WWF MWIOPO Adaptation Work

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Context

- Madagascar: High level endemism of fauna and flora (26 endemics families)

- January 2008 workshop: climate change poses a serious threat to biodiversity and livelihoods

- Climate change: potential to be one of the most significant threats to the region's biodiversity and could jeopardize our current conservation efforts

- WWF MWIOPO: Adaptation is crucial for biodiversity and human systems to respond to the current and future effects of climate change

Pilot Adaptation Projects

- ❑ **Capacity building** (WWF MWIOPO and partners)
- ❑ **Mangrove ecosystems** (West Coast)
- ❑ **Marine Protected Areas** (North-West)
- ❑ **Regional level** (North - DIANA Region)

➡ **Basis for the WWF MWIOPO Climate Smart Conservation**

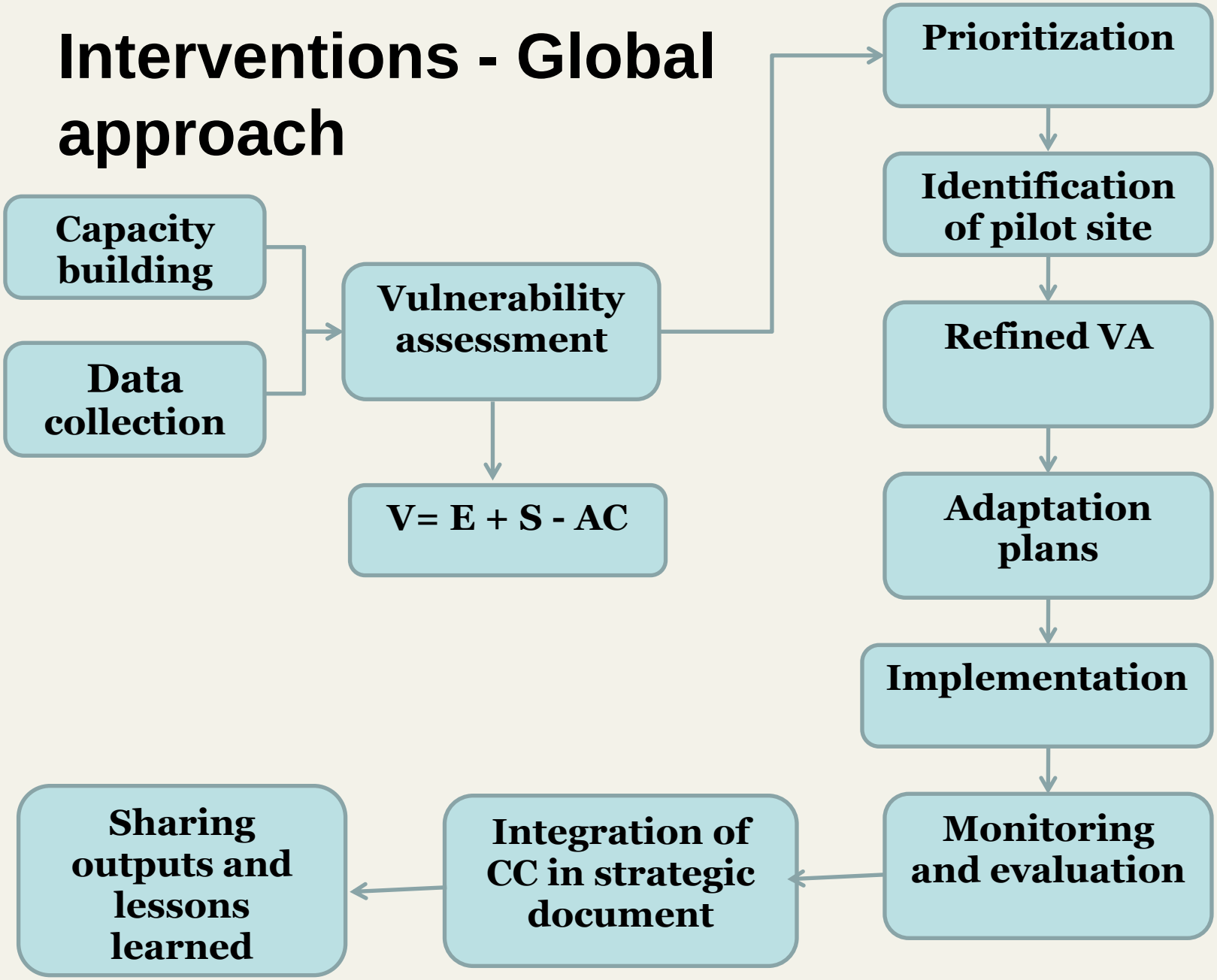
Problem Description

- ❑ Endemic biodiversity highly exposed to climate change threats
- ❑Vulnerable poor people: heavily depending on its natural resource base for development
- ❑ Observed changes already consequent: increasing temperature, decreasing rainfall, frequency of cyclones, sea level rise
- ❑ Climate Change: very new initiative in Madagascar and knowledge of its effects on the ecosystems, species and community are limited

Problem Description

- Lack of capacity to design and implement actions to reduce vulnerability to the effects of climate change
- Few people with the skills and knowledge to identify specific vulnerabilities to climate change and to implement adaptation strategies
- Lack of expertise in using available tools and methodology
- Data insufficient to carry out a vulnerability assessment and design good adaptation: climatic, socio-economic and ecological data
- Lack of framework document on VA methodology

Interventions - Global approach



Failures and Success

FAILURES

- **WWF Staff capacity building**
- **The vulnerability assessment methodology used was not grounded in sound knowledge (Mangroves VA)**

SUCCESS

- **Effectiveness of project implementation and integration of CC in strategic document (case of the SRAT of DIANA region)**
- **WWF MWIOPO: recognized among the lead in terms of adaptation in Madagascar**

Lessons learned

CAPACITY BUILDING

- ❑ **Practical and useful training tools**
- ❑ **Guidelines for integrating CC into WWF project**
- ❑ **Capacity need assessment and detailed training plan before any training on climate change adaptation**
- ❑ **Monitoring and evaluation system on the progress of the knowledge and skill of people trained**

Lessons learned

VULNERABILITY ASSESSMENT (VA)

- **Climate change team needs to be familiarize with the climate science particularly the climate data**

- **The VA should take into account both social and ecological aspects and their complex interactions**

- **The VA process must be conducted in a participatory manner with key stakeholders and sectors and include systematically some capacity building sessions**

- **The VA methodology must be relevant in order to produce reliable outputs and to avoid maladaptation**

Lessons learned

ADAPTATION

- **Formal collaboration with regional and local stakeholders including authorities is very crucial to ensure the effectiveness and implementation of adaptation plans**

- **Adaptation process must be conducted in a participatory manner with key stakeholders and sectors to ensure ownership and sustainability of adaptation work**

Lessons learned

APPROACH

- **Working at several scale: Need more partnerships**

- **Rapid social surveys (Climate Witness) are very important before undertaking a scientific vulnerability assessment in order to document local knowledge on CC**

- **Combining EBA and CBA approach are very substantial to respond effectively to CC effects**

- **Integration of non climatic factors in the process of vulnerability assessment**

Perspectives: landscape VA

System (I)	Exposure			Sensitivity			Adaptation capacity (VIII)	Vulnerability (IX)	Adaptation options (X)
	Climate factors (II)	Climate change or non-climate stressors (III)	Likelihood of the threat (IV)	Dependency on climate or non-climate factors (V)	Impacts of stressors (VI)	Degree of Impact (VII)			
Species, ecosystems, ecological processes, sectors, institutions, regional policies etc.	temperature, rainfall, drought, cyclones, trade winds, seasons etc.	Increase in temperature, shift of the rainy season, anthropological factors etc.	(E)	Relationship between the factors and the system in non-disturbed natural conditions	Degradation / disturbance /loss of effectiveness of the system because of the stressors	Degree of the degradation (S)	Availability of internal or external capitals to cope the impacts (CA)	f(E, S, AC)	Adaptation measures aiming to reduce the sensitivity of the system and to enhance its adaptation capacity

→ **Required more partnerships**

Thank you - Misaotra

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