

# INVITATION

## Training Course On Solar Powered Hatchery Operation

### Course content

- Introductory presentations
- Guided tour to Bunda Campus aquaculture and fisheries department and farm operation
- Introduction into the solar power facility
- Broodfish management at the farm and present production methods for fingerlings
- Quality of feed for juveniles and adults
- Hatchery operation: explaining the technology, hands-on training, including maintenance, monitoring water parameter, feed and feeding technology

### Who should attend

- Advanced fish farmer, those who are interested specifically in propagation of fish
- Instructors in aquaculture ("train the trainers")
- Advanced students in aquaculture

### Details

- No course fee
- Max. 25 participants
- Accommodation and subsistence provided from the "Ich liebe Fisch" project
- Free course material

### How to register

- Registration opens now, please send an e-mail to Prof. Daud Kassam ([dkassam@luanar.ac.mw](mailto:dkassam@luanar.ac.mw)), providing a short statement of your background and your motivation to participate and a contact. Deadline 6<sup>th</sup> of March, 2019

#### When?

12 - 14th of March 2019

#### Where?

Bunda Campus  
aquaculture and  
fisheries department  
farm, LUANAR

Organized from the "Ich  
liebe Fisch" project





# Training Course on solar powered fish hatchery operation

Organized by the "Ich liebe Fisch"-Project

**BUNDA FISH FARM, LUANAR, BUNDA**  
**12<sup>th</sup> -14<sup>TH</sup> MARCH 2019**

## Logistics Program

Date	Activity	Responsible Person
8.03.19	Confirming accommodation at APATU	Apatsa
11.03.19	Welcoming Farmers at APATU and making sure all are accommodated	Apatsa & Hassib

## Registration Program

Date	Venue	Responsible Person
22 <sup>nd</sup> September 2018	AOF Conference room	Apatsa & Hassib

**DAY 1: TUESDAY – 12<sup>TH</sup> MARCH, 2019**

**07:00 – 08:00: Arrival of participants**

**OPENING PROGRAM- Aquaculture Conference Room**

	<b>Activity</b>	<b>Responsible Persons</b>
<b>08:00</b>	<b>Registration desk opens</b>	Apatsa Chelewani, Hassib Sainan
<b>09:00-09:10</b>	<b>Official Opening of the Training</b>	HoD, AQF
<b>09:15-09:30</b>	<b>Introduction into scope of the workshop, agenda, time frame, housekeeping issues etc</b>	Dr. B. Ueberschär (Association for Marine Aquaculture, Germany)  Professor Kassam (LUANAR)
<b>09:35-09:45</b>	<b>Introduction into the "Ich liebe Fisch Project", Scope and goals</b>	Dr. S. Rakers (Fraunhofer EMB, Germany)
<b>09:55-10:10</b>	<b>Address on regional aquaculture outlook and programs by World Fish</b>	Silke Uhlenbrock (World Fish Zambia)
<b>10:15-10:30</b>	<b>Group Photo</b>	
<b>10:35-10:50</b>	<b>Health Break</b>	
<b>10:55-11:10</b>	<b>Introduction to Bunda College's aquaculture and fisheries department and farm operation</b>	Mofolo Sifo (LUANAR)
<b>11:15-11:35</b>	<b>Introduction into solar powered hatchery operation, including the McDonald Unit</b>	Dr. B. Ueberschär
<b>11:40-11:55</b>	<b>Aquaponics: basics on the production of fish and plants in barrels</b>	Peace Mnelemba (LUANAR)
<b>12:00- 13:00</b>	<b>Lunch</b>	
<b>13:30-16:00</b>	<b>Farm, Hatchery, Solar, Aquaponics Short guided tour through the Bunda Farm facilities with all participants, including the hatchery and solar power plant</b>	Mofolo Sifo, Dr. B. Ueberschär Hassib Sainan (LUANAR)
<b>END OF 1<sup>ST</sup> DAY SESSION</b>		

**DAY 2: Wednesday – 13<sup>TH</sup> MARCH, 2019****07:00 – 08:30: Arrival of participants****BUNDA FISH FARM**

	<b>Activity</b>	<b>Responsible Persons</b>
09:00-9:20 09:20-9:35	<b>Broodfish management at the farm and present production methods for fingerlings- Maldeco and Bunda Case Studies</b>	Tawa (MALDECO Aquaculture) Benson Lusangasi (LUANAR)
09:40-09:55 09:55-10:10	<b>Quality of feed for a. larvae b. juveniles and adults</b>	a. Dr. B. Ueberschär b. Lucky Penemulungu (IFFNT)
10:15-10:30	<b>HEALTH BREAK</b>	
10:35-10:55	<b>All-male production – principles and practical approaches</b>	Apatsa Chelewani Elysee Nzohabonayo (LUANAR)
11:00-11:20	<b>Cryopreservation as a tool to improve performance of reproduction</b>	Dr. S. Rakers
12:00-13:00	<b>LUNCH</b>	
13:30-15:00	<b>Catching broodfish, sex determination, egg retrieval, stage determination, incubation into McDonald.</b>	B. Lusangasi core team of the training course
15:00-16:00	<b>Taking larval samples, general inspection (binocular), measuring size and weight</b>	Dr. B. Ueberschär, Benson Lusangasi and Hassib Sainan
<b>END OF 2<sup>nd</sup> DAY SESSION</b>		

**DAY 3: THURSDAY – 14<sup>TH</sup> MARCH, 2019****07:00 – 08:30: Arrival of participants****BUNDA FISH FARM**

	<b>Activity</b>	<b>Responsible Persons</b>
<b>09:00-10:30</b>	<b>Hatchery operation: explaining the technology, hands-on training, including cleaning, measurement of water parameter, water exchange, feeding and feeding technology</b>	Dr. B. Ueberschär, Benson Lusangasi, Hassib Sainan, Mofolo Sifo
<b>10:15-10:30</b>	<b>HEALTH BREAK</b>	
<b>10:35-12:00</b>	<b>Continuing with Hatchery operation: explaining the technology, hands-on training, including cleaning, measurement of water parameter, water exchange, feeding and feeding technology</b>	Dr. B. Ueberschär, Benson Lusangasi, Hassib Sainan, Mofolo Sifo
<b>12:00-13:00</b>	<b>LUNCH</b>	
<b>13:30-14:30</b>	<b>Q&amp;A session, sharing experiences and Soliciting Views from participants on the training in general (including filling out questionnaires)</b>	Denis Chinkhata (IFFNT) and Core team of the workshop
<b>14:30-16:00</b>	<b>Awarding Certificates, Final Closing Remarks by Participants</b>	Core team of the workshop
<b>END OF TRAINING</b>		