







# A model PPPP for a green economy: a case of L. Naivasha

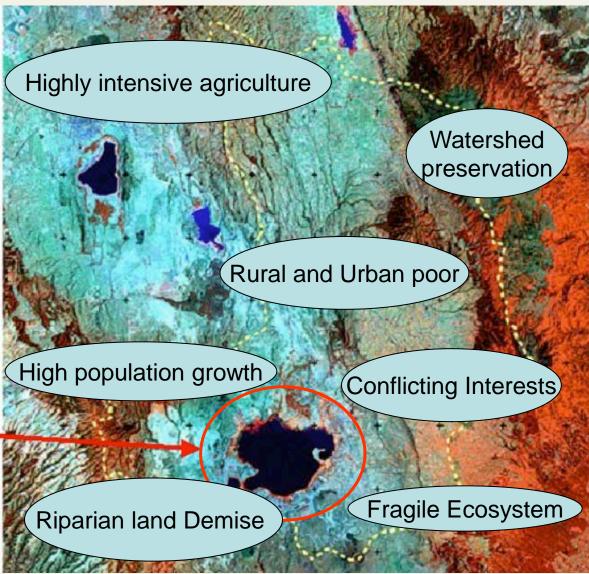
Batula Awale WWF Kenya 4<sup>th</sup> October, 2011 UN water conference, Zaragoza



#### Why the Naivasha basin?



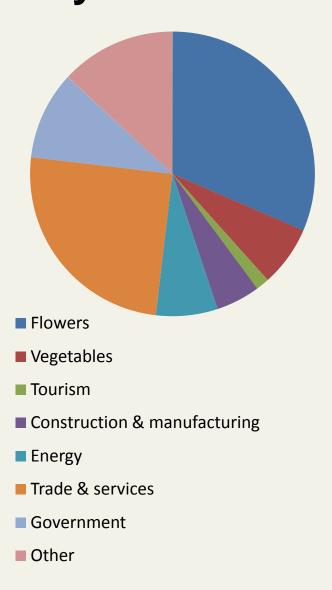






#### **Economy of Naivasha Local GDP**







#### What are the threats and drivers?



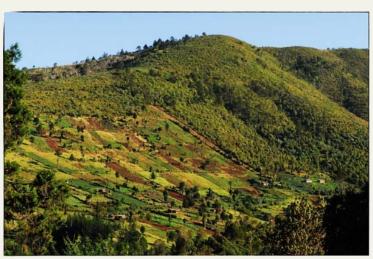
#### **Threats:**

- Catchment degradation
- Poor land management
- Weak policy enforcement
- Declining water inflows
- Increased pollution
- Lake water fluctuation due to water extraction
- Decreasing rural poor livelihoods

#### **Drivers:**

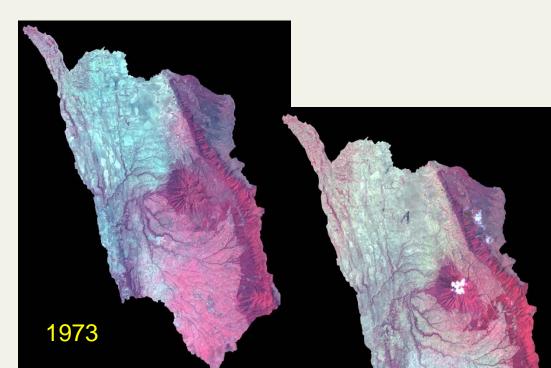
- Population growth
- Unsustainable development
- Weak institutional framework
- Inadequate institutional capacity











1987

- •Land fragmentation
- •Intensive agriculture
- Deforestation
- •River bank clearing

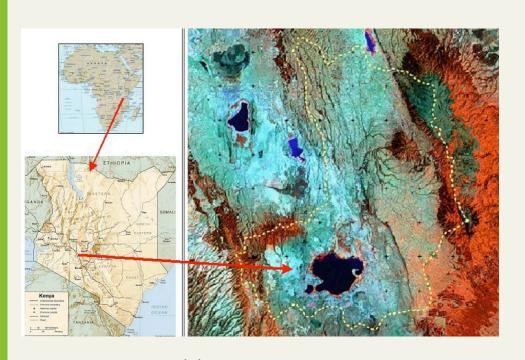
2003

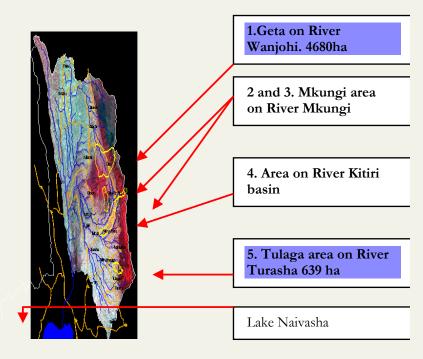
The deeper the RED the dense the forest cover





#### Selected Sub-basin PES Sites

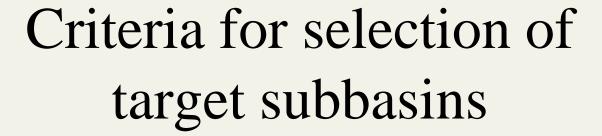




PES Project sub-basin targets

Source: J.M .Gathenya







- Water yield from sub-basins
  - Total water yield
  - surface water yield
  - Groundwater contribution to flow
- Sediment yield from sub-basins
- Also considered
  - Population density and poverty
  - Land use/ land cover dynamics
  - Potential buyers and sellers



# PES Implementation Process

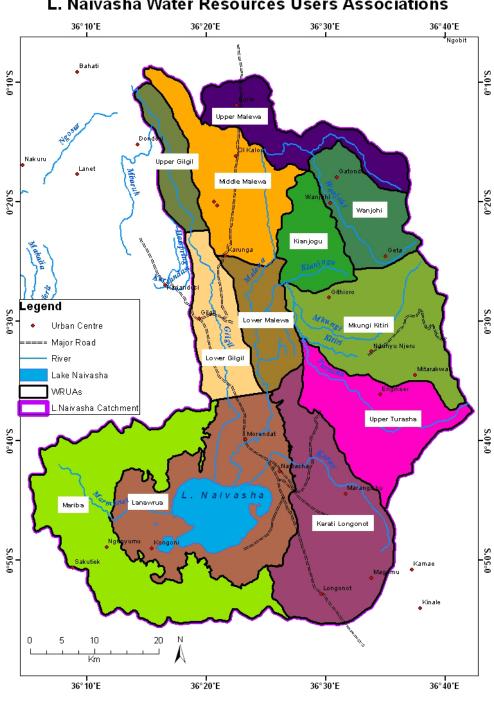


- ☐Site selection based on:
  - (i) Hydrology assessment
  - (ii) business case
  - (iii) Impact on livelihood improvement
  - (iv) Legal framework
- ☐ Community (Buyers, Sellers) mobilization
- ☐ Selection of target farms

- Mapping and laying out
- □Buyer-Seller contract/agreement
- **□**Incentives
- □ Hydrology monitoring



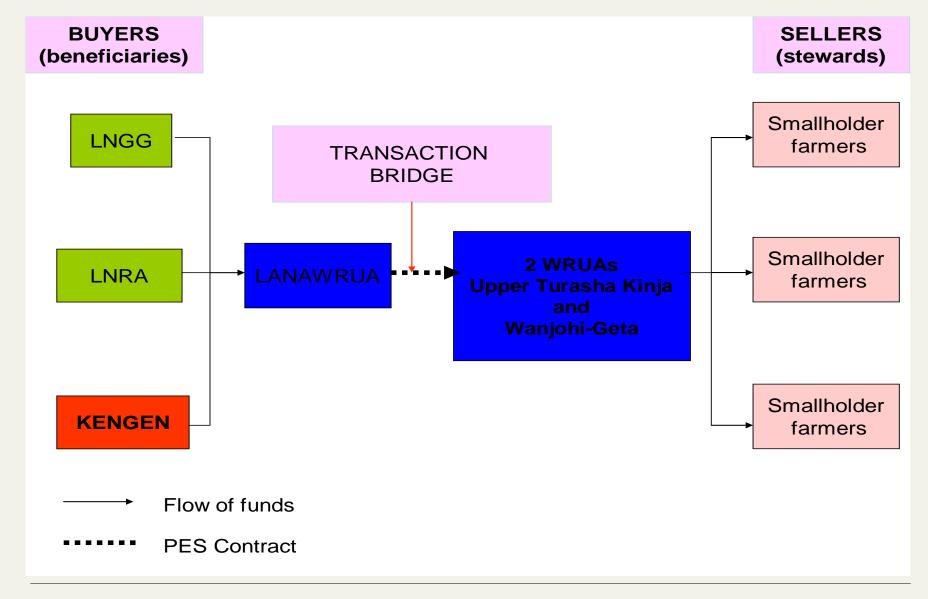
#### L. Naivasha Water Resources Users Associations





#### PES - mechanism in the Naivasha

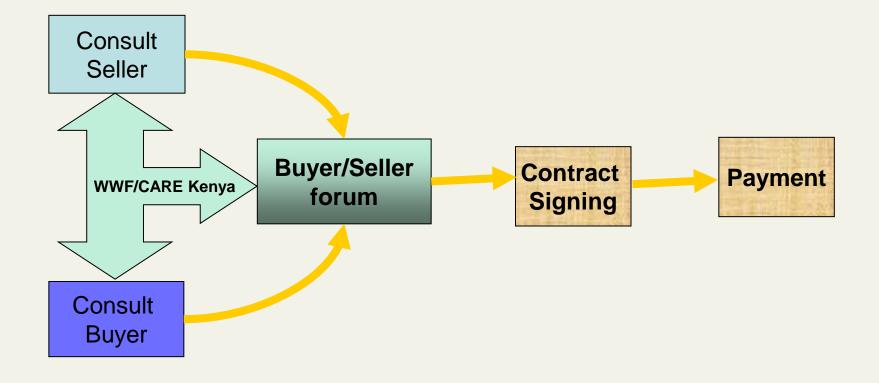








### PES Negotiation process





Two PES farms
(Before and After)









# Key Message



- Naivasha Basin is a complex, fragile ecosystem
- Important economic hub that has local, national and international significance
- Sustainability of economic development is dependant on sustainable input of ecosystem goods and services
- PPPP provides an opportunity for a win-win situation for sustainable investment and livelihood





# Challenges

- Very high demand for change
- Unpredictable weather pattern

- Degraded public lands
- Complex land ownership
- Low buyers buy-in



#### **PES Partners**

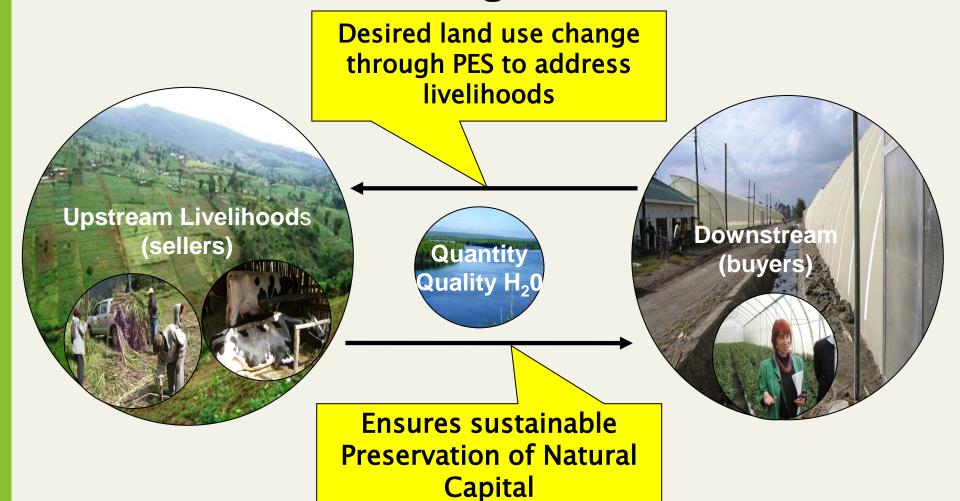


- Development partners- DGIS,
- NGOs WWF & CARE
- Government MWI & WRMA, MoA
- Civil Society & Communities –WRUAs, CFAs, LNRA
- Private Sector LNGG, individual farms



# WWF Experience... Livelihood Linkages







# Key Message



- Naivasha Basin is a complex, fragile ecosystem
- Important economic hub that has local, national and international significance
- Sustainability of economic development is dependant on sustainable input of ecosystem goods and services
- PPPP provides an opportunity for a win-win situation for sustainable investment and livelihood









#### Thank you

www.panda.org

© 2010, WWF. All photographs used in this presentation are copyright protected and courtesy of the WWF-Canon Global Photo Network and the respective photographers.