

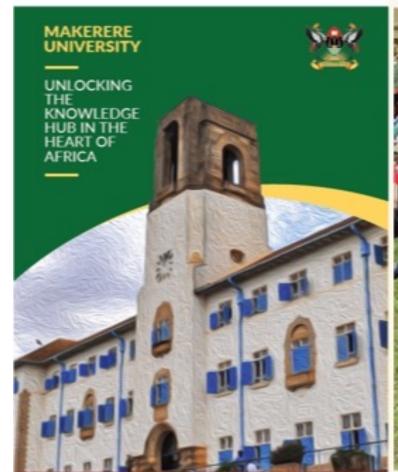
### 1 Overview of Graduate Research Issues 1



### in CAES

### Yazidhi Bamutaze (PhD), Professor,

**Deputy Principal** 





#### The four goals are:







AN ENGAGED UNIVERSITY WITH ENHANCED PARTNERSHIPS WITH INDUSTRY, THE COMMUNITY AND INTERNATIONAL INSTITUTIONS



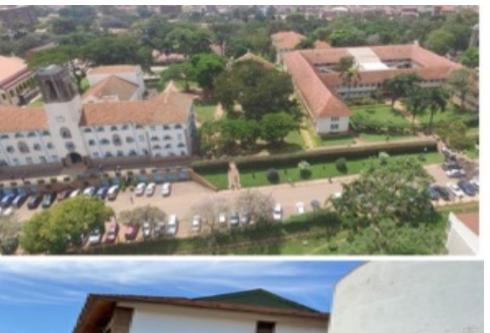


### Aspirations & Strategic thrusts

### **Transformative aspirations**

### **Strategic Targets**

- 30% increase in graduate enrolment
- 70% timely graduate completion
- Improve quality of delivery
- Research led university
- Shift from undergraduate to postgraduate training



### CAES at Glance: Graduate Research

• 21 marketable & attractive graduate programmes (600 admitted in 2023).

• 170 Competent Academic Staff

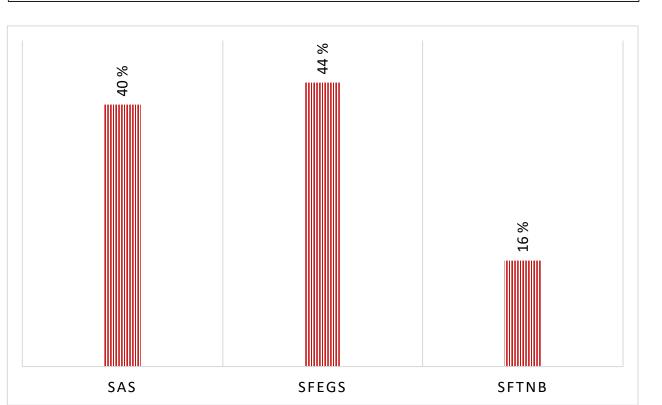
Highest number of Professors

High publication portifolio: Up to 300/year

• Resident journals, Editors & Assoc. Editors

Culture of grant writing

# 140 130 129 129 129 120 110 100 100 90 90 84 80 668 667H 77H 887H 97H 77SND 77SND



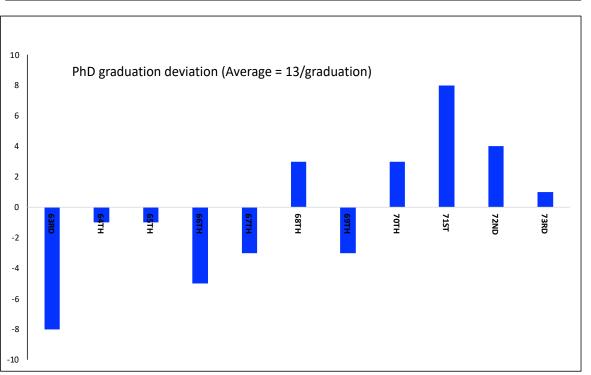
### Situation Analysis

### 1. Suboptimal Graduation numbers

### Key numbers

- Overall average = 109/year
- Average masters = 96/Year
- Average PhD = 13/Year
- Average per academic Staff (0.64)

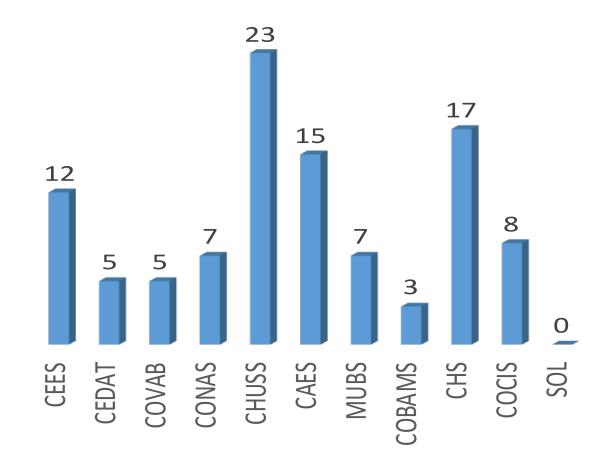
# CAES PhD Graduation 21 15 10 5 0 68TH 73RD



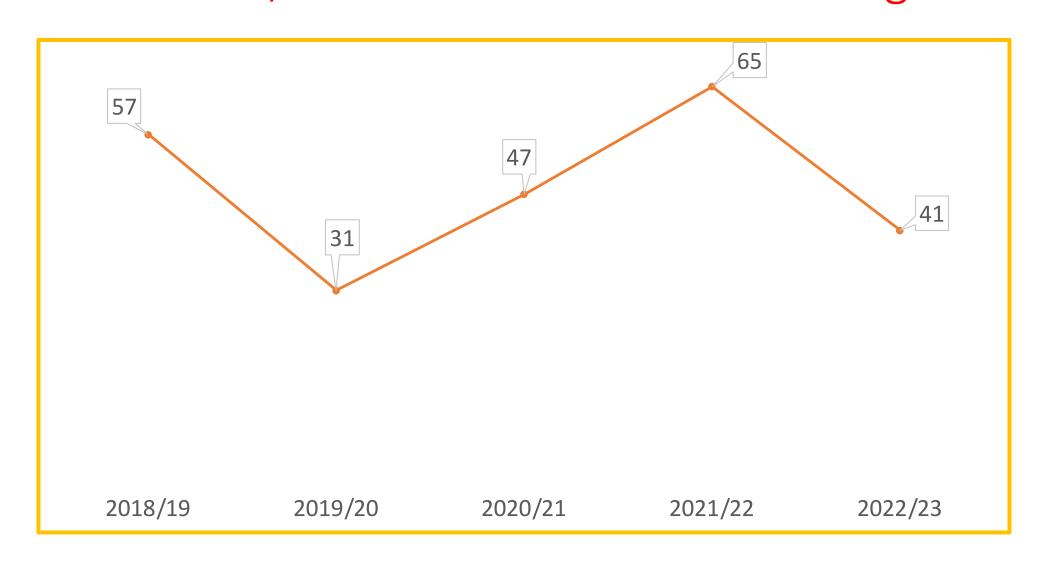
### Situation Analysis

### 1. Suboptimal Graduation Numbers





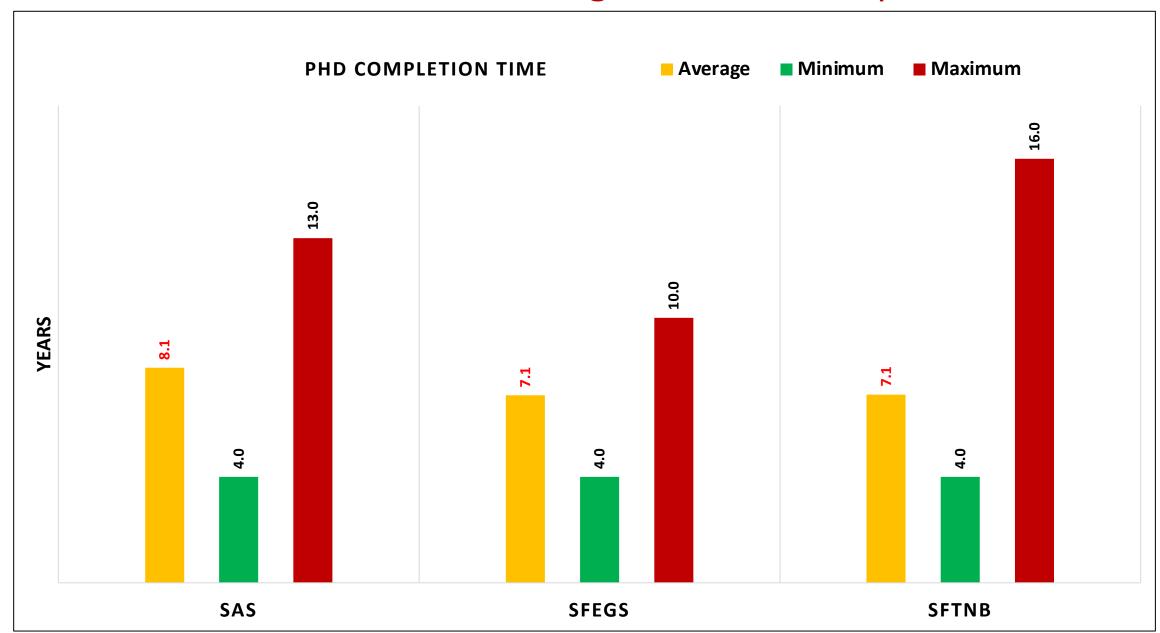
# 1. Situation Analysis Translation/Conversion of Admission to graduation



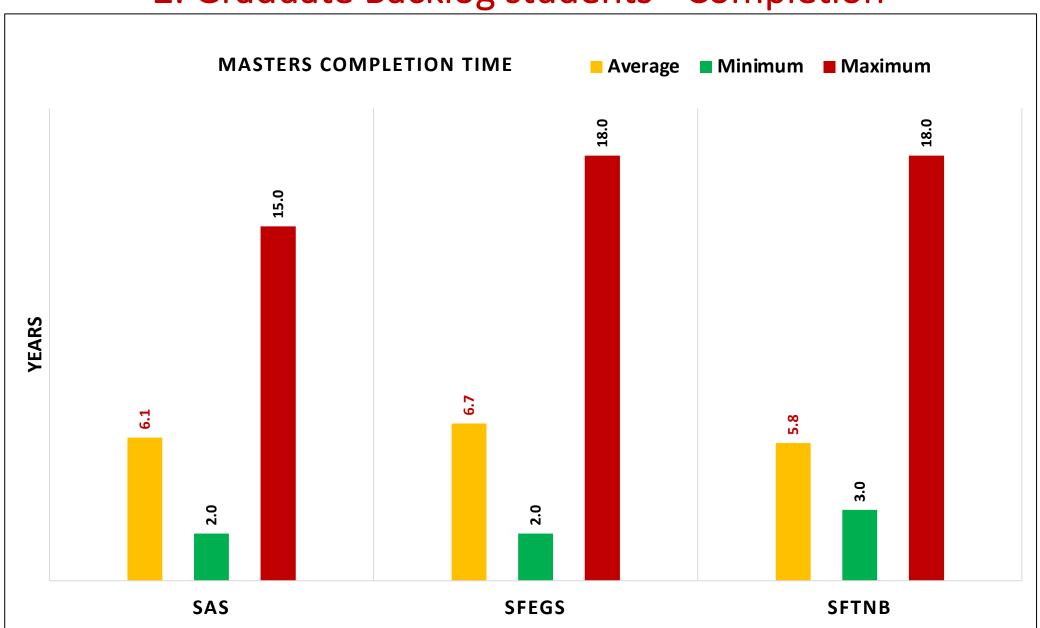
Ca. 50 admitted per Year: 1 student out of 4 graduates

Situation Analysis

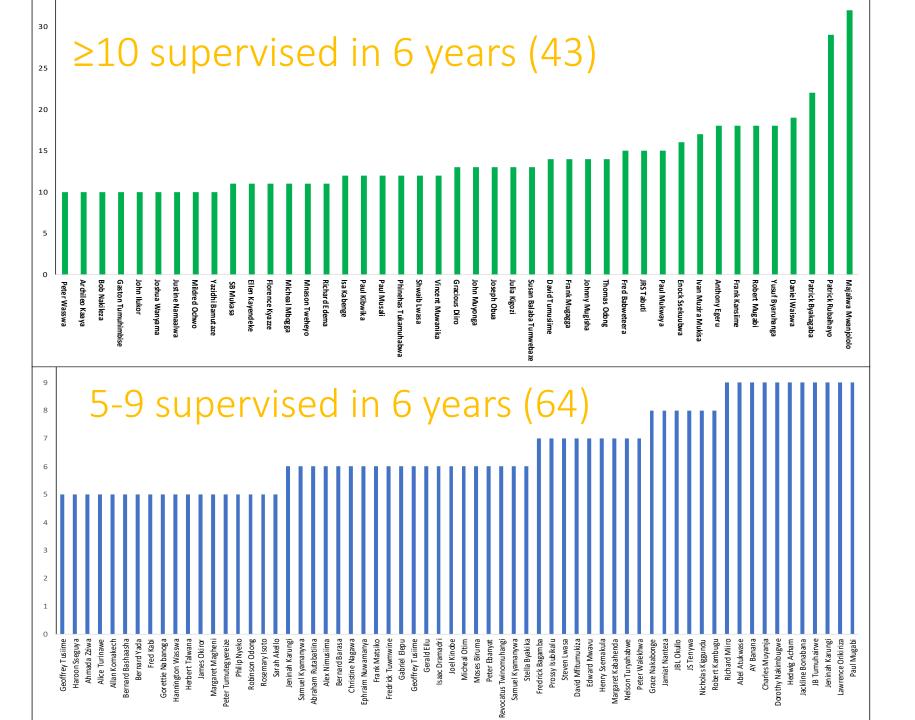
2. Graduate Backlog students - Completion



### Situation Analysis 2. Graduate Backlog students - Completion



# . Situation Analysis Staff productivity

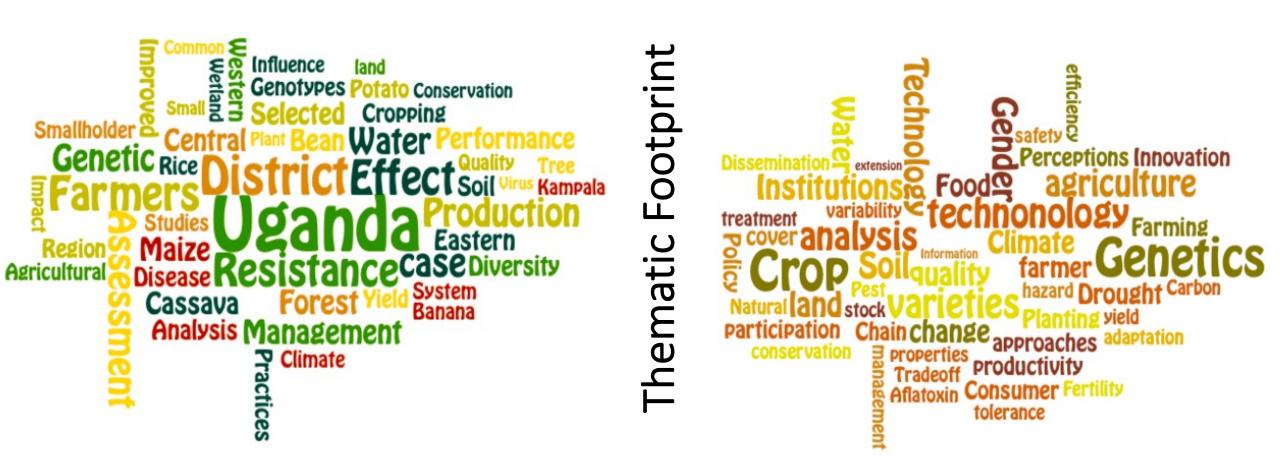


Min = 10 Max = 32

Min = 5 Max = 9

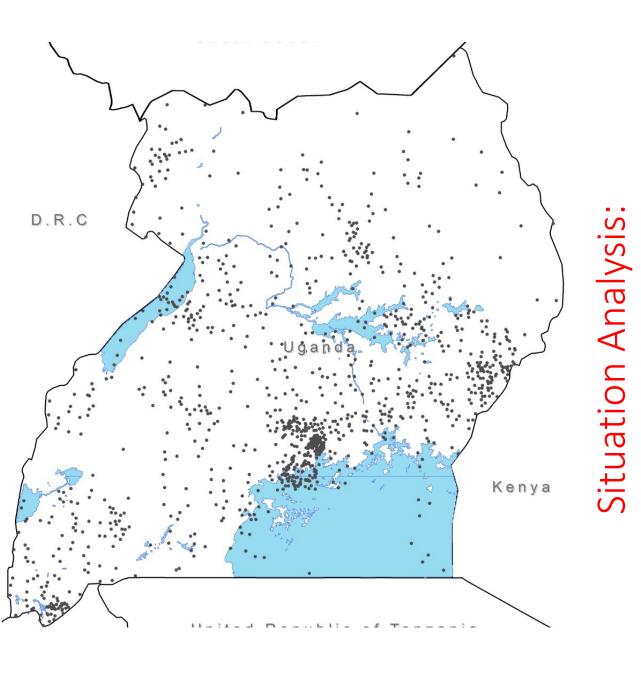
### Situation analysis

4. Graduate Research not anchored in a specific Agenda or priorities

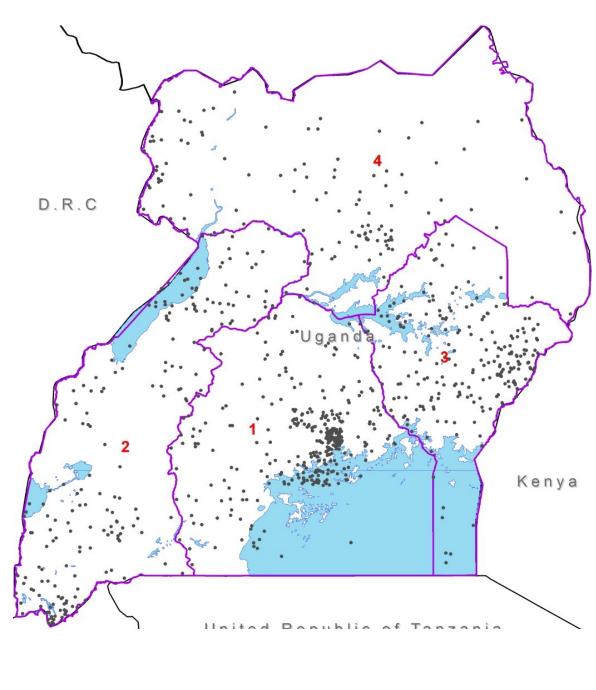


6 Years data (PhD & Masters): N=665

Diverse research but undirectional: Genetics, Climate Change, Gender, Diseases



Research



# SELF FUNDING SPONSORED

### SAS SFEGS SFTNB

# Situation Analysis 6. Graduate research funded



### Emerging issues from CAES Graduate Research

### **Summary Issue**

- Graduate research not hinged on clear priorities: Neither is it demand driven
- Scattered allover the country
- Piecemeal, limited in scale and doesn't address bigger issues in the country
- Adhoc and projectilized
- Transdisciplinarity is lacking

### **Desired change/Improvement**

- Improve the completion on time
- Creating Impact in the communities
- Enhance the efficiency Staff efficiency
- Contribute to the national and global development agenda
- Increased scientific outputs from the graduate research

Research for qualification Research for societal transformation

# MAKERERE UNLOCKING HEART OF **AFRICA**

#### The four goals are:









# Increasing Expectations of society: Shifting roles of Universities

- 1. Teaching to develop human capital
- 2. Research on a plethora of CCA issues
- 3. Outreach
- 4. Innovations
- 5. Industrialization
- 6. Mobilize funds
- 7. Produce enterprenuers
- 8. Ready made solutions

### Fit for Purpose struggle on universities



### Theory of Change (TOC): Transformative Tenets

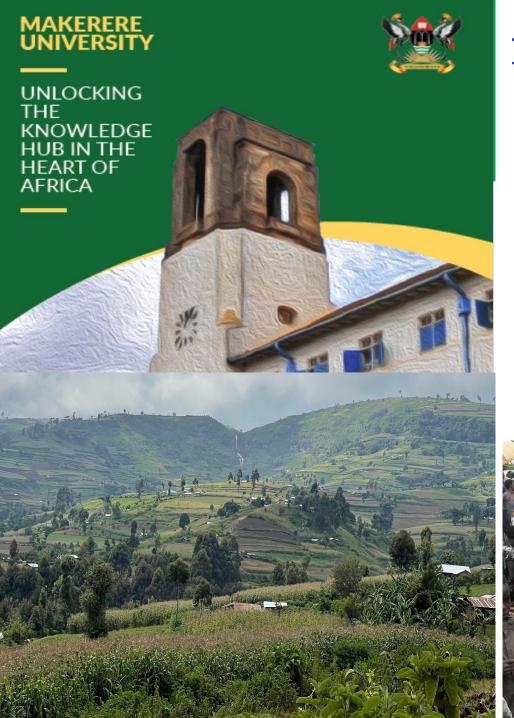
1. Transition to Programatic Research at CAES

2. Co-created Research Agenda with actors in the national agenda

3. Focussed in priority geographic areas

4. Implemented in a Transdiciplinary Manner

5. Human resource efficiency and resource optimization



### 1. Transition to Programmatic Research

• Develop core research programme foci under which graduate research

Clusters or cohorts of students deployed

Food Systems? Resilience? Genetics? Water security Programmes derived from the research priorities



### 2. Co-Created Research Agenda

















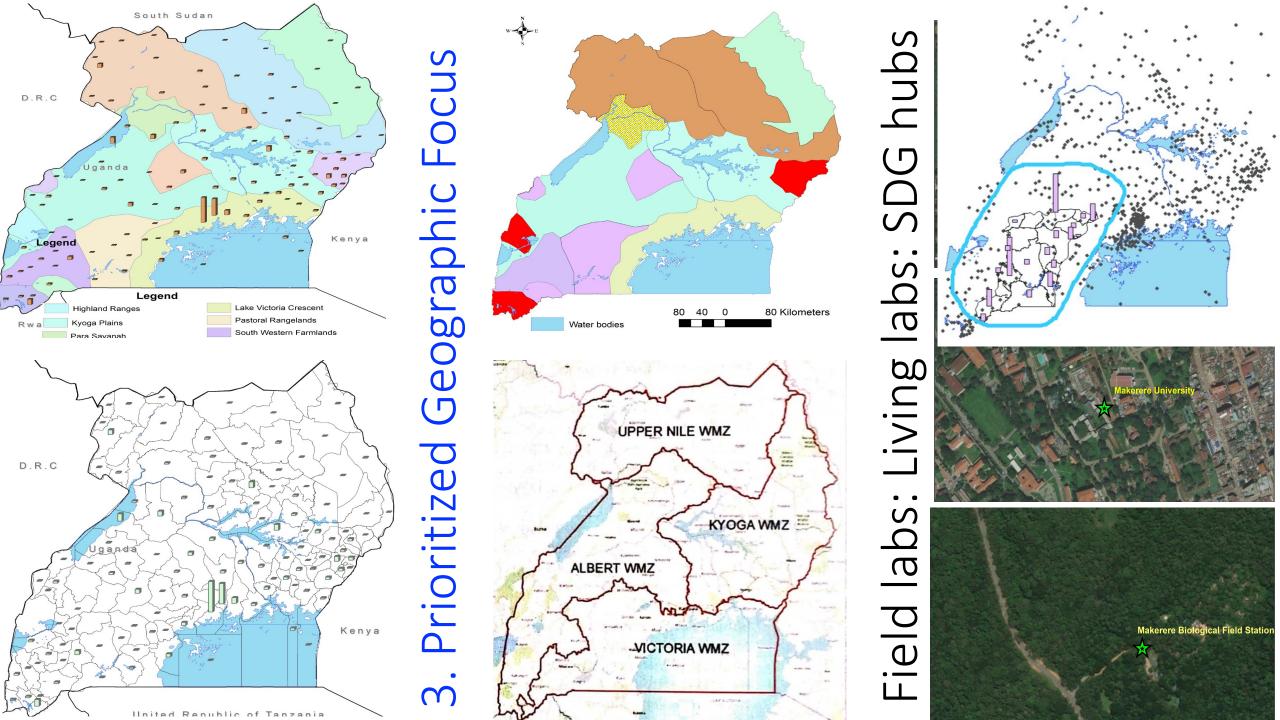


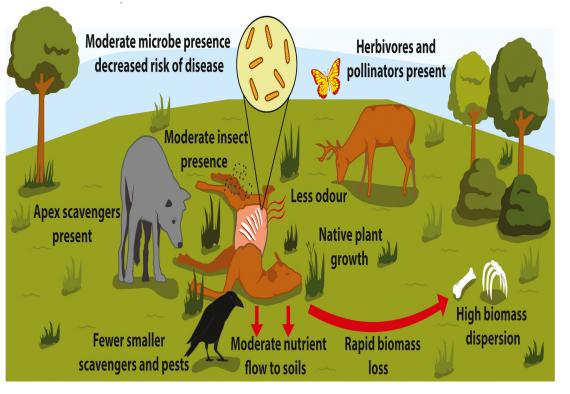


Capacity Building in Agriculture



Tapping into an array of opportunities

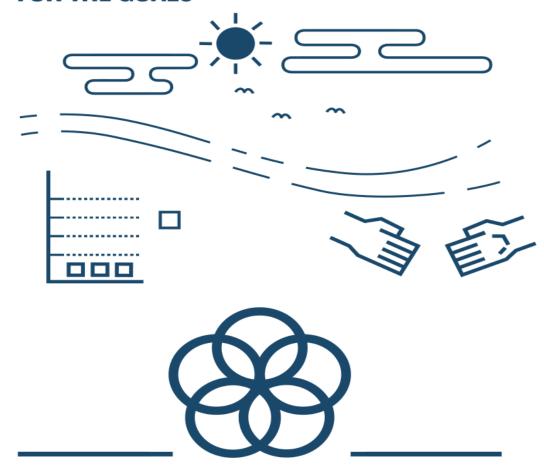






# 4. Complex & Intertwined requiring an Ecosystem Approach

**17** PARTNERSHIPS FOR THE GOALS



#### 4. Shift to Transdisciplinary Research





Complex socioecological issues



Working with local government and government agencies at the local scale Generate long-term data

Optimize installations



### 5. Human Resource Efficiency & Resource Optimization

Field supervised and guided research

Multidisciplinary supervisors

Peer groups and cohorts

Well developed almanac for completion





### Paradigm shift in Graduate Research: Key Ingredients

- 1. Buy-in into the vision
- 2. Budgetary allocations
- 3. Initiating MoU with relevant agencies
- 4. Leveraging on existing opportunities
- 5. Taking advantage of RIF: Piloting our model
- 6. Internal structures and processes

