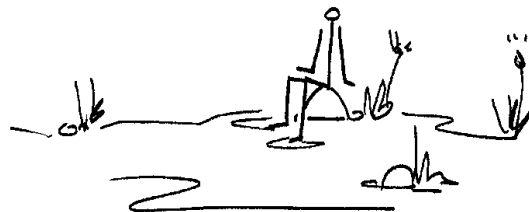


# Institutional arrangements for complex social ecological systems: catchments and WMA's

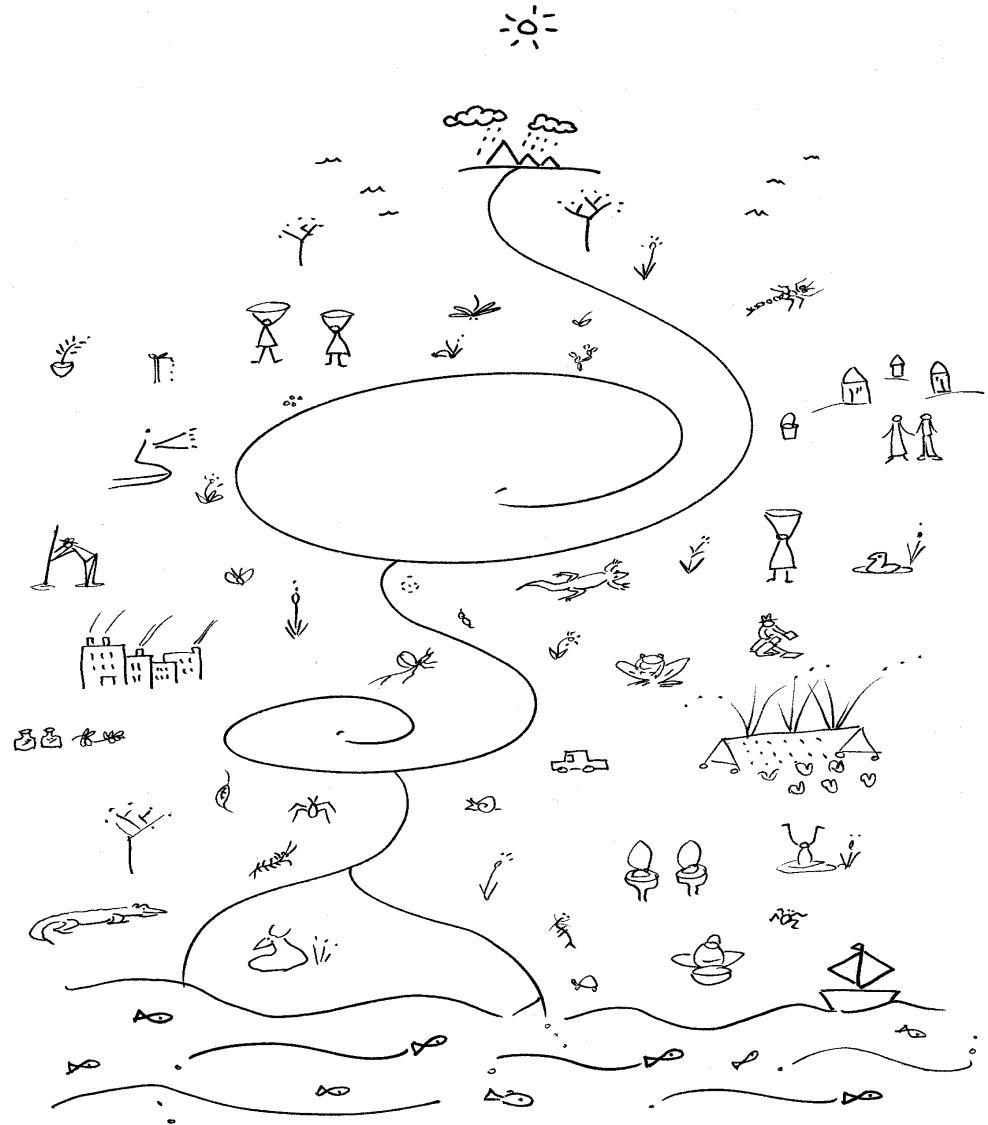
**Tally Palmer**

**Institute for Water Research**

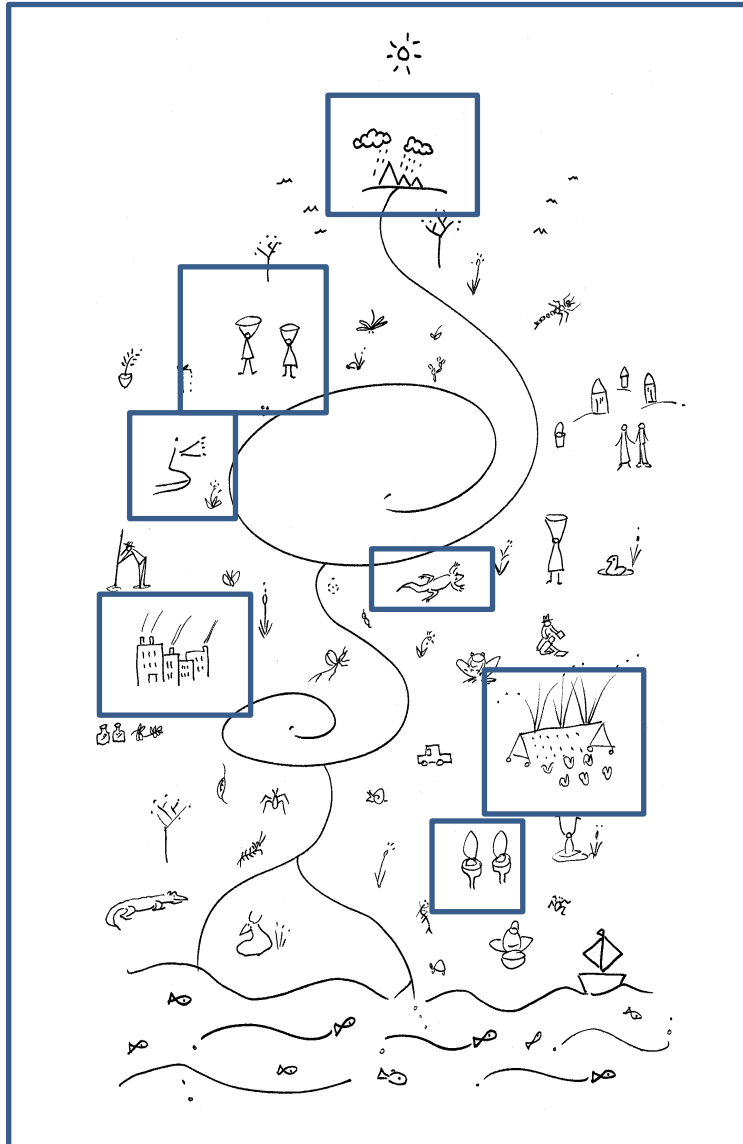


**RHODES UNIVERSITY**  
*Where leaders learn*

# We all live on this planet, in a catchment



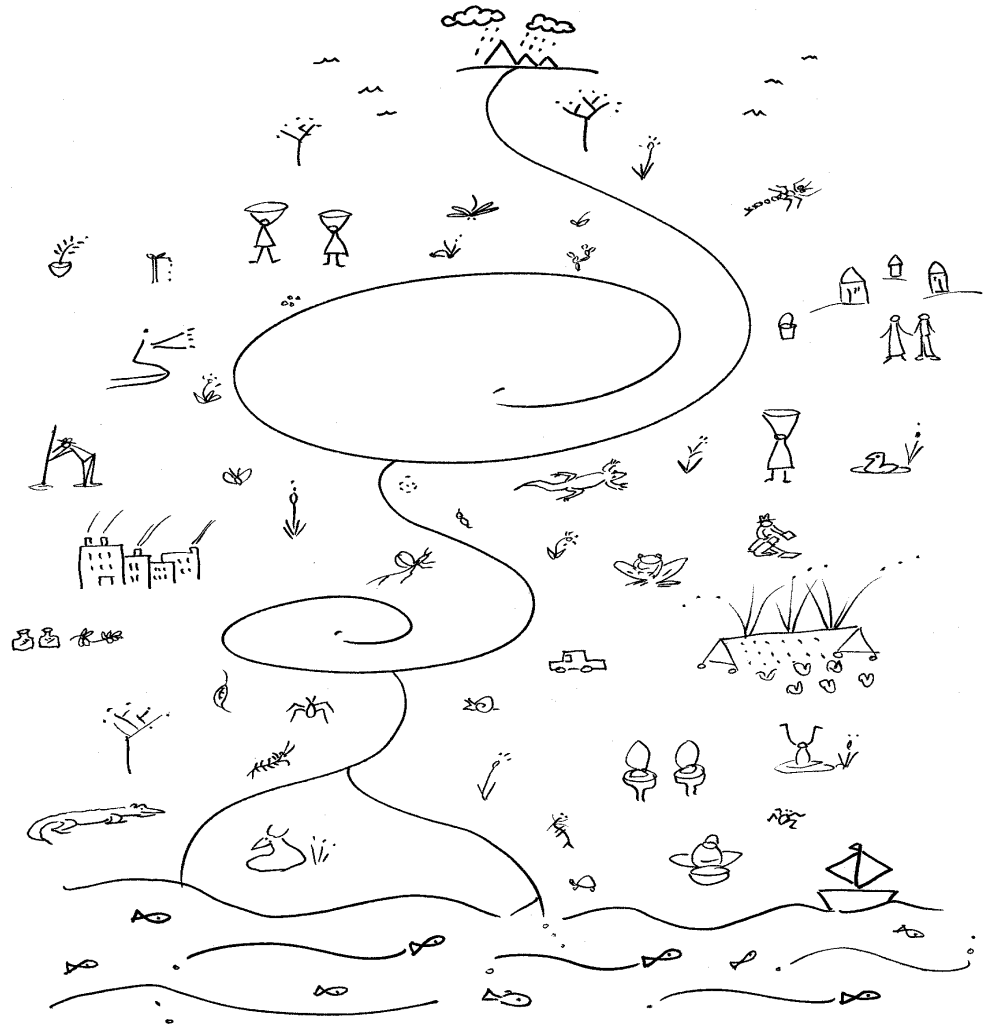
# Why is implementing policy, strategy and legislation so hard?



- so many interacting parts
- non-linear processes
- feedbacks
- water by its nature connects and integrates
- even with the principles of equity, sustainability and efficiency
- ALL people CANNOT have ALL THEY WANT at the same time in the same place
- discontent and disappointments are experienced as “wicked problems”
- need new approaches:

## MAKING IMPLEMENTATION REAL

# Seeing catchments as social-ecological systems ( integrated or holistic )



# Effective implementation requires good governance by appropriate institutions

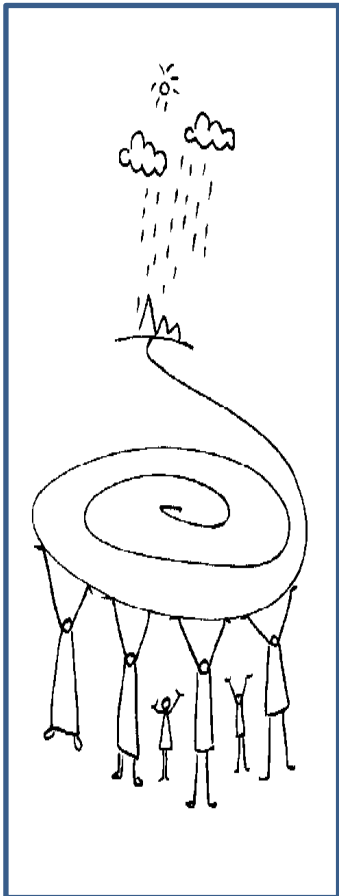
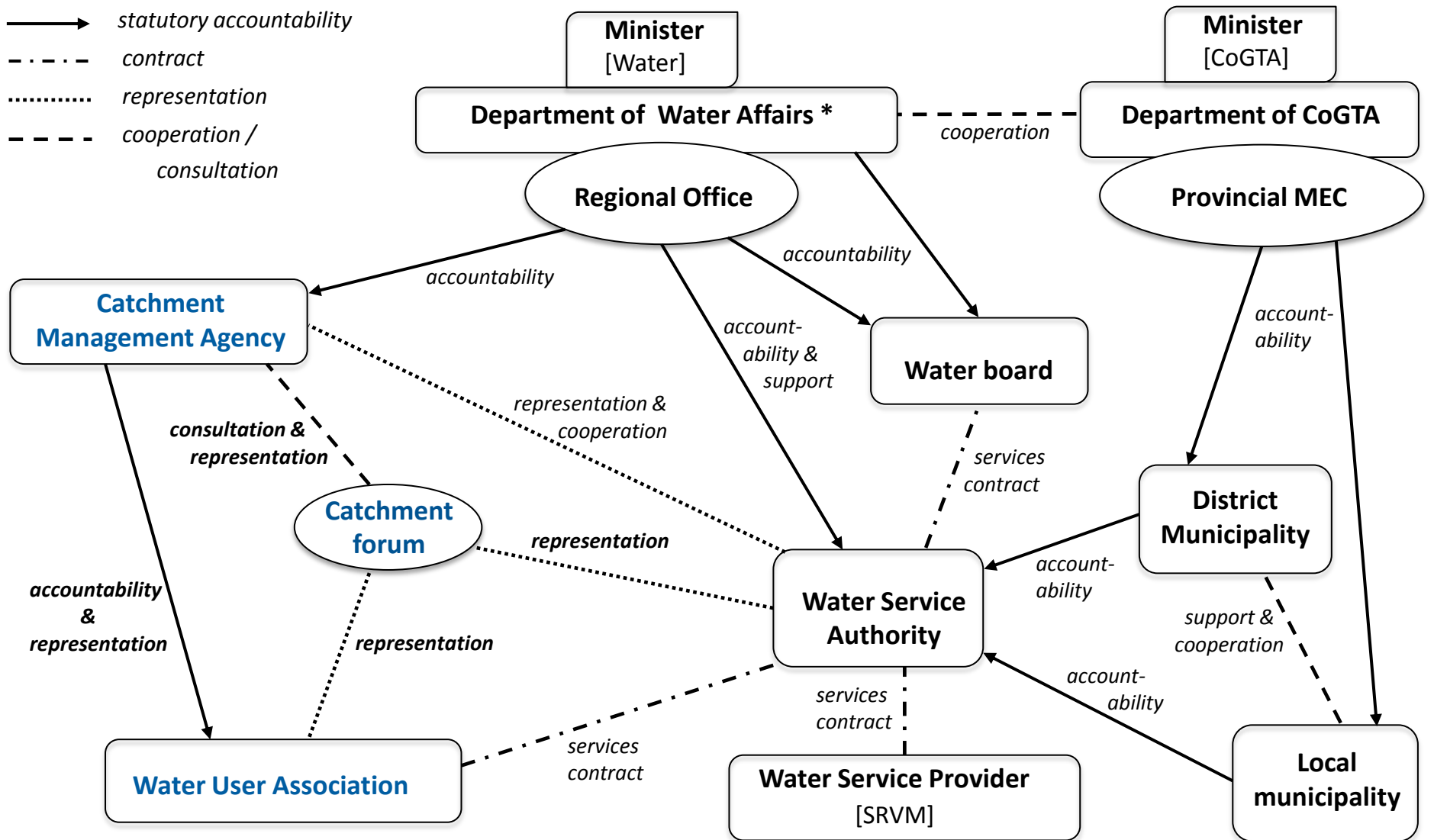


Figure 12: Water management areas in which CMAs will be established

## Key

- statutory accountability
- - - - contract
- ..... representation
- - - - cooperation / consultation

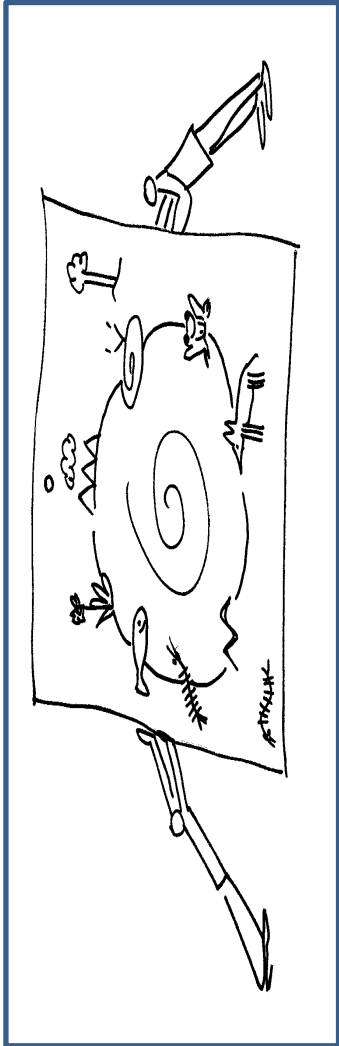


**Water Resources Management**  
(National Water Act of 1998)

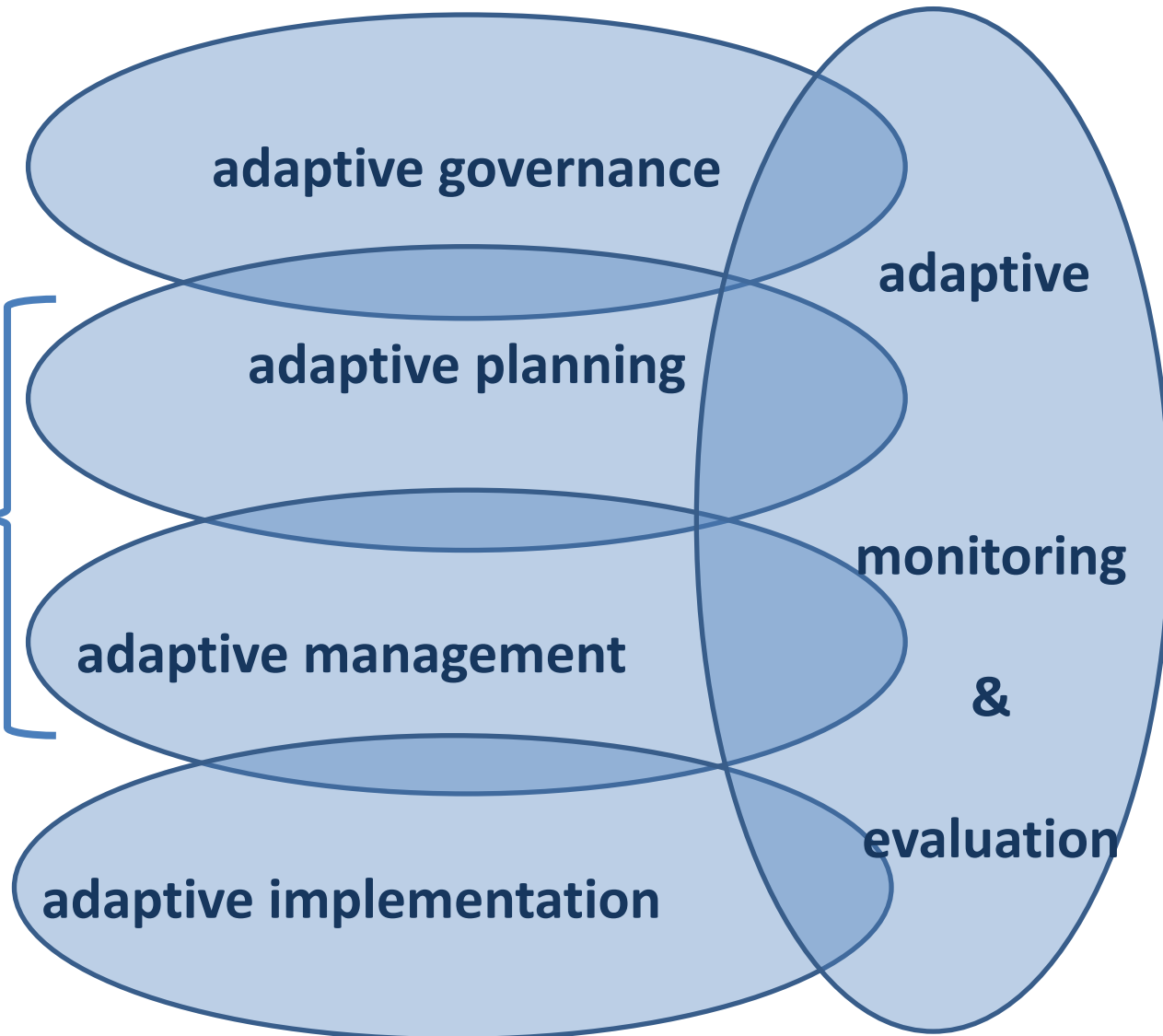
**Water Services**  
(Water Services Act of 1997)

**Local Government**  
(Muni. Structures Act of 1998)  
(Muni. Demarcation Act of 1998)  
(Muni. Systems Act of 2000)  
(Muni. Finance Man. Act of 2003)

# Adaptive processes



**SAM**





# Catchment management forum workshops



HOGSBACK / ALICE

FEEDBACK

CONCERNS

1. ECOSYSTEM HEALTH
2. WATER INFRA MANAGEMENT
3. COMMUNICATION OF INFO
4. POLLUTION & WASTE OF H<sub>2</sub>O
5. PRODUCTIVITY OF LAND

ACTION

1. FORMALIZE CMF
2. DEVELOP CMF VISION
3. ELECT CMF STRUCTURE
4. PROVIDE INFORMATION
5. BE AN ACTIVE PARTICIPANT

STAKEHOLDER IDENTIFICATION

- Higher Education/Learning Institutions
- Traditional Leaders
- Traditional Healers
- Local Communities
- Religious Groups
- Farmers
- Government Dept.s & Municipalities
- Civil Society Organizations
- NGO's
- Women Associations
- Businesses (eg. Car Wash, Hair Salons etc)







**Thank you**