

# **Building Capacity to Use GIS in Local Government Planning in Uganda**

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# **Background**

- **The Uganda Local Government Act**
  - **The Ministry of Local Government (MoLG) Mandate**
  - **The Central Problem of Local Government Planning**
  - **The Local Government Information Communication System (LoGICS)**

# **Background**

- **Evaluation of LoGICS Pilot**
  - **Recommendation**
    - **Integrate GIS**
- **Implementation of Integration of GIS into LoGICS**
  - **Submission of Grant**
  - **No GIS Training Component**
- **Called to Assess Training Needs that will Build Capacity to Use GIS in Local Government Planning**



# **Assessing Training Needs for Building Capacity in GIS**

- **Major Findings**
  - **Conception of Capacity Building**
    - Project-based GIS
    - Single-targeted
    - Single-layered
  - **Implementation Methods**
    - Training the “Wrong” Personnel
    - Weak Follow-up
    - No Mechanism for Sustainability

# **Assessing Training Needs for Building Capacity in GIS**

- **Major Recommendations**
  - **Short-term**
    - **Train the MoLG Planners to Use GIS**
  - **Long-term**
    - **Equip Makerere University to Build GIS Capacity**
      - **Undergraduate Level**
      - **Graduate Level – Applied GIS Research**
- **Results – Invitation to Submit a Grant**

# **The Grant Proposal**

- **Objectives**
  - **To Build Capacity to Use GIS in Local Government Planning through**
    - **Training of District Planners to use GIS**
    - **Establishment of GIS Teaching and Research Lab at MU**
    - **Development of Undergraduate GIS program at MU**
    - **Strengthening of Applied GIS Research at Graduate Level at MU**

# **Deliverables**

- **District Planners will use GIS in Planning Activities**
- **A Modern GIS Lab at MU**
- **Undergraduate option in GIS in the Dept. of Geography and MUIENR**
- **Graduate two students at the Master's Level in applied GIS**

# **Activities and Stakeholders**

- **Development of Training Modules and Material – UWSP**
- **Training of Planners – UWSP, MU, & MoLG**
- **Establishment of GIS Lab – UWSP & MU**
- **Undergraduate GIS Curriculum – UWSP & MU**
- **Graduate Training – FORUM, MUI ENR**



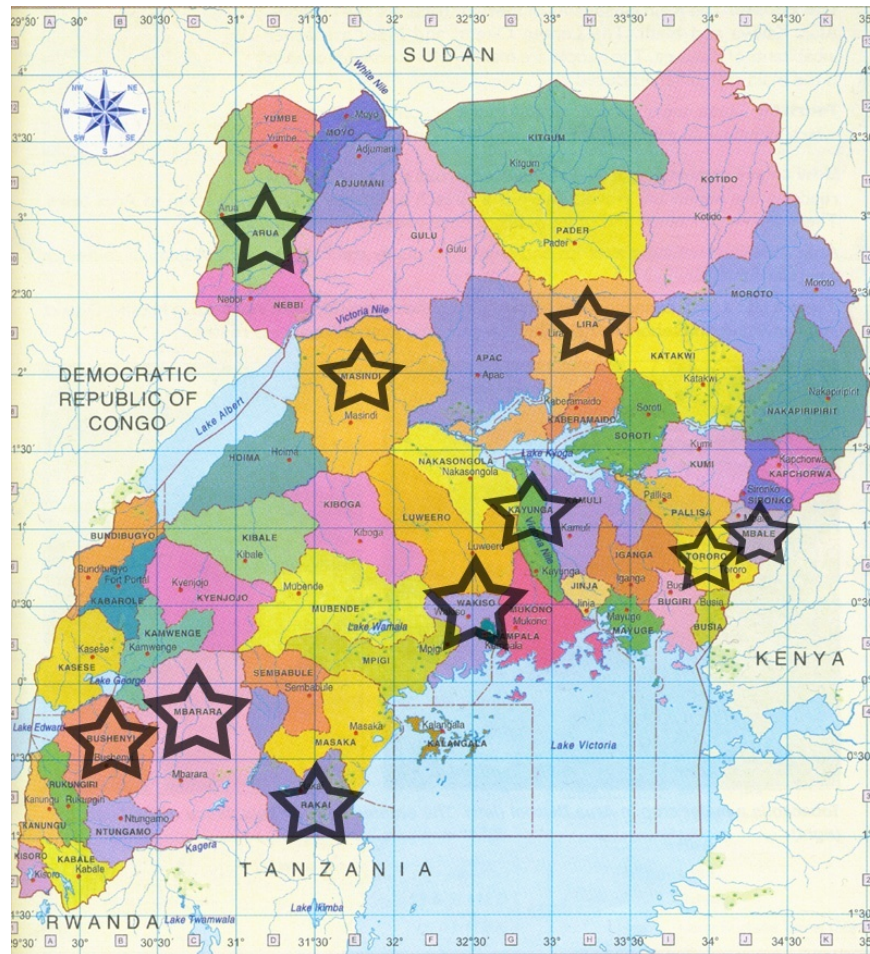
# **Activity Time Line**

- **Year 1: 2004-2005**
  - **September - December 2004**
    - **Development of Training Materials**
    - **Development of Lab**
    - **Curriculum Discussion**
    - **Announce Graduate Training Grant**
  - **January 2005 – June 2005**
    - **Pilot Training**
    - **Curriculum Development**
    - **Follow-up with Pilot Trainees**
    - **Select Graduate Grant Awardees**

# Activity Time Line

- **Year 2: 2005-2006**
  - **July-August 2005**
    - **Train all Planners**
  - **August 2005**
    - **-Implement Curriculum**
    - **Graduate Students Begin**
- **Year 3: 2006 -2007**
  - **Follow-up Activities**
- **Year 4: 2007-2008**
  - **Follow Up**
  - **Evaluation**
  - **Wrap Up**

# Project Activities: Focus Areas



# **Project Activities: What Worked and What Did not Work**

- **First Year Activities**
  - Development of Training Material
  - Establishment of GIS Labs
  - The Training of District Planners
  - Curriculum Development
- **Second Year Activities**
  - Follow-up Training
  - Change in Plans

# **Project Activities: What Worked and What Did Not Work**

- **Third Year**
  - Leadership Change
  - Second Needs Assessment
  - More Training of District Planners
  - Establishment of Internship
- **Fourth and Final Year**
  - Project Wrap Up
  - The Future

# Conclusion

- **GIS needs in Africa are enormous**
- **There is a cadre of GIS capacity in African Universities in the form of personnel and various organizations.**
- **This capacity is however ineffective due to lack of teaching and research infrastructure.**
- **Research partnership between GIS expertise in the West and GIS expertise in Africa can only go so far**
- **Such partnerships tend to be limited, project-specific, and single-layered**

# Conclusion

- To be sustainable, the development of GIS capacity in Africa must begin at the foundations – curriculum and delivery
- African universities must be equipped with the necessary infrastructure – GIS teaching and research labs to support strong GIS programs.
- It is only when these are in place will research partnerships with African academics can be more meaningful and effective