COMMUNICATION FOR DEVELOPMENT (C4D)
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in strength we grow

Stakeholder Awareness and Perception Assessment as a Prerequisite in Designing Informed Community-based Communication Strategies for Remotely Piloted Aircrafts (RPA) Flight Tests

Focus Groups Findings from Lilongwe and Dowa Districts

Charles Matemba
VillageReach

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Introduction and Background

- Drones are an emerging innovation, widely used for commercial and recreation purposes
  - ✓ RPA = Remote Piloted Aircraft
  - ✓ UAV = Unmanned Aerial Vehicle
- Drones for health, including transport of medical products, are being considered in some countries for integration into traditional delivery systems
- Flight tests – Research exploring feasibility of drone use for health commodities is ongoing in Malawi and globally

Charles Matemba (presenter) observing a drone during flight tests in Dowa, April 2018;
PHOTO CREDIT: Luciana Maxim for VillageReach

Remote Piloted Aircrafts (RPAs) in Malawi

- Malawi has:
  - ✓ Africa's only drone testing corridor in Kasungu
  - ✓ a highly supportive RPA regulatory framework
  - ✓ conducted several RPA studies
- Grand Challenges Canada (GCC) is funding a study on the potential use of RPAs to transport blood and oxytocin for maternal health emergencies
  - ✓ Study led by Ministry of Health with MBTS, Pharmacy, Medicines and Poisons Board, VillageReach and Vayu (an RPA company)
- Stakeholder Awareness and Perception Assessment conducted to inform community sensitization strategy in Dowa and Lilongwe districts
  - ✓ Important to understand perceptions on safety, privacy, benefits, socio-cultural sensitivities

Captain Hastings Jailosi (Chief Flight Operations Inspector for Malawi Department of Civil Aviation) conducts community sensitizations in Dowa and Lilongwe districts, April 2018; PHOTO CREDIT: Charles Matemba for VillageReach

Stakeholder Assessment – Methods

National FGD conducted during the first RPA Steering Committee meeting in Lilongwe, February 2018; PHOTO CREDIT: Anna Shaw for VillageReach

- Focus Group Discussions (FGD) with key stakeholders at national, district and community levels - February 2018
  - ✓ NHSRC provided ethics approval
- Focused on knowledge/awareness of RPAs and perceptions on:
  - ✓ RPA use in general
  - ✓ RPA use to transport medicines and other medical supplies
  - ✓ RPA use to transport blood for transfusions in emergencies (as a social-culturally sensitive product)

Stakeholder Assessment – By Type and Location

- 10 FGDs = 130 stakeholders
  - ✓ 1 national level - Government, public, private and multilateral stakeholders
  - ✓ 3 district/council level - Lilongwe City Council, Lilongwe District, Dowa District
  - ✓ 2 health facility level - Area 25 Health Center and Dowa District Hospital
  - ~ 2 community level - Community leaders around Area 25 and Dowa DHO
  - ~ 2 special interest - Women from the communities in Area 25 and Dowa

Dowa women FGD - rural setting (top); Area 25 health worker FGD - urban setting (bottom); PHOTO CREDIT: Charles Matemba for VillageReach

Key Findings & Strategy Implications (1)

Assessment	Summary of Findings	Sensitization Approach
Awareness of RPAs (drones)	▪ Low awareness at community level compared to health workers, community leaders and district teams	▪ Fully explain drones, study, research process, including potential benefits and risks ▪ Reach out to women and children (schools)
	▪ Higher awareness in urban (Area 25) than rural area (Dowa)	• Spend 3 days sensitizing in Dowa vs. 2 days in Area 25

Key Findings & Strategy Implications (2)

Assessment	Summary of Findings	Sensitization Approach
Perceptions and Acceptance	▪ Generally positive about using RPAs to transport emergency health products ▪ Biggest potential benefit: time saved in delivering life-saving health products ▪ Risks: disruption of daily activities, technology safety, privacy concerns, associations with the supernatural ▪ District teams concerns about sustainability of integrating RPAs into ground transport system	▪ Leverage potential 'time saved' by RPA in sensitizations ▪ Highlight the need: maternal deaths ▪ No flying on weekends ▪ Involve police during test flights

Key Findings & Strategy Implications (3)

Assessment	Summary of Findings	Sensitization Approach
Potential misconceptions	▪ History of rumors spreading (‘blood suckers’, elections rigging) ▪ Be sensitive, proactive and prevent misconceptions from developing, rather than attempting to manage them after public opinion is stirred	▪ Engage community/district structures, health workers ▪ Blood and medicines flown are ‘study products’; will not be given to patients ▪ Products handled by gov’t health experts (MBTS, PMPB, health workers)
Privacy concerns	▪ Drone ‘spying’ on people	▪ No camera on board ▪ Show drone up close

Key Findings & Strategy Implications (4)

Assessment	Summary of Findings	Sensitization Approach
District and national issues	▪ Limited payload, distance ▪ Cost of UAVs ▪ Poor weather conditions	▪ Technology will continue to advance over time ▪ Costs being investigated ▪ Flights authorized by DCA
Guidance	▪ Branding: Gov't of Malawi ▪ Remind crowds of safety around drone ▪ Traffic safety (crowds especially children and drivers/cyclists)	▪ Local ownership ▪ Secure perimeter ▪ Traffic police ▪ Sensitize all

Stakeholder Engagement Value

- Focus groups helped to:
  - ✓ identify awareness gaps and social-cultural sensitivities to take into consideration
  - ✓inform a sensitization strategy that addressed awareness gaps and possible negative perceptions
  - ✓ensure stakeholders gained a balanced view of the research process, which led to trust and support at all levels when study did not go as planned (RPA crash)

Community sensitizations and drone demonstrations in Lilongwe and Dowa districts;
PHOTO CREDIT: Charles Matemba for VillageReach

From A to Z: Stakeholder Engagement in Practice

Early planning stages

Donor: Grand Challenges Canada

Consultations with key institutions

RPA study partners: study protocol development + regular check-ins

- VillageReach, MoH (RHD), Lilongwe & Dowa District Health Officers, MBTS, PMPB, Vayu

Ethics committee approval

DCA regulatory approval

RPA steering committee

Implementation stages

Focus groups

Strategy drafted

Orientation with District Health Promotion teams led to customized sensitization approach by district

- Public messages agreed upon

MoH national press release

Radio advert

Posters, flyers, banners

Health staff briefings

Website release

Community sensitizations

- Lilongwe airport - flight schedule
- Ministry of Defense - Embassies
- Local police & traffic police
- District ambulance on standby
- Central Medical Store - oxytocin
- Central Hospital - potassium POC

Opportunities and Lessons Learned

- For new technologies, community sensitizations are worth the time and cost
- Understanding awareness gaps and perceptions helps shape effective sensitization strategies for new and highly visible innovations
- Different stakeholders = need for customized messaging and approaches
- Honest stakeholder engagement guarantees support even when research does not go as planned
- Gov't leadership and ownership is critical

Community sensitizations and drone demonstrations in Lilongwe and Dowa districts;
PHOTO CREDIT: Luciana Maxim and Charles Matemba for VillageReach

Acknowledgments: Malawi RPA Study Team

Institution	Name	Title
Ministry of Health	▪ Mrs. Fannie Kachale ▪ Dr. Alinafe Mbewe ▪ Dr. Peter Makoza	▪ Reproductive Health Director ▪ Lilongwe District Health Officer ▪ Dowa District Health Officer
Malawi Blood Transfusion Services (MBTS)	▪ Dr. Stephen Njolomole ▪ Mr. James Palapandu	▪ Medical Officer ▪ Chief Laboratory Officer & Head of Lilongwe Blood Transfusion Centre
Pharmacy, Medicines and Poisons Board (PMPB)	▪ Mr. Steven Chapima	▪ Chief Drug Analyst and Head of Laboratory
Vayu	▪ Mr. Daniel Pepper ▪ Ms. Julie Bateman	▪ Founder and CEO ▪ Director of Operations
VillageReach	▪ Ms. Carla Blauvelt ▪ Mr. Charles Matemba ▪ Ms. Luciana Maxim ▪ Mr. Matthew Ziba ▪ Mr. Thokozani Chimenya	▪ Country Director ▪ Supply Chain Program Officer ▪ Senior M&E Advisor ▪ Senior Program Manager, Supply Chain ▪ M&E Specialist for Supply Chain
Medical Advisors	▪ Dr. Prakash R. Ganesh ▪ Dr. Jeffrey P. Wilkinson	