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, MUIENR
Activity Time Line

• Year 1: 2004-2005
  – September - December 2004
    • Development of Training Materials
    • Development of Lab
    • Curriculum Discussion
    • Announce Graduate Training Grant
    • 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