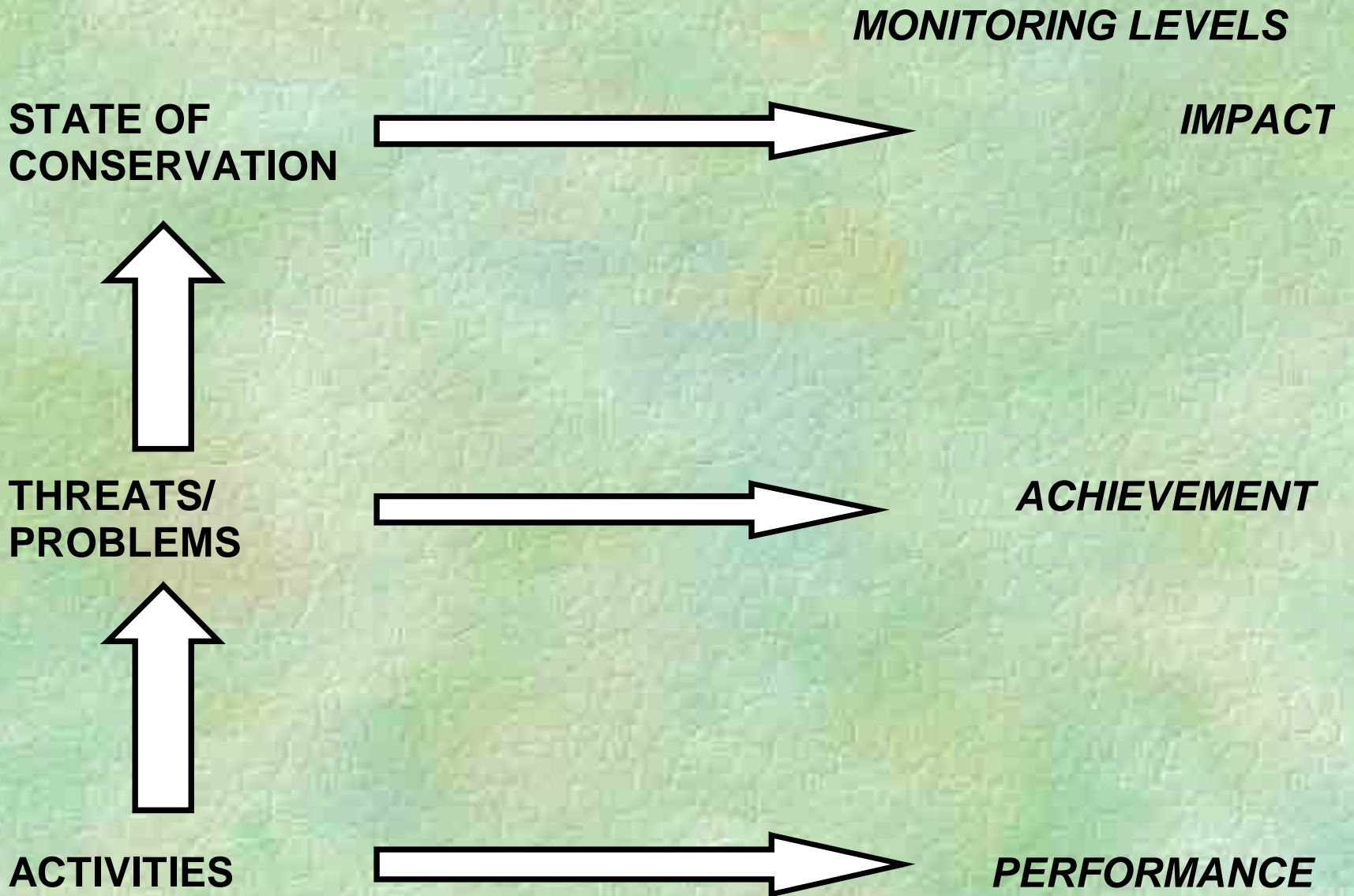


# Bwindi and Mgahinga Ecological Monitoring Programme

- Institute of Tropical Forest Conservation
- Uganda Wildlife Authority
- Royal Netherlands Government
- Mgahinga and Bwindi Impenetrable  
Forest Conservation Trust

## *Approaches to monitoring:*

- project / organisation monitoring and evaluation plan
- management as an experiment
- the ecological “*bottom line*”
- two (overlapping) aspects of monitoring:
  - evaluate conservation efforts up to present
  - plan future actions



# Criteria for selecting what to monitor:

- Importance of conservation value
- Indicator of biodiversity
- Feasibility of measuring conservation value
- Significance of threat to which parameter relates
- Significance of conservation value to which parameter relates
- Relevance to park management - will this information really be used?

Park boundary,  
Bwindi



## ***Threats / issues for Bwindi and Mgahinga:***

- high human population density around parks
- hostility of local people (lack of access, crop-raiding)
- continuing impact of previous disturbance
- hunting / poaching
- fires (human induced)
- management interventions - “eco”-tourism resource use
- alien plant species

## The mission of the Ecological Monitoring Programme is:

- *To provide relevant, accurate and timely information that will strengthen the conservation and management of Bwindi Impenetrable and Mgahinga Gorilla National Parks, southwest Uganda by implementing a long-term monitoring programme in partnership with protected area management and other stakeholders who work in and around these two Albertine Rift Afromontane forest islands. In doing so, we strive to enhance the conservation of biodiversity and maintenance of the ecological, economic and cultural values of the two parks in perpetuity.*

## ***Objectives:***

1. Knowledge on forest ecosystem 'health' or ecological condition of Bwindi and Mgahinga enhanced.
2. Understanding of the impact of human use of forest resources and human-wildlife interactions in Bwindi and Mgahinga increased.
3. Knowledge on physical parameters in Bwindi and Mgahinga increased
4. Monitoring results and recommendations integrated into Bwindi and Mgahinga park management plans

# 1. Knowledge of forest ecosystem 'health' or ecological condition of Bwindi and Mgahinga enhanced

## *Key Activities:*

- Monitoring of water quality in rivers
- Preparation of a vegetation map as a baseline for long-term monitoring of large scale vegetation changes
- Monitoring of key species
- Monitoring of regeneration of formerly encroached areas
- Monitoring of forest gap dynamics

# Forest gap in Bwindi



# Regenerating area in Bwindi



# Monitoring populations of key species



## **2. Understanding of the impact of human use of forest resources and human-wildlife interactions in Bwindi and Mgahinga increased.**

### *Key Activities:*

- Monitoring of selected harvested species and determination of sustainable levels of exploitation
- Monitoring of afro-montane wetland gravity water source
- Monitoring of forest fires
- Monitoring of effectiveness of forest fire control and prevention measures

# Previously burned area in Bwindi



### **3. Knowledge on physical parameters in Bwindi and Mgahinga increased**

#### *Key Activities:*

- Monitoring of climatic factors

## **4. Monitoring results and recommendations integrated into Bwindi and Mgahinga park management action plans**

### *Key Activities:*

- Joint identification of priorities and planning of monitoring
- Participation of park managers in monitoring wherever feasible
- Produce reports tailor-made for managers
- Hold “Information for Managers” workshops
- Maintain regular formal and informal engagement with managers

## ***Lessons learned:***

- importance of close collaboration with other organisations, especially management authorities
- make sure results are relevant to and will be integrated into management
- need to prioritise carefully which parameters to monitor
- need to make sure have appropriate baseline for each parameter
- adapt monitoring according to changing conditions
- ensure good coordination and integration of data collected by different organisations
- make the most of indigenous knowledge
- make use of external expertise
- long-term funding