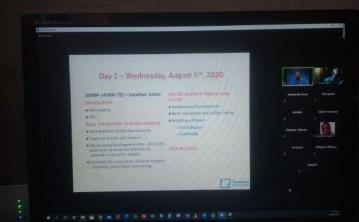




## **Online Drone Flight Training**





Yussuf illustrates the different flight height with respect to the coverage of an area

Leka introduces the Day 1 program

OVERVIEW	
Flying Labs	Tanzania Flying Labs
Location	Tanzania
Date	5 - 9 August 2020
Length (number of days)	5
Sector program (optional)	AidRobotics, EcoRobotics, DevRobotics
Format	Both (online and in-person)
SDGs	GOAL 2: Zero Hunger GOAL 11: Sustainable Cities and Communities

SCOPE & OUTCOMES	
Type of training	<ol> <li>Introduction training to mapping drones</li> <li>Sector-specific training of professionals (for World Vision Zimbabwe)</li> </ol>
Goal of the training	Create drone awareness





	<ol> <li>Develop drone data acquisition skills</li> <li>Develop drone data processing skills</li> <li>Test the possibility and modality of conducting Drone Flight Training ONLINE</li> </ol>
Expected outcome for participants	<ul> <li>The participants had different level of understanding to drones, some expectations were:</li> <li>At the end of this training, all participants should have a clear understanding of the term Drone, and in what applications it can be integrated.</li> <li>Understanding how to operate a drone, manual and automatic flights, planning and executing a mission.</li> <li>Process the collected data through Pix4Dfields.</li> <li>Get an example of how the products can be used and integrated with other tools</li> </ul>
Confirmed outcome after training	All mentioned outcomes were confirmed by the participants verbally and through the daily quizzes which were provided at the end of each day of the training.
Lessons learned	<ul> <li>Stable and reliable broadband Internet access is a MUST</li> <li>4 hours/day is about right for an online course</li> <li>Learn multiple Zoom screen sharing features</li> <li>Acquire free software licenses BEFORE the course starts</li> <li>A facilitator needs to find multiple ways for participants to interact so as to maintain the focus on the topic.</li> <li>Showing the steps during the practical hands-on is the best way, although it can be a good idea for the steps to be provided prior in pdf format, so that participants can follow, and the facilitator can still continue maintaining the people to be nearly on the same lines. The facilitator can also use initial time to show and let participants follow the steps provided and respond when needed.</li> <li>Giving participants a small quiz at the end of each day was a perfect idea, since it aims just to make sure participants absorbed the right understanding, and this needs to be done even on in-person training we are providing.</li> <li>We need to test how we can do practical sessions to those who own a drone, this may also require a better</li> </ul>





	<ul> <li>internet connection, and train/show the fail safe as a contingency plan incase of any emergency.</li> <li>When training an organisation staff, it is better to advise their full participation, and escape their duties for a few planned hours so that we maintain equal participation in the class.</li> </ul>
Eventual next steps	Tanzanian participants had an opportunity to have hands-on training. And now we are planning to full-fill the same to the Zimbabwe participants, if not in-person, we will try an online hands-on training.

PARTICIPANTS	
Profiles and number of participants	<ol> <li>Eight (8) Staff from Organizations         (non-profit/for-profit/research institutes, etc.)</li> <li>One (1) Staff from Government (ministries, government service, etc.)</li> <li>One (1) High School graduate</li> </ol>
Name of participants' organizations	<ul> <li>Tanzania Civil Aviation Authority (TCAA-Control Tower personnel (ONLINE/IN-PERSON)</li> <li>World Vision Zimbabwe (ONLINE)</li> <li>High School graduate (ONLINE/IN-PERSON)</li> </ul>
Gender ratio	9% for Female and 91% for Male
Who paid for the training?	<ul> <li>Student paid for himself</li> <li>World Vision Zimbabwe paid for their staff members</li> <li>The TCAA received one scholarship from TFL</li> </ul>
Participant fee rate (if applicable)	<ul><li>\$199 for in-person participants</li><li>\$99 for online participants</li></ul>
Scholarships offered?	YES

CONTENT	
Training components	<ul> <li>Three (3) days for Four (4) hours each on Theoretical components and hands on on Data usage.</li> <li>Two (2) days for Two (2) hours of Flying Practical components</li> </ul>





Training resources used	<ul> <li>Theoretical training content, computer and smartphone, Drone Deploy (both in smart device and web platform), Pix4Dfields, Picterra platform</li> </ul>
Approaches and methods used	<ul> <li>The first part of the training was in class, and the second part took place online via Zoom room. So we tried our best to make sure all participants were focused during the class. We made them participate in discussion, questions and finally asked them to participate in a quiz to confirm that correct information has been absorbed.</li> </ul>