

an experiment in systemic invention

Founding Partners

Barbara Heinzen James Magode Ikuya Chris Jones Rose Lyimo Mwajuma Masaiganah Msi Choke Seaweed Farmers Cooperative Sammy Muvelah Oby & Hilda Obyerodhyambo

November 2016 Facebook: <u>https://www.facebook.com/Barbets-Duet-733881916669526/</u> archive of reports: <u>www.barbaraheinzen.com</u> → Barbets

Barbets Duet, 2006

Barbets: tropical birds



Environmental care: Gift → economic necessity

> A Business Idea, Not a Charity

> > INVENT New institutions

e.g. property rights & marketing structures organisational forms who support the

SUPPORT

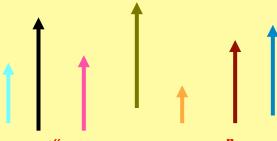
people

natural world

who sing in duet

LEARN from 2 cultures: Africa + West, Modern & Traditional

on equal terms



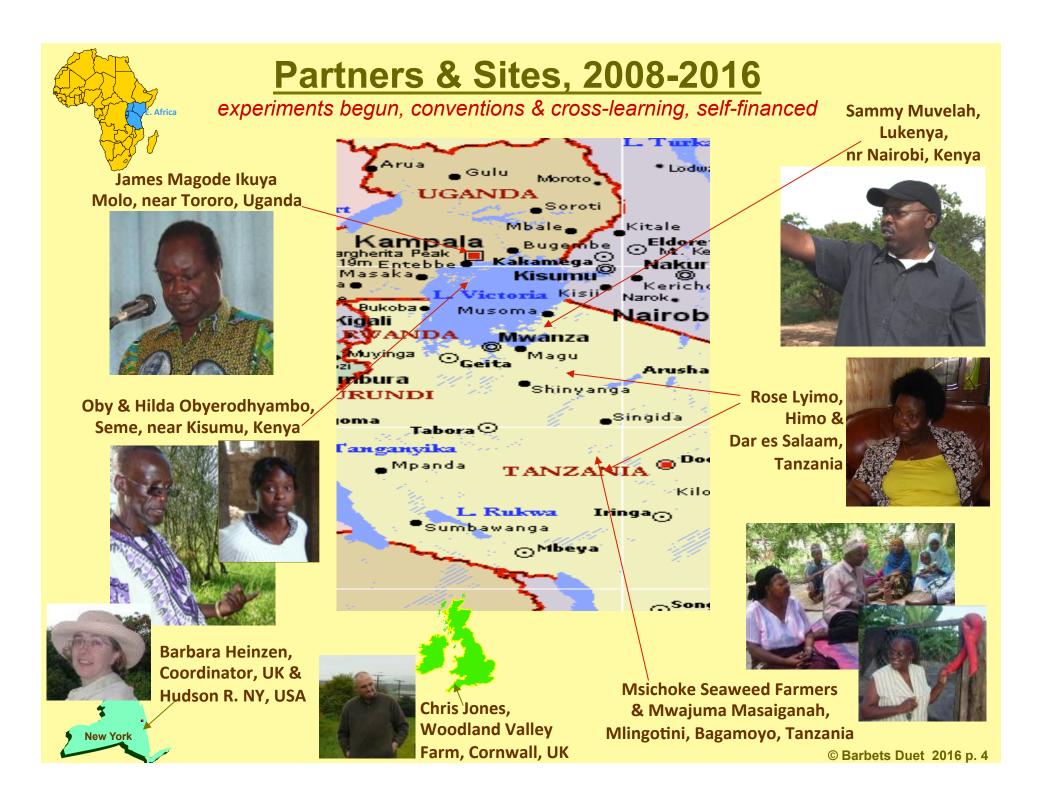
("It will take 20 years..." "it will take several generations") Whe only in duct

Red & yellow barbet, Tarangire, Tanzania - Photos from: <u>http://www.birdingafrica.net/page69.html</u>

Property Rights from Two Systems



Mosaic rights → high social equity, high biodiversity; Column rights → successful markets



Diverse Ecologies →



Hannacroix Creek, NY, USA

Molo, Uganda

Diverse Learning

Seme, Kenya

Lukenya, Kenya



Ladock, Cornwall, UK

Mlingotini, Tanzania

What We Are

Barbets Duet – A Jumuiya

A jumuiya (collective, or constellation) of learning sites experimenting with ways to support people who support the natural world.

How We Learn: Conventions & Visits



Invention Convention, Mlingotini, Tanzania - Oct. '09 Discussing new business ideas.



Rose Lyimo at the Hannacroix Creek, New York 2013

Coming of Age Convention, Molo, Uganda Discussing the need for fences, Jan. 2016



Safari Convention, Seme, Kenya - April 2011 Identifying medicinal plants



Lukenya Convention, Kenya January 2014, Climbing to top of the rock used to collect water for the community dam started by Sammy Muvelah

Useful Principles – for Sites & Jumuiya

Barbets Duet Working Assumptions	Initial Governance Principles	Establishing a Barbet Site
Multiple experiments & diverse sites → rapid learning	Each site evolves in its own way to its own conditions.	"Just Begin" With something that bears fruit quickly
Equity & engagement across knowledge, power & culture	There is value in coming together.	Barbet activity is consistent with its site
Give & gain: Everyone has something to give & something to gain.	In coming together, all have a stake and all share responsibility.	Shape environmental ambitions around immediate needs.
Mosaic Rights → support environmental & social goals.	We are a Jumuiya A <u>jumuiya (</u> collective, or constellation) of learning sites experimenting with ways to support people who support the natural world	Learning by demonstration
		Thinking step by step; one thing follows on another
"Rather than ask: how can Lukenya support a Friesian cow, I ask:		Follow the path of least resistance; start with what is most possible.
h	what can Lukenya support?" Sammy Muvelah, '10	

Barbet Learning Confirmed Feb08

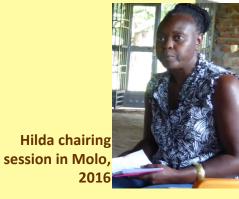


"Sacred grove" at compound gate, 2014, protected area of plants & trees

Seme, near Kisumu, Kenya

Oby Obyerodhyambo & Hilda Adhimabo

Family land, Oby is co-author: Barbets Duet Conceptual Framework





Tissue culture bananas, 2007

Identifying traditional remedies, April 2011 Site activities: Water harvesting, tree planting, medicinal plants, training young people, new & traditional crops, animal husbandry





Oby water harvesting in Seme, 2011

Kenya

Piggery, 2014 Goats added in 2016

Barbet Learning Site Confirmed Feb08

Msi Choke, Mlingotini

Msichoke Seaweed Farmers Cooperative

Tanzania



Discussing soap production at Msi Choke office 2016



Mama Gashindo, Msi Choke Chairwoman

introduced



<u>Mwajuma Masai</u>ganah, Msi Choke neighbour in Mlingotini village



Coastal waters & seaweed farm, Mlingotini, Tanzania, October 2009

Mwajuma Mabewa & Machani Ali, introducing Msi Choke at Seme, Kenya, during Safari Convention, April 2011



Chris Jones, UK, visiting Msi Choke seaweed farm, 2016



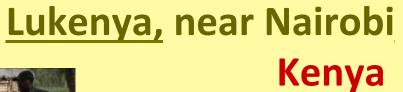
Barbet Learning Site Confirmed Feb08



Sammy Muvelah Fund manager, Zimele Asset Mgt, Nairobi Private land, community partnership

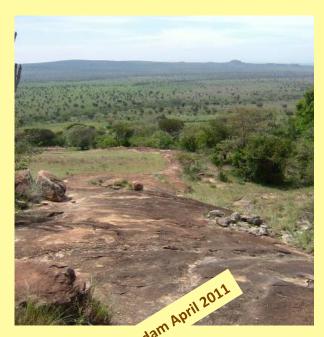














Barbet Learning Site Confirmed Feb08



Identification, protection & propagation of useful trees; Safari Convention, April 2011



Magode Ikuya Clan land, 12 families. Writer, activist, businessman

<u>Molo, near Tororo</u> Uganda



First fish pond, 2011 Molo Rural Agricultural Farming Initiative (MRAFI)



Clan land: 21 km along Kanginima stream, feeding Nile River, 2009



oil seeds for cash cropping, April 2011





forest & swamp land cleared in previous 12 years, 2009

Barbet Learning Site Confirmed Oct09



Ladock, Cornwall England

WOODLAND VALLEY FARM

Raising pasture-fed beef Creating an Edible Woodland Teaching ecology to school children

<u>Chris Jones</u> Family land, Livestock farmer, forester, nut & apple trees, Aug. 2010

Permanent organic pasture, August 2010



Barbet Learning Site Confirmed May 10

Hannacroix Creek, New York



Barbara Heinzen

2010 owner of a swamp forest on west bank of Hudson River, at Hannacroix Creek, New York, USA, gardener

New York



First monarch butterfly found in new native plant garden, Sept 2016.



Can we create a simple tradable biodiversity index?



USA

Rose-breasted grosbeak



Hannacroix Creek at high tide Various habitats at mouth of Hannacroix Creek on Hudson River © Barbets Duet 2016 p. 14

Barbet Learning Site confirmed Feb12



Rose Lyimo Business woman, Co-founder, Akiba Commerical Bank, Dar es Salaam



<u>Himo,</u> Tanzania

Customary canal watering the site 2012



Baba Dan (L) and Hans Mtika (R): new joint management of site



2012: Tree planting during Himo Convention, 2012 © Barbets Duet 2016 p. 15

Barbet Learning Site in May, 2012

Mwasama Pre & Primary School Bagamoyo, TZ



Mwajuma Masaiganah, Feb 2016 Founder of Mwasama School; Partner, Barbets Duet; plant collector





Plants from Anne Outwater's garden of native plants in Dar es Salaam, are taken to Mwasama, Feb 2016.





Shamba Darasa "Garden classroom" Planting trees from Himo, TZ 2012









Barbet Learning Site in February 2016

Hans Mtika, Rose Lyimo's son



Four types of cichlid fish

Cichlid Breeding Dar es Salaam

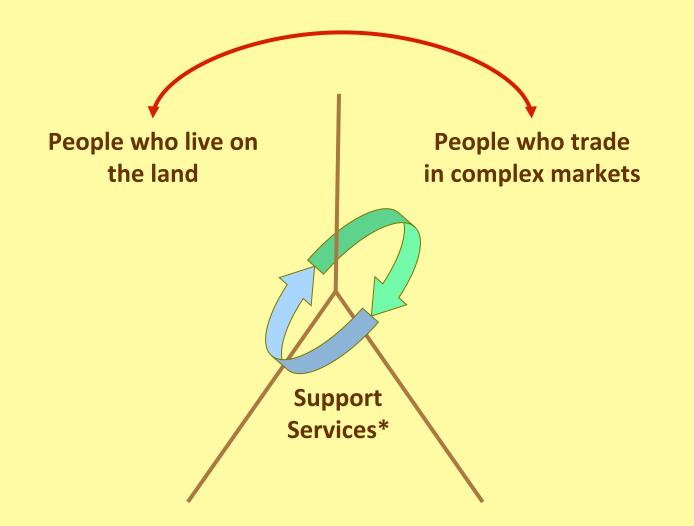
In 2014, Hans, started a business to collect, breed and export Rift Valley cichlid fish to international collectors.

Hans expects to work with local divers working at the Lakes to ensure that fish stocks are maintained. This will require, he said, "a change of mentality".



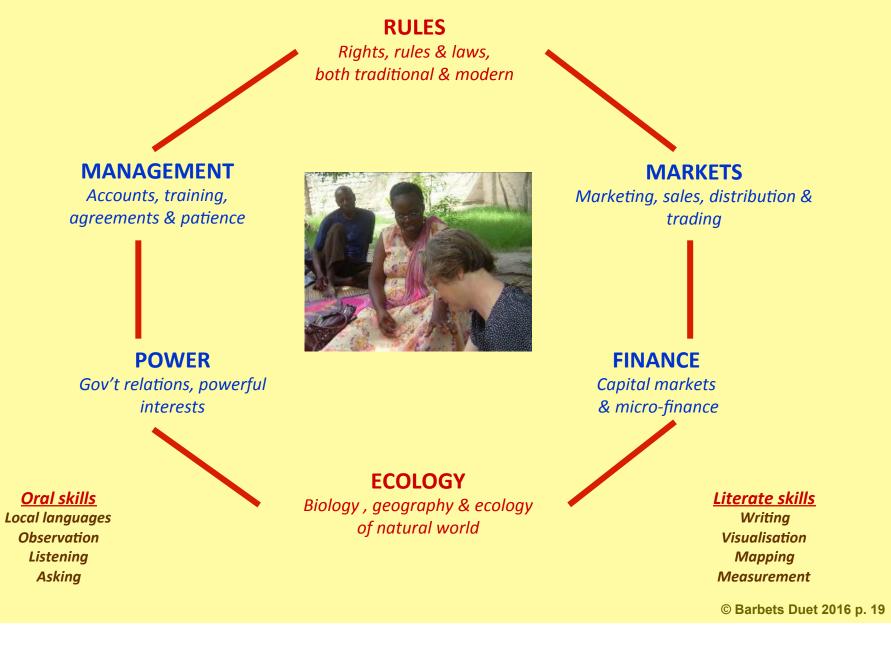
Tanks for holding fish before expo

Principal Relationship: People & Markets



e.g. environmental monitoring, finance, advertising, PR

Necessary Knowledge & Experience



Lessons - 2016



No deadlines

"Rebuilding takes time... We never gave ourselves a deadline."



Multi generational



Mistakes are okay.

"We try, we make mistakes, we learn, we try again."

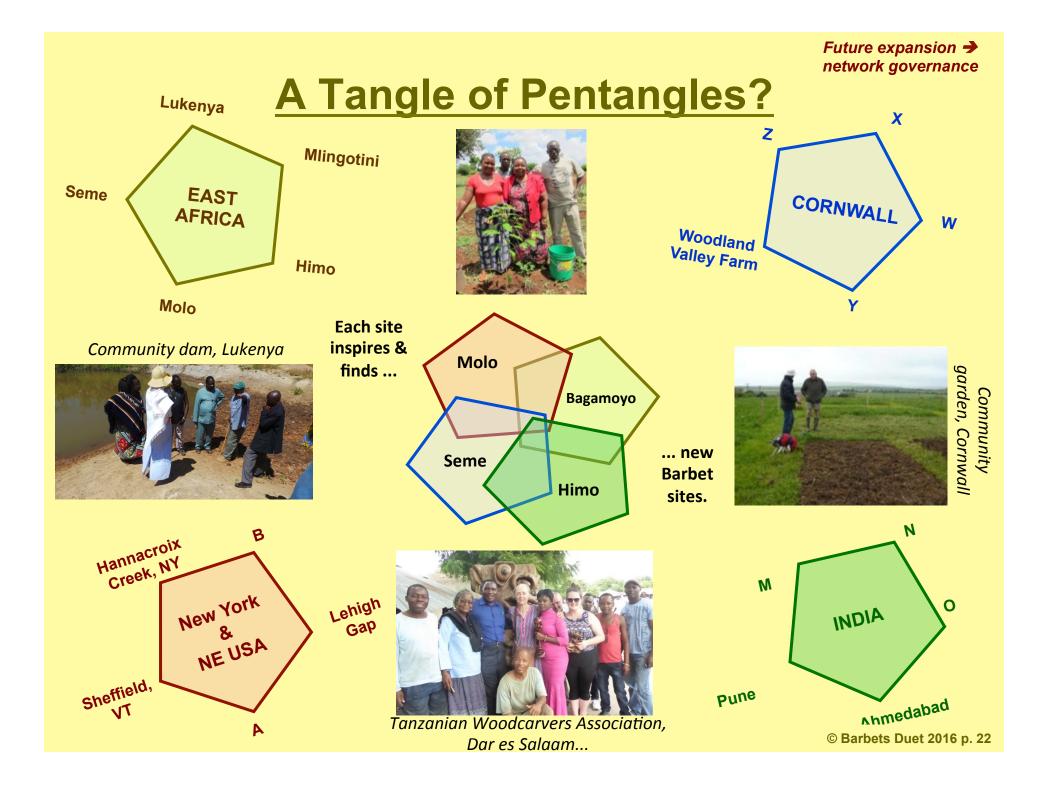


Restoration & economy can work



"Restoration is not contradictory to economic activities ..." © Barbets Duet 2016 p. 20

We have only begun POTENTIAL MARKETS	Products of "Thing" Culture: Moveable products Tangible, portable, Species-specific	Products of "Earth" Culture Environmental products Intangible, immoveable, Site-specific habitats
Utility: creating things we need e.g. clean water, air, food, medicine, cosmetics, building materials; biofuels	•Timber & grasses (wild & domestic) •Medicinal plants •Domestic biodiversity (e.g. seed & semen banks) • Edible – wild & domestic (e.g. roots, bush meat)	• Ground water recharge • Water purification • Carbon sinks (e.g. swamps, grasslands, uncut forests) • Waste management Decomposition services
Insurance: reducing risks of climate change, flooding, loss of ground cover due to climate extremities; loss of food species to disease or bad weather	 Woodlots & grasses Medicinal plants Diverse food supply Domestic biodiversity (e.g. seed & semen banks) 	 Flood control Micro-climate change Wild biodiversity Carbon sinks
Aesthetics Fashion, bragging rights, tourism, meditation	•Edible wild: (e.g. teas, roots, bush meat) •Wild biodiversity	•Species habitats
Intellectual property Genetic reserves	• Medicinal plants • Domestic biodiversity (e.g. seed & semen banks) • Wild biodiversity	•Species habitats to support genetic reserves
Learning & Advisory Services Practical land management & business, Integrating income & environ'tal restoration, Managing experiments & systemic invention	 Barbets Game local field guides 'How-to' manuals 	 Visitor Centres (c.f. Eden Project) Advice on environment/economic integration Working stays at sites



Fundamental Issues

Can price signals reward abundance, not scarcity?

What exactly can be owned & traded?

This may be necessary, but is it possible?

"If it is necessary, it must be possible."

Julius Kipng'etich Director, Kenya Wildlife Service 17 October 2007