ ክልል

Head of Government of the

ርዕሰ መስተዳድር

Amhara National Regional State

NABU, The Nature and Biodiversity Conservation Union, has promoted the interests of people and nature for more than 100 years drawing on its unwavering commitment, specialised expertise and the backing of its 600,000 members and supporters. The NGO is the largest of its kind in Germany.

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