carried outside the small bays less than 3 Km diameter and at least 1.5 Km away from the shoreline. This will also solve the conflict withTilapia fishery that occurs within one-kilometer belt off the shoreline.

2. Control mesh size, fishing gear and methods

The most popular mesh size of nets in use on Lake Victoria is 5 mm stretched. When this net is operated away from the nursery grounds mentioned above, it captures mainly mature mukene. Nets of meshes smaller than 5 mm capture mainly immature mukene and by-catch and should be discouraged. Likewise fishing for mukene using beach seines (nets pulled from the shore) should be prohibited as these are operated in nursery grounds. Boat (Lampara) seine nets can be operated away from the shoreline and thus are most appropriate for mukene fishing



3. Fishing seasons:

Mukene breeds through out the year but show two breeding peaks in August and December to January. Mukene produced during these breeding peaks appear in commercial catches as immature fishes in November/ December and April/ May. These periods could qualify as closed to mukene fishing. However, fishing away from the shore avoids capture of these immature fishes.

Benefits from the solution suggested above:

Catching mature fish allows stocks replenish themselves. These fishes will have bred and left offspring for the future. Mukene caught in the open waters far way from the shore are larger than those inshore. They are easier to dry and therefore fetch better prices to the fishers. By avoiding by-catch, the Nile perch and Tilapia are allowed to grow and support the export market which depends on the Nile perch.

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SUSTAINABLE EXPLOITATION OF MUKENE ON LAKE VICTORIA



NARO

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Introduction:

Mukene is found in Lakes Victoria, Kyoga and Nabugabo and in the Victoria Nile. It is among the three most important commercial fish species in Lakes Victoria and Kyoga. The fish is a cheap source of fish proteins for both humans and domestic animals. In the lakes, the species is important as food to the Nile perch, the most important export fish in the country.



The fishery:

Mukene is fished by light attraction. Compared to gillnetting, light fishing is relatively new in Uganda. Kerosene pressure lamps are floated on water attracting fishes to light. Mukene thus attracted, is fished out using scoop-nets and nets pulled from the shores (beach seines) and from canoes(lampara nets).

Mukene, being a small fish (grows to an average standard length of 48mm), the nets used in fishing are of meshes 3, 5 and10 mm stretched.

Problems to the fishery:

1). Fishing grounds

Because of the specialized nature of mukene fishing (light fishing) favorable weather conditions are necessary. Safe fishing grounds consisting of shallow sheltered bays and near-shore waters attracts large numbers of fishing boats These shallow inshore waters and small bays are nursery grounds for immature mukene, Nile perch and Tilapia. The high exploitation rates when added to predation by the Nile perch results in localized mukene over-fishing. In such areas, the fish is harvested before maturity.

2). Fishing gears and methods

Initially mukene was fished by beach seines constructed out of 10 mm mesh nets. A more efficient lampara net was later introduced but the mesh size was reduced to 5mm and in some cases to 3mm. Nets of small meshes capture mainly immature fishes.

3). By- Catch:

Fishing for Mukene also captures immature Nile perch and Tilapia as by-catch.

Light used in the fishery attracts water insects. Young Nile perch and tilapias are in turn attracted to the plentiful supply of the insect food around the lamps. These fishes are therefore caught as by-catch during fishing for mukene. The mesh size of nets used to fish Mukene can catch immature Nile perch and Tilapia. This will affect stocks of fish and will harm the fishery of these two important export fish species.



Solutions and recommendations:

For a regular supply of mukene from Lake Victoria, management measures should be aimed at avoiding capture of immature mukene and other fish species that commonly appear as by-catch of the mukene fishing. This can be achieved through:

1. Control of fishing grounds:

To avoid capture of immature mukene and by-catch species fishing should be