Professional training for NILALEG Project executing team

Figure 1: Theory training in session

Figure 2: Multi-rotor drone operation

Figure 3: Post-flight check excercise

Figure 4: DeltaQuad fixed-wing drone assembly

OVERVIEW	
Flying Labs	Flying Labs Namibia
Location	Windhoek, Namibia
Date	Monday, 18 October 2021 - Friday, 22 October2021
Length (number of days)	Five (5)
Sector program (optional)	EcoRobotics, DevRobotics
Format	In-Person
Co-organizer if applicable	University of Namibia (UNAM)
SDGs	GOAL 4: Quality Education GOAL 8: Decent Work and Economic Growth GOAL 9: Industry, Innovation and Infrastructure

SCOPE & OUTCOMES	
Type of training	1. Introduction training to drones 2. Technical training of professionals 3. Sector-specific training of professionals
Goal of the training	1. Create drone awareness 2. Develop drone data acquisition skills 3. Develop drone data analysis skills
Expected outcome for participants	1. Applications and use cases of drones in project context 2. Availability of credible local drone and data experts 3. Clearing up of drone stigma and pertinent misgivings 4. Data collection, processing and analysis 5. Knowledge of the Safety Management System 6. Mission planning, validation and execution 7. Understanding RPA rules and regulations
Confirmed outcome after training	The remotely piloted aircraft knowledge, safe and legal drone operation, as well as data processing skillset and competencies developed during the training will accelerate the implementation of the Namibia Integrated Landscape Approach for Enhancing Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG). The project seeks to promote an integrated landscape management approach in key agricultural and forest landscapes, reducing poverty through sustainable nature-based livelihoods, protecting and restoring forests as carbon sinks, and promoting land degradation neutrality.
Eventual next steps	1. Additional fixed-wing operation demo session 2. Introduction of drone curriculum at UNAM 3. Joint Flight Operations Manual preparation 4. Pilot project for implementation
PARTICIPANTS	
Profiles and number of participants	1. Staff from Government (2) 2. Professionals (6) 3. Project M & E (1)
Name of participants' organizations	1. Ministry of Environment, Forestry and Tourism (MEFT) 2. NAHIKAV Investment (NILALEG Project Management Unit) 3. University of Namibia (UNAM)

Gender ratio	3 female (33%) and 6 male (67%) - **Female : Male = 1 : 2**
Who paid for the training?	1. Flying Labs Namibia 2. NAHIKAV Investment 3. University of Namibia
Participant fee rate (if applicable)	N$ 14,900.00
Scholarships offered?	Partial scholarship
CONTENT	
Training components	1. Theory 2. Practical 3. Simulation
Training resources used	**Hardware** 1. Data projector 2. DeltaQuad Pro #MAP 3. DJI Mavic 2 Pro 4. DJI Tello 5. Laptop computers 6. Sound system **Resources** 1. Flip chart 2. Quiz material 3. Training manuals 4. Whiteboard markers **Software** 1. DeltaQuad Mission Validator 2. DroneDeploy 3. Google Earth Pro 4. MS PowerPoint 5. Pix4Dmapper 6. QGround Control 7. VLC **Visual Aids** 1. Banners 2. Flyers
Approaches and methods used	● Complemented the standard introduction to drones training, with fixed-wing drone operation content ● Participants got to plan and execute flight missions

	● Quiz to assess retention capacity of taught concepts ● Theoretical knowledge was put into practice through: ➢ Drone assembly and payload switching ➢ Filling out pre-, during- and post-flight checklists ➢ Safe and controlled drone operation ➢ Weather prediction