



INSTITUTIONAL CHALLENGES FOR IMPLEMENTING PES IN SASUMUA WATERSHED, KENYA



Training Workshop on Payments for Ecosystem Services (PES) and
Reducing Emissions from Deforestation and Degradation (REDD+)
Nairobi, Kenya - August 8th, 2011

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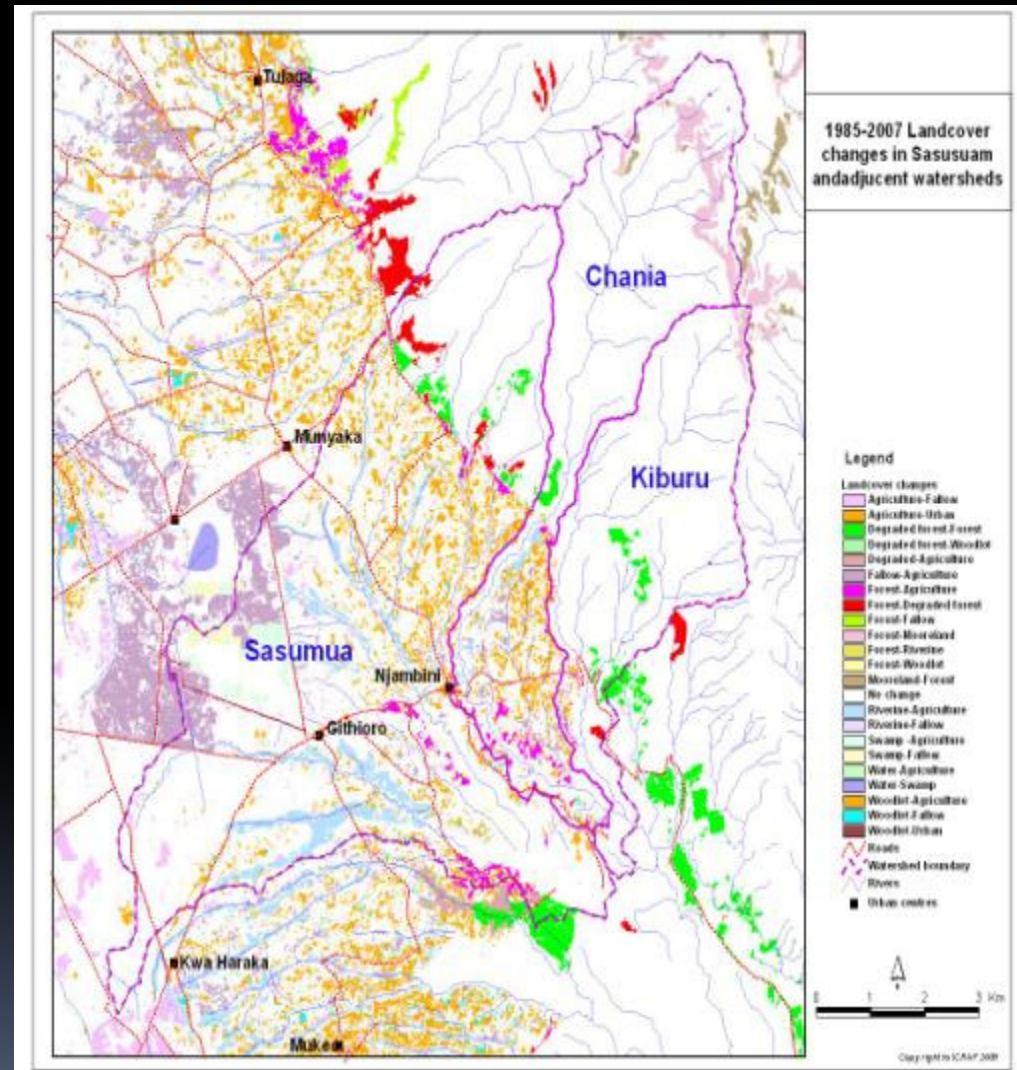
Land use changes

Woodlots and wetlands converted to agriculture

Forest encroachment now under control

Conversion of agricultural land into commercial plots

Wetlands, river banks and drainage waterways are used for cultivation.



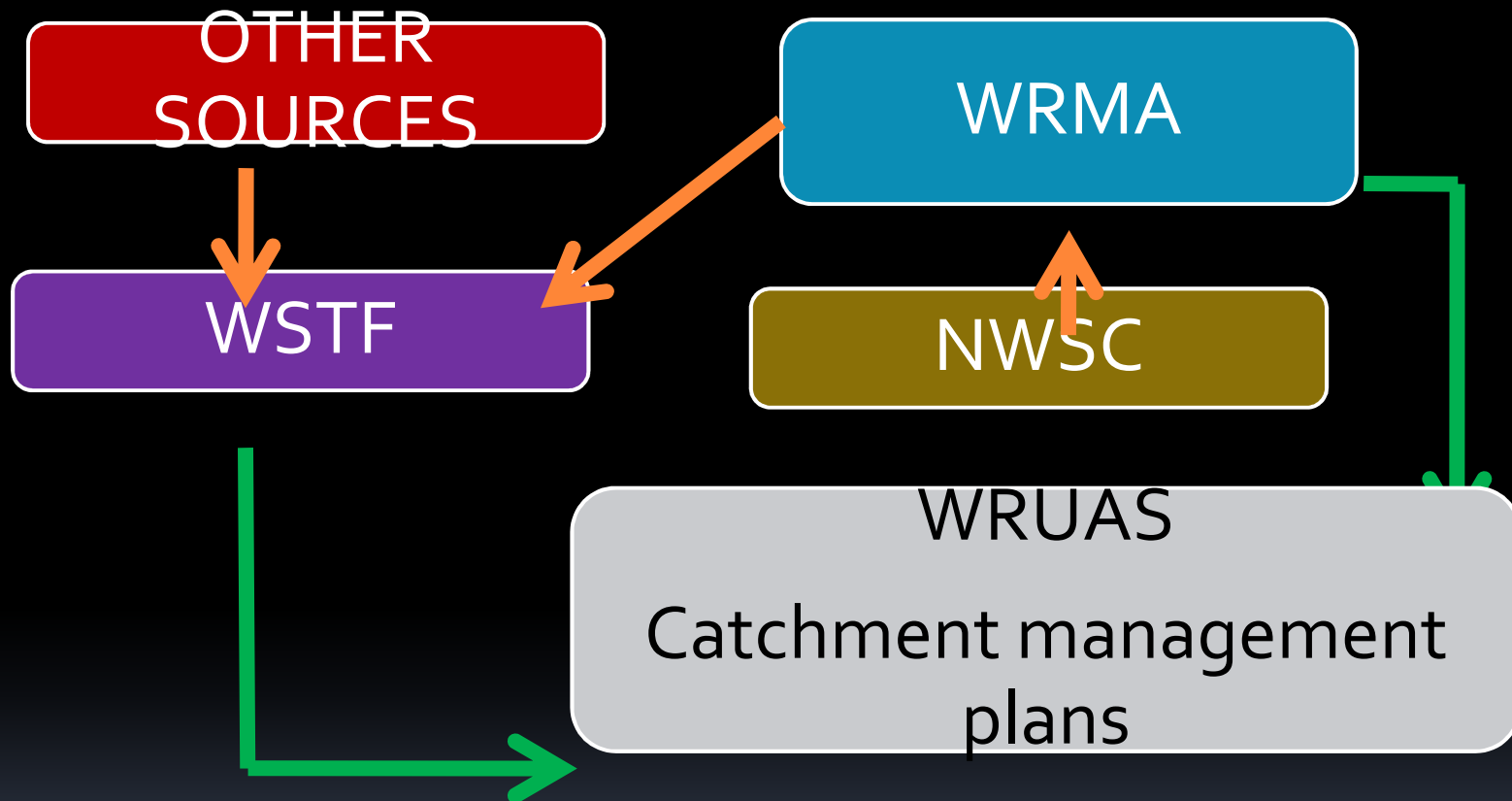
Impact on watershed services

- Dry season flows: reduced
- Wet season surface runoff: increased.
- Sediment load: High
- Chemical and biological pollutants:
 - Heavy metal pollutants (Pb) noticed in levels close to WHO-limits
 - High microbial pathogen counts in raw water esp near town centres

Using Scientific evidence

- Landuse change affects water partitioning
- Most sedimentation originates from privately owned farmlands
- Agroforestry , terracing and grass strips along contours and waterways can be used to improve watershed hydrological functions
 - Reducing soil erosion – reduced sedimentation and siltation of dams and reservoirs
 - Improving base flow – sustained availability of water over a longer period

Catchment management structure



- Accessing funds is hard.
- Limited ability to utilise the funds on privately owned land

PES in Sasumua

WHO GETS PAID?

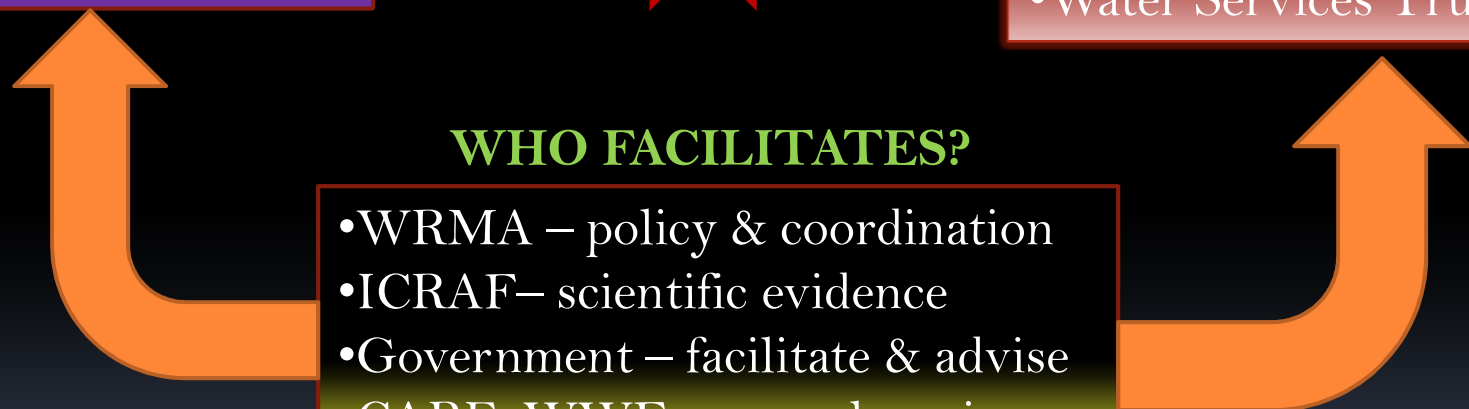
Upland communities in Sasumua WRUA

WHO PAYS?

- Nairobi Water Company
- Water Services Trust Fund

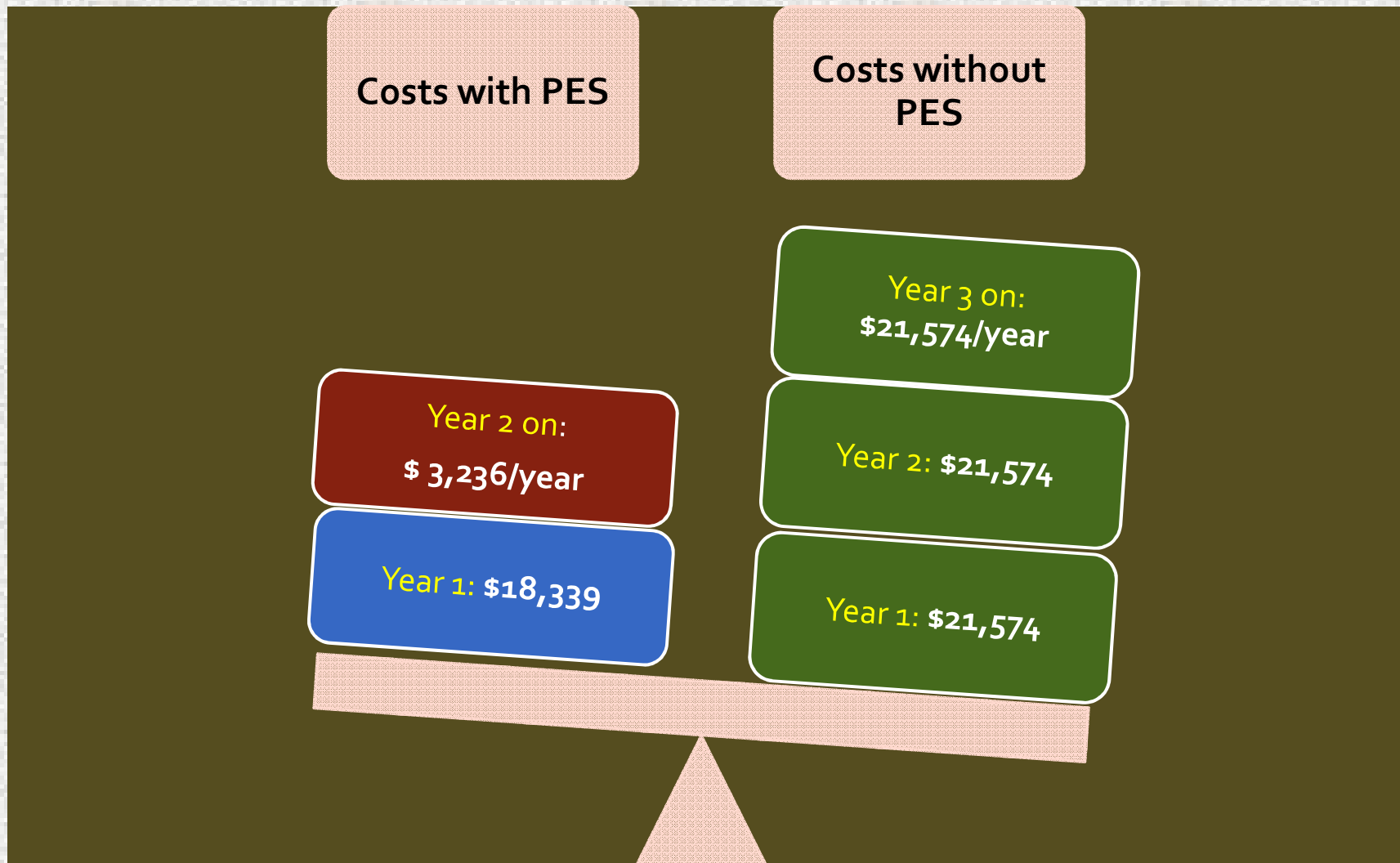
WHO FACILITATES?

- WRMA – policy & coordination
- ICRAF – scientific evidence
- Government – facilitate & advise
- CARE, WWF – cross learning



CASE FOR PES: NAIROBI WATER COMPANY

Grassed waterway causing 20% Reduction in sedimentation



Nairobi Water Company would consider PES, but....

- Burdened with multiple levies – may view PES as double payment
- Poor financial base
- Water scarcity
- High UFW
- Governance and management challenges
- Priority is reducing investment costs and improving infrastructure

CASE FOR PES

THE WATER SERVICES TRUST FUND

- Achieving mandate of watershed conservation more efficiently
- PES provides incentive mechanism for improving landuse practices on privately owned land
- Increasing community access to the fund

WSTF would consider PES but....

- Mandate is for capacity building
- Procedure for accessing funds allows only actions stipulated in the catchment management plans
- Will need to 'buy' environmental services across all watersheds - to avoid bias
- 'Buying' ES from all watersheds would be too expensive

Key options for PES

- Expand the mandate of WSTF to include 'buying' of ES directly from land owners.
- Allow local WRUAs to retain and use a portion of abstraction fees for watershed management via PES.
- Reduce fees levied on NWC if it engages in PES.

Other supporting options

- Include the PES approach formally within the Tana Catchment Management Strategy
- Enforce existing laws and regulations on zoning of land important for watershed functioning.

Way forward

- Buyers: Dialogue to increase confidence that PES works
- Sellers (WRUA): Provide technical backstopping on PES interventions, negotiation and monitoring
- Provide support on how to structure PES at WRUA level
- Government: Dialogue on policy and institutional structures to enable PES



Thank you



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