Integrating Conservation, Health, Water, Sanitation and Hygiene (WASH) to Support Families, Fisheries and Forests

Lukindo Hiza; The Nature Conservancy & Josaphat Mshighati; Pathfinder International







Photo credit: Pathfinder Internationa

Protecting nature. Preserving life.



Project Description:

Tuungane is a Swahili word for "Let's Unite". It unites The Nature Conservancy, Pathfinder International, district governments, and local communities into an integrated project that simultaneously addresses complex issues of population, health and environment (PHE).

The project empower communities to create healthier families, forests, and fisheries in the Greater Mahale Ecosystem, in Western Tanzania.

Project Goal:

Conserve the Greater Mahale Ecosystem as a diverse, functioning ecosystem sustaining healthy and resilient human and natural communities.







Why work in the Greater Mahale Ecosystem?

Over 250 species of endemic fish



Home to 93% of Tanzania's chimpanzees



17% of the freshwater in the world



Primary source of income & protein for local people





Threats to Conservation and Human Well Being

- Majority of the region unprotected 75% of the chimpanzees living in general land
- Inadequate access to primary and sexual/ reproductive health services
- Rapidly growing population (4.8% per year) and 50% of population under 15 yrs
- Few economic opportunities and families that survive on less than USD 150 per annum
- Unsustainable farming and fishing practices
- Weak local governance and low literacy rates
- Climate change







Theory of Change (Tuungane Project)



TUUNGANE creating a healthy future for people and nature

Water, Sanitation and Hygiene (WASH)

- 2.5 billion people without basic sanitation facilities
- 750 million people lack access to safe, clean drinking water
- ~2,300 people die every day from diarrhea
- Was part of the Millennium Development Goals (MDGs)
- Now Goal 6 of Sustainable Development Goals (SDGs)





Goals of WASH - Health

Benefits of improved sanitation:

- Reduce risk of diarrhea
- Reduce spread of intestinal worms, schistosomiasis and trachoma
- Reduce severity and impact of malnutrition
- Promote dignity, boost safety, particularly among women and girls
- Promote school attendance





Goals of WASH - Environment

- Strengthen fisheries management and improve governance through support to Beach Management Units
- Promote sustainable fisheries by reducing illegal fishing and protecting fish breeding sites
- Improve forest management through conservation agriculture training
- Reduce sedimentation through tree planting and climate-smart agricultural practices





WASH Theory of Change

IF we improve sanitation and hygiene and decrease the disease burden from water-related pathogens,

THEN we increase the time people have for other vital tasks, enabling children to have better school attendance, enabling economic improvement, and improving overall well-being specifically for children and women.

AND we create healthier aquatic and terrestrial ecosystems, mitigate climate change, promote more sustainable water management practices, safeguard health of wildlife and aid the development of a sense of stewardship to protect ecosystems and natural resources









WASH activities

- Prevention
 - Tippy taps with soap
 - Dish drying racks
 - Compost piles
 - Boil water
- Improved information
 - Outreach
- Improved environments
 - Latrines
 - Dish washing far from shore
 - Farming at distance from shore





Conservation activities

- Fisheries
 - Support to Beach Management Units
 - Reduce illegal fishing and identify fish breeding sites
- Forests
 - Conservation agriculture training and tree planting





Baseline survey 2011

Follow-up 2016



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Project Outcomes in the First Four Years

December 2017 By Craig Leisher and Sebastiaan Hess







Results: Latrines

Household differences in latrines (%)

	Improved latrine (with slab)		Pit latrine		
	Unshared	Shared	without slab	No facility	n
2011 unweighted	31	5	62	2	487
2011 weighted	33	5	60	2	487
2016	19	4	72	5	1002



Results: Access to clean drinking water

Households with access to an improved source of drinking water – restricted sample (%)

	Improved source Dry season	Improved source Wet season	n
2011 unweighted	17	22	335
2011 weighted	17	23	335
2016	14	46	415



Results: Handwashing

Hand washing facilities (2016 only)

	No hand washing place	Has water	Has soap/ sand/ash	Has water and soap/sand/ash	n
Igalula	27	72	42	40	127
Rukoma	15	83	50	47	145
Ikubulu	35	63	39	37	57
Buhingu	31	65	42	38	142
Nkonkwa	3	97	70	70	71
Katumbi	7	92	72	70	60
Kalilani	3	97	49	49	35
Kalya	9	90	49	47	150
Kashagulu	11	87	41	39	135
Sibwesa	17	81	51	49	88
Overall	17	81	49	46	1,010



Results: Supporting sustainable fisheries

15 community fish breeding sites now protect 3,286 acres

Household perception of fish catch increased significantly since 2011



Results: Improving forest management and promoting conservation agriculture

40% of trained farmers have adopted improved agricultural practices



More people agree that deforestation causes siltation in local water sources





Conclusions

- Reduced prevalence rate diarrhoea (56% in 2011 to 49% in 2016)
- Increased perception of fish catch (9% in 2011 to 33% in 2016)
- Increased understanding that deforestation causes siltation (50% in 2011 to 68% in 2016)

Challenges

- Few people have access to improved water source
- Still need to allow for significant time to gather water each day
- Difficult for people to construct and maintain latrines
- Not all latrines and handwashing stations are used





Recommendations and Future Activities

- Emphasize engagement on community-based information, including education on WASH and the role of community health workers (CHW) and champions
- Engage health community staff and strengthen the links between the Health Facility and the community
- Support communities with livelihoods interventions
- Connect with experts or other organizations that specialize in WASH
- Increase engagement with local government on benefits of improved access to water
- Continue improving adoption of climate-smart agriculture
- Conduct education and outreach on the linkage between siltation and fish populations in Lake Tanganyika
- Focus on environmental education in schools





