
Hydrologic Corridor Tanzania
First project: Mtanana
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Justdiggit (1/2)

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COOLING DOWN THE PLANET
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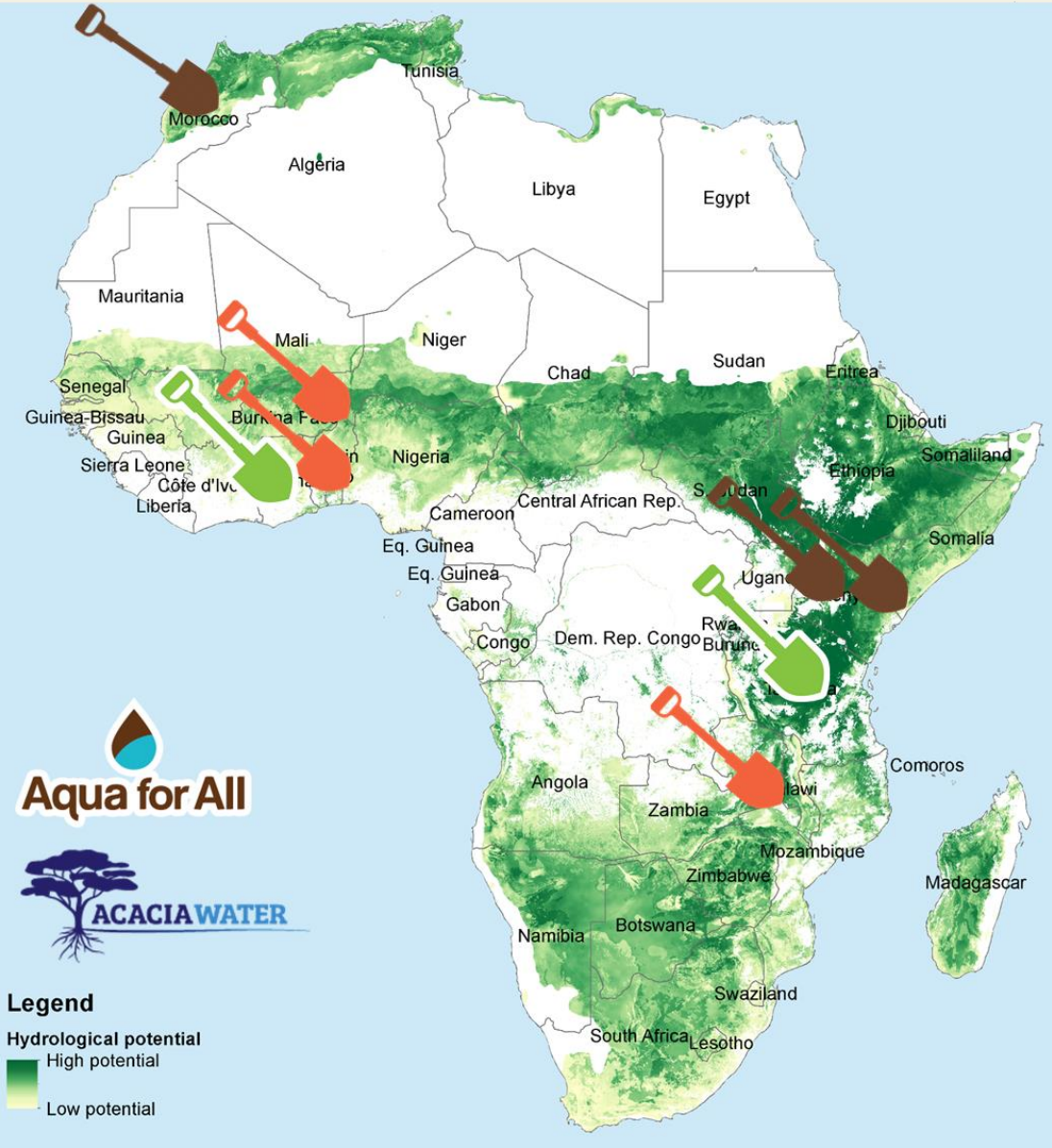
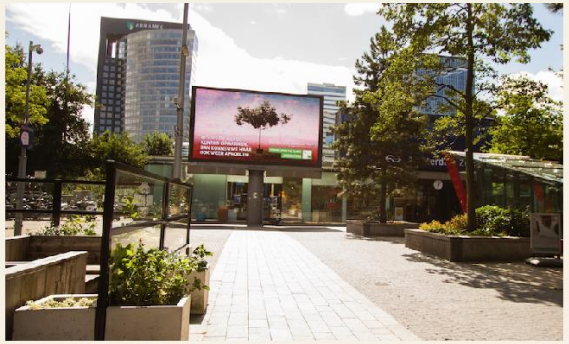
Justdiggit (2/2)





Our 2 main ingredients to restore degraded land

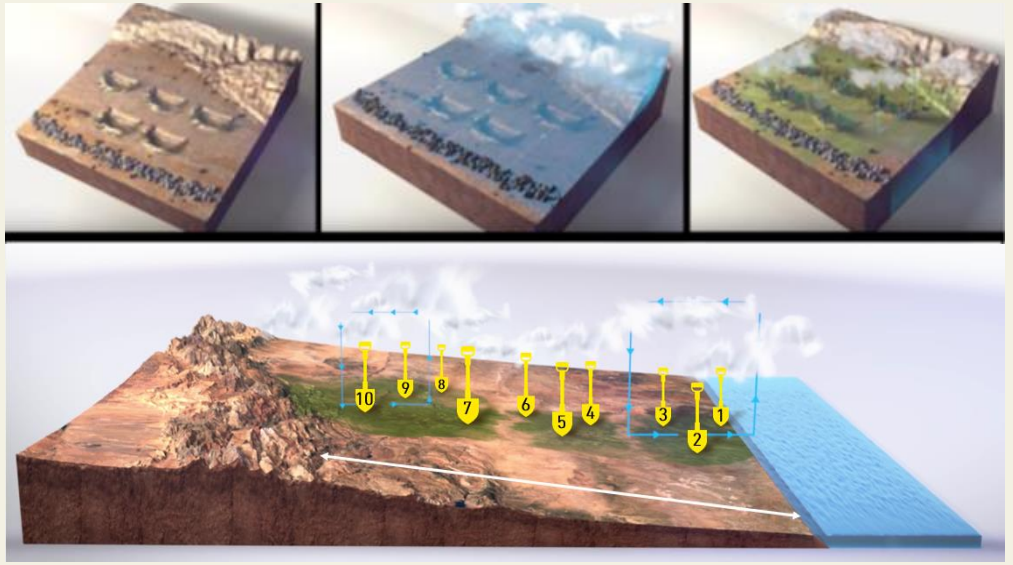
Landscape approach

Basic principles:

1. Involve trees and other woody plants in landscapes where appropriate
2. Scale up successes from individual sites
3. Restore functionality, ecosystem services, not “original” forest cover
4. Balance local needs with national and global priorities
5. Employ a range of restoration strategies
6. Adapt to circumstances over time
7. Avoid strategies that lead to the conversion of natural ecosystems

Source: http://www.wri.org/

Hydrologic Corridor concept



Hydrologic Corridor Tanzania – Dodoma region

Dodoma region

- MOU signed with GoT, mutually decided to focus on Dodoma-region
- Dodoma is Heart of Tanzania, home to capital
- Surface of 41,311 km2 (almost Netherlands), pop. 2,083,588 (2012)
- 90% of populace depends on land for livelihood
- Degraded land, very poor
- Solid economic infrastructure and institutions
- NGO's active in region
- History of projects to build upon

Heart of Tanzania, 7 districts

Important drivers of degradation

Mtanana Landscape restoration project

Selected based on following criteria:

- ✓ Large area: 3,000 ha (7,400 acres) minimum
- ✓ Degraded, but good restoration potential
- ✓ Preferably existing initiatives to build upon
- ✓ Long term sustainability (benefits for community + climate)
- ✓ Strong community, government and partners

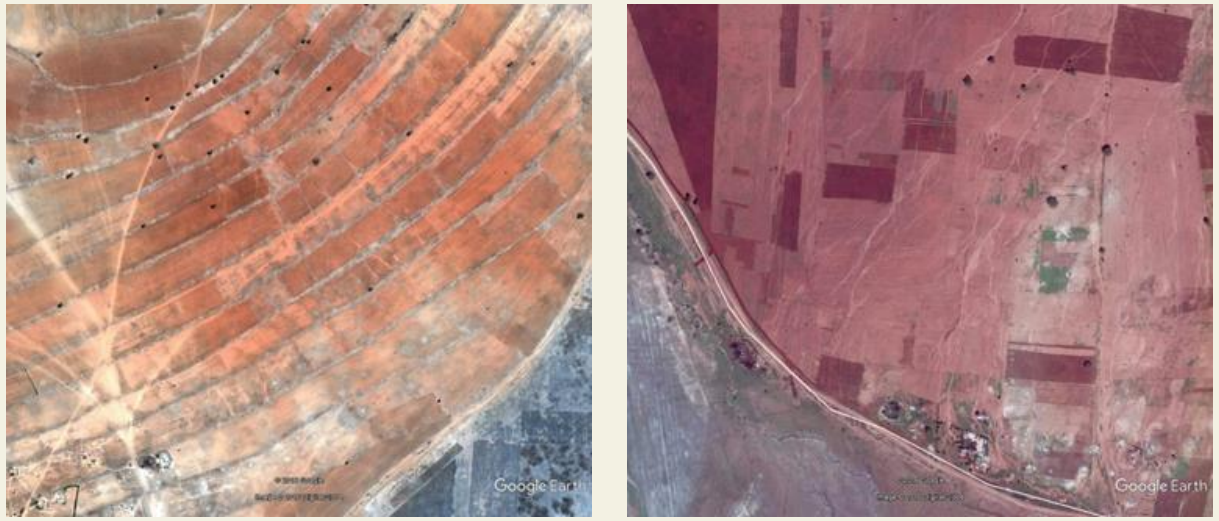
First visit to Mtanana villages

Mtanana Landscape restoration project

Degraded agricultural land in Mtanana

Key characteristics:

- ✓ 90 km east of Dodoma
- ✓ Mainly subsistence farming and livestock
- ✓ Annual rainfall 500mm (rain season nov-april)
- ✓ Kibaigwe grain market nearby
- ✓ Remnants of groundnut plantation from British colonial times (1940's)



Area with contour bunds and no erosion (left) versus area without bunds and many erosion gullies

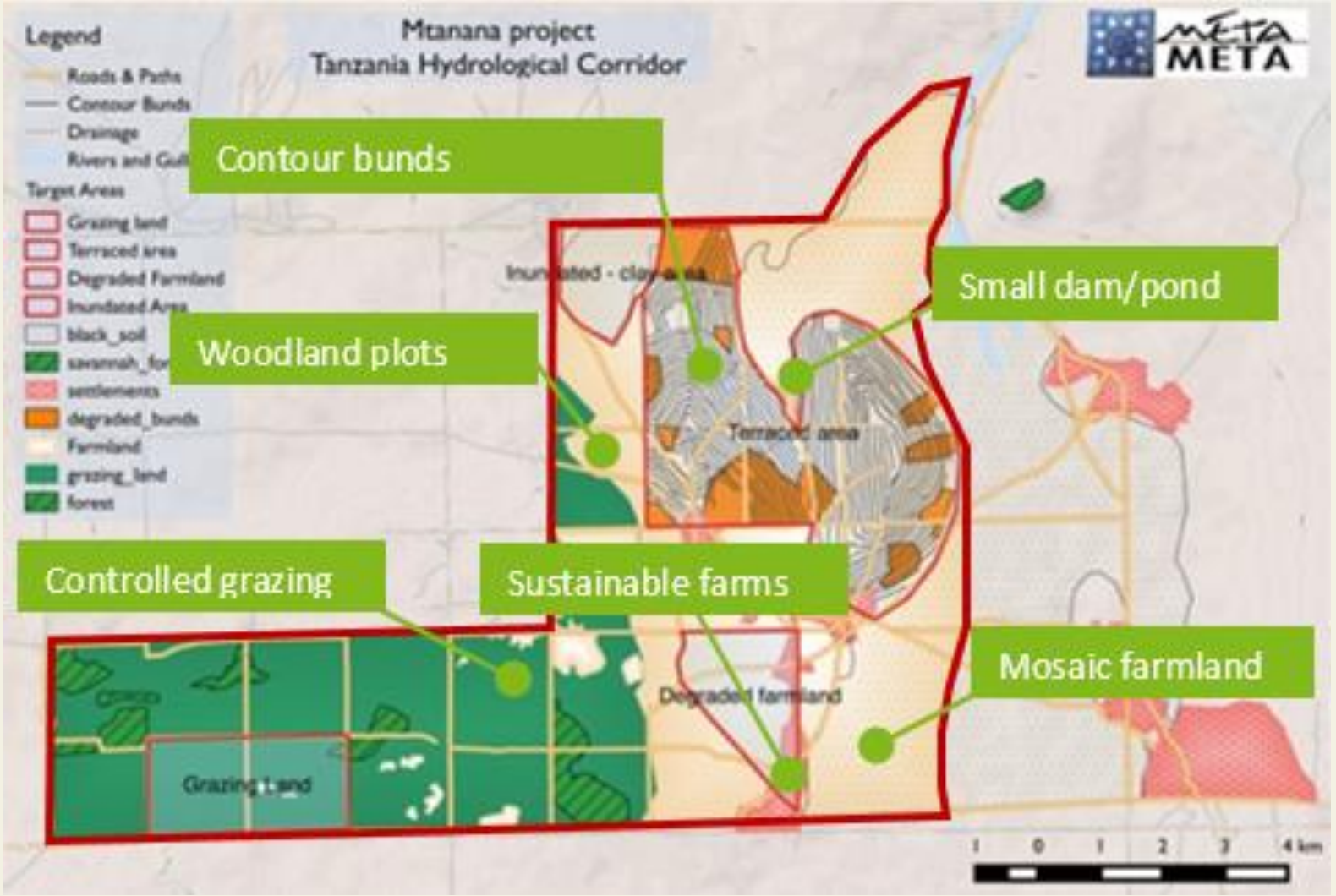
Design approach

- Participatory approach;
- Cascading use of workshops (region, district, ward/village);
- Presence of government, NGO's and private companies at each workshop;
- Equal importance to analysis of physical and non-physical landscape (eg available markets, business cases etc.). Both are input for the design;
- Emphasis in design is on sustainability and replicability;
- Balance between already known and "new" (best practice learnt elsewhere) interventions;
- Relatively short throughput time (aim is 6 months for entire design phase).

Examples of Business cases

Intervention/ System	Business Opportunities				Products
Improved contour bunds with agro forestry	• Bee keeping • Ground nut farming • Sunflower farming				Sunflower seed, Seed cake, Sunflower oil, Ground nuts, Honey, bee wax, propolis, bee venom, royal jelly, pollen
Woodland plots	• Fruit farming i.e. mangoes • Firewood & Timber wood • Tree Nurseries				Mangoes, mango pulp, tree seedlings, fencing poles, timber,
Sustainable farms at household level	• Poultry farming • Rabbit farming • Vegetable farming (tomatoes, onions etc.)				Eggs, poultry meat, offal, tomatoes, onions, Rabbit meat etc.
Controlled grazing	• Ranching (beef cows, sheep & goats) • Fodder farms				Meat, Hides, Treated hides, live cattle, manure, offal, bales of grass.
Mosaic farm land	• Pasture land • Cereals Farming (Maize)				Maize, fodder, pasture
Small dams and ponds	• Fish farming				Fish

Draft design for Mtanana project



Set 1: Contour bunds with agroforestry	900 ha	(30%)
Set 2: Woodland plots	300 ha	(10%)
Set 3: Sustainable farms	150 ha	(5%)
Set 4: Controlled grazing	1050 ha	(35%)
Set 5: Mosaic farmland	600 ha	(20%)
Total	**3000 ha (100%)**	

Set 1 Contour bunds with agroforestry

Set 1 Contour bunds with agroforestry

Example: Contour bunds with agroforestry

Make better use of the bunds by improving their soil and water conservation impact.

Introduce new sources of income such as beekeeping.

Introduce innovative ways to increase tree survival and growing rates.

Assist in new business opportunities such as sunflower oil production.

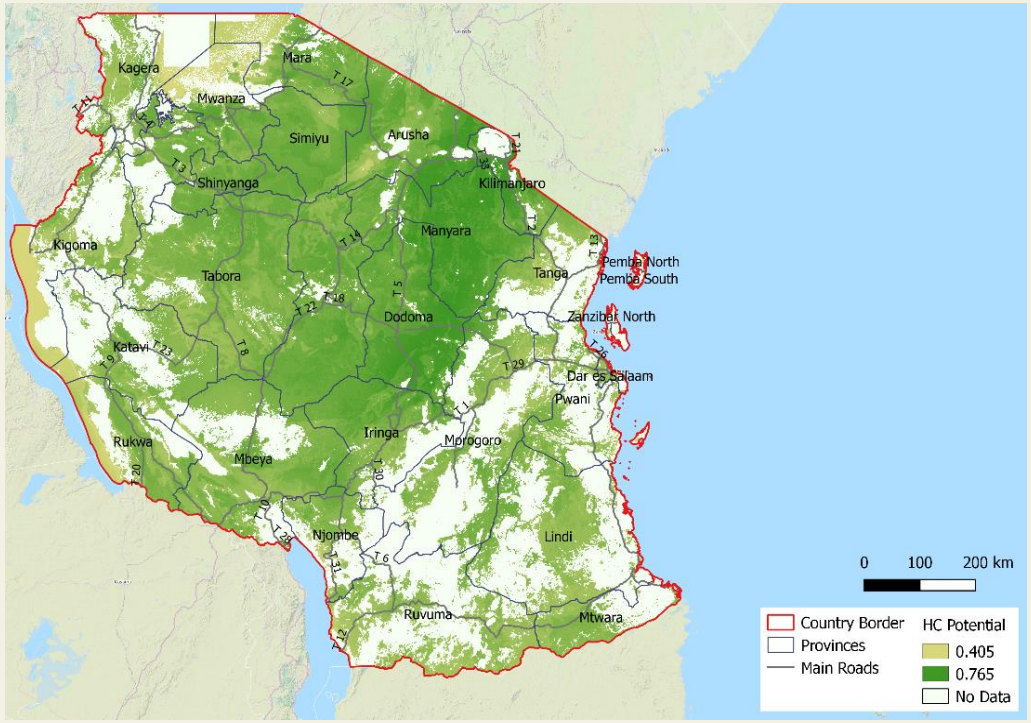
Implement agroforestry practices by planting trees and shrubs along the bunds to increase and diversify farmer income (e.g. fruits. nuts. firewood).

Introduce intercropping and improved ways of working the land to increase crop yield.

Benefits, value cases and business opportunities

- Improved crop yields.
- Reduced risk of crop failure due to improved agricultural practices and diversification.
- Increased biodiversity.
- Sunflower seeds, oil (cooking/cosmetics) and meal (chicken feed).

Scaling to full hydrologic corridor Tanzania



The hydrologic Corridor potential map for Tanzania is based on rainfall, land use, soil, elevation, vegetation and climate.

First project (3,000 ha / 7,400 acres)

Hydrologic Corridor Program (10 x 3,000 ha)

Changes in vegetation cover throughout the year. From left to right: April, June and October

“JOIN ME IN STARTING A GREEN REVOLUTION, JUSTDIGGIT!”

JUSTDIGGIT’S PATRON AND
AMBASSADOR DESMOND TUTU


IF WE CAN
WARM UP
THE EARTH,
WE CAN ALSO
COOL IT DOWN
COOLING DOWN THE PLANET
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