

The LNGG Bi-monthly

Newsletter of the Lake Naivasha Growers' Group

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LNGG Notice board

- * LNGG is carrying out a non members survey with the aim of understanding issues that affect growers who are non members of the association
- * The LNGG newsletter will now be published bimonthly
- * You can contact us on our new email address: office@lngg.org

Message from the new Executive Officer

It is with Great humility that I undertake to serve the Lake Naivasha Growers Group as the Executive Officer. Am honored to bear this responsibility while well aware of the enormous challenges that come with the position. I am confident that my training in Natural Resources Management and Project Management has prepared me for this role.

My agenda is to continue with the good work the out going Executive Officer, Dr. Sunita Sarkar, had started and make LNGG a professional organization, respected for its commitment to environmental care for the benefit of all.

Improving the membership of the association by bringing in more growers and non-growers will be a task that I will undertake. This will be aided by the ongoing non-members survey that is aimed at understanding issues that affect the non members as well as to see the



Joseph Kariuki— Executive Officer

LNGG from the perspective of the non members.

I will continue publishing the LNGG newsletter and cover topical issues relevant to the industry. Ensuring a wider circulation of the newsletter is important in tandem with the interests of the Association.

Publicity of the Association's activity and participation in Community welfare projects will be enhanced through labeling of our activities such as donations and documentation through photography. Development of a slogan to accompany the LNGG logo is a priority in my diary. This

will improve the stakeholders' understanding of what we stand for.

Relationship with Government agencies and partners such as WWF and Care Kenya are important for our operations. These relationships will be fostered and relationship with other potential partners explored.

The development of an educational program for our members will be fast tracked especially on wetland management, occupational health and safety and good agricultural practices.

Finally, I will continue representing members in forums at the District and National levels. I am confident that the tasks ahead will be accomplished and look forward to your invaluable support.

JOSEPH KARIUKI

Fish deaths- an update

In the month of February, there were significant fish deaths in Lake Naivasha for a period of three days. In reference to this, several media reports and politicians seemed to point fingers at flower/horticultural farms around the lake suggesting pollution. As you are aware the research is ongoing lead by Kenya Marine Research Institute (KEMFRI) and NEMA. The Chief Executive Officer of Fresh Produce Exporters Association of Kenya (FPEAK), Dr. Stephen Mbithi explains how such Deaths occur.

Fish kills, an ecological term referring to sudden fish deaths

happens regularly around the world in lakes and in seas. one of he main kills happened in December 2009 in Corpus Cristi Bay, Texas. The most common type of fish kills in lakes is caused by depletion of oxygen in the water which must be at certain minimum concentration for fish to survive. Symptoms of an oxygen depletion fish kill include fish swimming near the surface attempting to gulp air; large fish die first followed by smaller fish, deaths occur during the night or early morning, majority of fish die within a few hours time, the water in the pond or lake will be brown, gray or Black.

Oxygen depletion fish kills are mostly caused by die-off of microscopic plants (phytoplanktons) in the water or overturns in which water with low oxygen levels from the deeper levels of the pond mixes with water in the upper column. Phytoplanktons are an essential part of the food chain and supply oxygen in the water. A sudden die-off of these plants can occur especially during periods of overcast weather when the plants use more oxygen than they supply in the pond. As the phytoplanktons die and decompose the remaining oxygen in the pond is consumed and within a short time a fish kill occurs due to oxygen depletion.

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Alternative Energy and waste management

The LNGG held an evening social event on February 16, 2010. This was a session where members interacted in a relaxed and informal way and shared information. Two invited speakers made presentations on waste management and on the use of geothermal by products.

Ms. Martha Mburu of Geothermal Development Company (GDC) informed participants of the opportunities in exploiting geothermal not only for electricity generation but also other commercial uses. Some of the uses discussed are greenhouse heating (pictured right), Drying of agricultural produce, domestic water supply, soil fumigation and sterilization of fertilizing water on farms. GDC has been mandated by the government to develop the use of geothermal in the country and can work with growers to address their energy needs.

Mr. Nganga of Bremer Limited made a presentation on the use of incinerators to manage waste pesticides and their containers. His company is in the waste management business and has developed incinerators suitable for incineration of medical, industrial and chemical wastes. Such technologies are relevant to the industry and the Municipality in managing energy and waste management needs. Further information is available at the LNGG secretariat.



NAWACOMP - Environmental management through improved livelihoods

The Naivasha Watershed Conservation and Management Project (NAWACOMP), housed by LNRA, has been working quietly with the people in Eburru to improve watershed management as well as livelihoods. Here the Project Manager, Absolom Mukuusi outlines their goals, achievements, and challenges.

NAWACOMP is a 3-year project (2007-2010) being implemented in the Naivasha District. The focal area is the Eburru-Mau complex, though the project is also expanding to the middle-catchment of Bahati-Kinangop-Sitima, which has direct hydrological links to the Lake.

Over the last 3 years, the project has implemented most of the activities it had first envisioned, in spite of a number of drawbacks in particular the post-election crisis and the prolonged drought, but also the lack of land tenure for many of the community members and multiple forest fires that impede regeneration of forest cover.

None the less, the achievements of the project have been numerous:

- ☐ 57 ha Eburru forest have been restored
- ☐ Over 17 community owned tree nurseries that have supported the restoration project, have been established and supported through the project.
- ☐ The Eburru Community Forest Association (ECOFA) is the only

community forest association (CFA) in Kenya to have developed a management plan and management agreement with the Kenya Forestry Services (KFS). This was achieved through awareness training and capacity building of this community through project funds.

- ☐ The project has supported KFS through the purchase of equipment that will increase their capacity to monitor and manage the forest ecosystem.
- ☐ NAWACOMP has worked closely with WRMA, assisting them to put together 5 functioning WRUAs in the Elmentaita-Nakuru areas.
- ☐ Ten 10, 000 liter water storage tanks have been purchased for distribution to schools where rain-water harvesting projects have been implemented.
- ☐ Various alternative economic activities have been established to entice communities to reduce their negative impact on the environment. These activities include bee keeping where 240 modern langstroth hives, harvesting gear and centrifuges have been provided to community groups; establishment of a community-owned ecotourism facility at the view point over Lake Elmentaita; establishment of 3 community dairy-goat enterprises; 2 permanent fish ponds with a capacity of over 1000 fish have been built at Gatamaiyu; development of a pilot strawberry project with the Maji Moto group in Elmentaita; and lastly advocacy for and

training of youth groups around Naivasha Municipality on garbage collection and management, and development of closer working relations with the Municipal Council of Naivasha.

The expected outcomes were to increase woody biomass in the target areas, which in turn would increase water infiltration rather than runoff, and improved water quality through reductions in sediment load; improved livelihoods through diversified incomes; improved soil fertility and sustainable land use; and increased skills, environmental stewardship and management. We believe much of this has been achieved, however, due to the vastness of the project area (80% of the district), limited resources and lack of reliable transportation the evaluation of impacts of these projects has been hindered.

Our current request is for partners on a fish farming initiative in the middle catchment area. The Ministry of livestock and fisheries, Department of fisheries has already committed to providing technical support and initial stocking. What we need now are partners to help in procurement of PVC liners.

If you would like to become a partner, or require more information please contact:

Absolom - 0720 09 69 43
nawacomp@jambo.co.ke

PES, lessons from Tanzania

In the August 2009 issue of the LNGG newsletter (volume 1 issue 2), we carried an article on the Payment for Ecosystem Services (PES). This is an innovative, incentive based conservation approach which involves environmental service sellers (upper catchment farmers) and buyers (large scale water users in the lower catchment). Farmers in the upper catchment undertake soil and water conservation measures that reduce erosion on farms, thus

clean water flows in the rivers. The water users in the lower Catchment provide an incentive to the farmers for the environmental service rendered. The project is being implemented by Care Kenya/WWF in the Lake Naivasha basin.



Conservation structures on a farm under the PES project in Uruguru. Photo by WWF

Care Tanzania is implementing a similar project in the Uruguru Mountains. This is the catchment of the Ruvu river which supplies water to Dar-es-salaam, Tanzania's economic hub.

A team from Naivasha composed of farmers in the upper catchment, WWF, Care Kenya, LANAWRUA and LNGG recently visited the Tanzanian project to share experiences and learn lessons. The two projects are at the same level of implementation and are similar in the intervention mechanism.

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Fish... *Continued from page 2*

The water color also becomes brown or red, the so called red or brown blooms.

Blooms occur where there are high nutrient levels and warm sunny conditions. Human activities can accelerate occurrence of algal blooms. In rural areas, agricultural runoff from fields can wash fertilizers into the water. In urban setups, nutrient sources include treated wastewaters from septic systems, sewage treatment plants and urban storm waters as happened in Naivasha in the recent past.

A significant fish kill occurred in Naivasha after el-Niño rains in 1997 as a result of enriched soil brought in by runoff water.

Pesticides also cause fish kills, for example in Alabama where it occurs annually. Convulsive swimming and lethargy are symptomatic of pesticide toxicity. If an organophosphate insecticide is the cause, the pectoral fins of a poisoned fish curl and point towards the head. The smaller fish die first and eventually all sizes of fish may die. This is quite the opposite of what happened in Naivasha. It is unlikely that

pesticides were the cause. It would take several hundreds of drums of very toxic pesticide to increase the concentration of the pesticide in the lake to high levels in a wide area to cause the level of fish deaths that occurred.

We hope the facts mentioned above will clarify discussions on the subject now and in future eventualities

The final Government report on the fish deaths confirms the scientific facts discussed by Dr. Mbithi. Fish did not die of poisoning but from oxygen depletion.

From the secretariat

World Water Day Celebrations

The World Water Day is celebrated on 22nd day of March each year. This year's celebrations are focused on water quality. Naivasha District will be celebrating at Kihoto grounds with the theme "Communicating Water Qualities, Challenges and Opportunities. The promoting slogan is "Maji Safi Masha Bora". Activities of the day will include a procession to be flagged off at the DC's office, tree planting at the municipal sewerage treatment plant, speeches and presentations by various environmental groups. All are welcome to celebrate and communicate the challenges and opportunities of water quality.

Roads

LNGG and the Kenya Flower Council have appealed to the Ministry of Roads to reclassify the Moi South and Moi North Lake roads from class D to ensure the roads get budgetary allocation from the central government and are rehabilitated. In the shortfall, the LNGG and supporting farms are working towards rehabilitating the Moi south Lake road which is in need of urgent repairs. This is one of the most important roads in the Kenyan economy. We are mobilizing all users of the road to participate in this project which is estimated to cost KES 5 million. Farms can make contributions to the project at a rate of KES 0.75 per m² of cultivated area. Other users such as Hotels, Kengen and Agrochemical suppliers are also welcome to participate. All contributions will be acknowledged in the LNGG news letter and on a bill board to be elected on the road. For more information contact the LNGG secretariat.

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PES: The Tanzanian experience

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In Kenya, the focus is soil conservation through establishment of grass stripes along contour lines and river bank protection. The grass is also used as fodder for livestock. In Tanzania the focus is also soil conservation through establishment of terraces. Unlike in Kenya where the grass strips will provide fodder, the community in the Uruguru mountains does not keep livestock thus grass stripes are of no economic value to them. Both projects are promoting agro-forestry.

Comparing the levels of degradation, the Naivasha Basin is highly degraded and has a

higher population than Uruguru. The land use in Kenya is more intensive thus more degradation. In the Uruguru basin the population is still low. The rivers streams and springs are largely clean. The vegetation cover is intact though cultivation is evident on steep slopes. The Uruguru project is largely a proactive measure to halt further degradation of the environment. This is contrary to the Naivasha basin project which is a reaction to an already dire situation.

The restoration of the heavily degraded upper catchment of river Malewa is a great task that needs the

input of not only the sellers and buyers of the ecosystem service. The Ministry of Environment and other stakeholders should support the project for the benefit of all. Early warning systems should be designed to aid in proactively addressing environmental issues as opposed to reacting to the problems.

All said and done, the Care Kenya/ WWF supported PES project is a sure way of ensuring environmental care despite the enormous task given that the Naivasha basin is highly degraded.

With input from Johnstone Mulary – WWF Naivasha

The Planning Act - *What you need to know*

In June 2005, the Municipal Council of Naivasha (MCN) gazetted a new charge of KES 2 per m² for the approval of building plans. This is a one-off charge for all developments to conform to the requirements of the Physical Planning Act 1996. Clause 30 of the Physical Planning Act 1996 states:

(1) No person shall carry out any development within the area of a local authority without a development permission granted by the local authority under Section 33.

(2) Any person who contravenes subsection (1) shall be guilty of an offence and shall be liable to a fine not exceeding one hundred thousand shillings or to an imprisonment not exceeding five years or to both.

The LNGG negotiated to help its members in complying with the Act, as most of the developments were done before the gazette notice came into effect (2005). After lengthy negotiations, the following terms were agreed between LNGG and MCN;

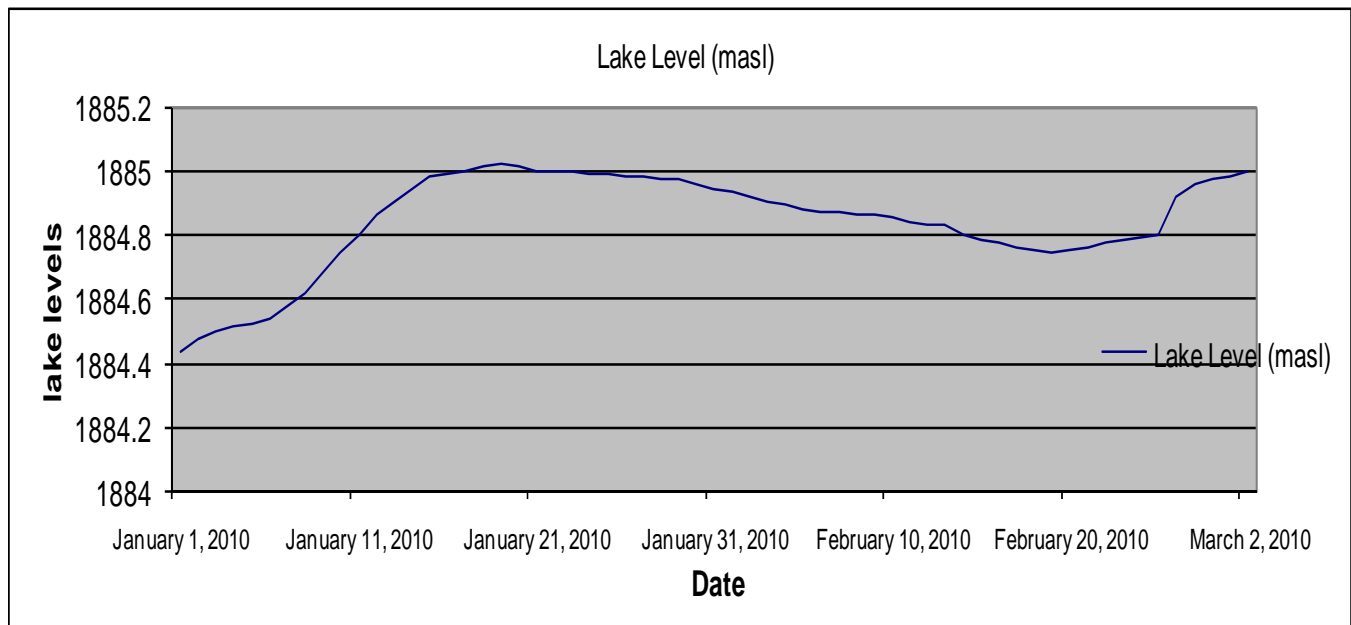
- ▣ Each farm to prepare a plan showing all developments. This should differentiate between greenhouses erected pre-2005 and post 2005. It will also show all other buildings.
- ▣ For the pre-2005 greenhouses a fee of KES 1 per m² will be levied while for the post-2005 greenhouses a fee of KES 2 per m² will be levied as a one-off approval fee.
- ▣ For all other structures a fee of KES 2 per m² will be levied irrespective of when the building was constructed.

LNGG has received the information from 18 farms. The information will be handed to the MCN for them to come up with invoices that will be used by LNGG to collect the fees due.

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LAKE LEVELS

The lake levels are coming up again thanks to the rains. We are at 1885.01 meters and rising!



Lake Naivasha
Growers' Group

WE'RE ON THE WEB:
WWW.LNGG.ORG

PO Box 1356-20117, Naivasha
Phone: 020- 3510604
Mobile: 0722 272721
Email: lngg@africaonline.co.ke