



USAID
FROM THE AMERICAN PEOPLE



Amalima



CNFA
Cultivating New Frontiers
in Agriculture

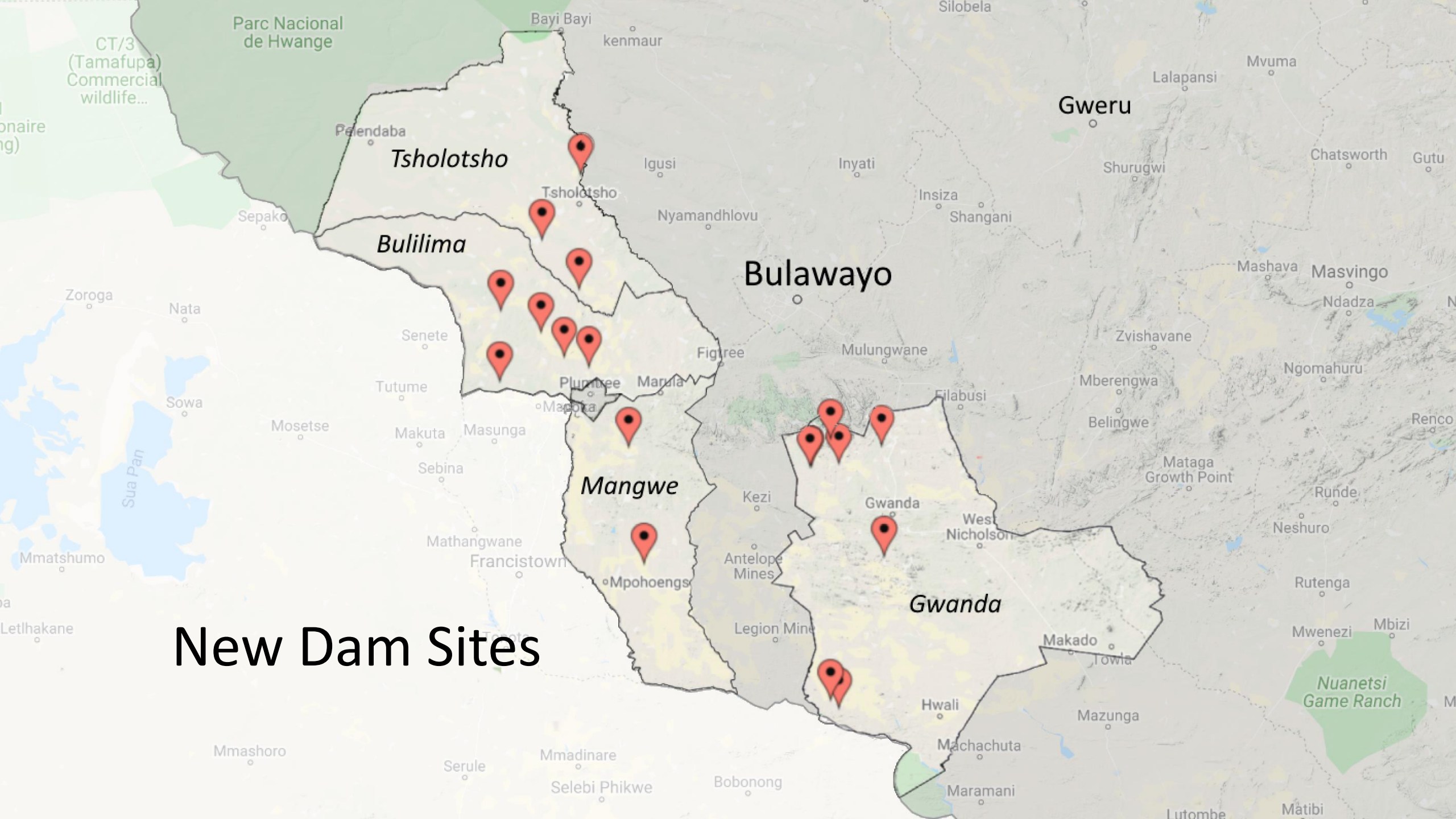
Amalima New Dams 2014-19

From 2015-2019, Amalima communities constructed 18 new masonry dams in 4 districts of Matabeleland North and South.

Almost 4000 community members worked for over 1500 days on the dams and were compensated with cash (\$271,950) or food (over 274 metric tons).

Additionally, Amalima supported the construction or rehabilitation of 106 additional community assets, including dam rehabilitations, cattle dip tanks, grazing land rehabilitation, and irrigation schemes.

Proposed dam sites were identified by communities and listed in ward and district level Disaster Risk Reduction plans.



New Dam Sites

Tsholotsho

Bulilima

Bulawayo

Gweru

Mangwe

Gwanda

Nuanetsi Game Ranch

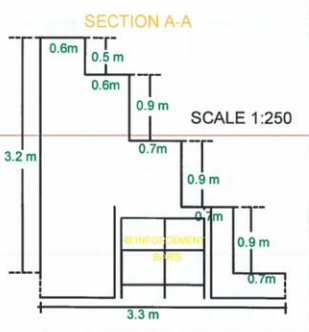
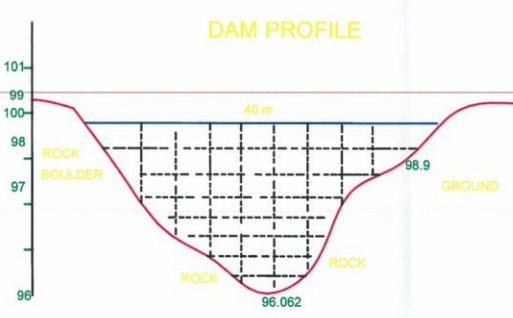
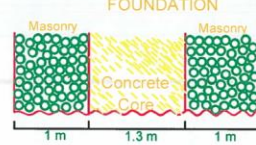
Sites were then verified by Amalima and GoZ engineers for suitability, and designs prepared and approved for selected sites.

Community Labor was mobilized by Amalima. Depending on the season, workers were paid either \$30 or an equivalent food basket per 15 4-hour workdays.

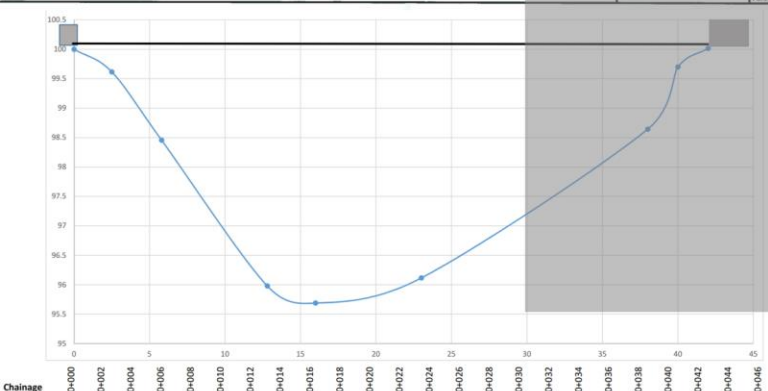
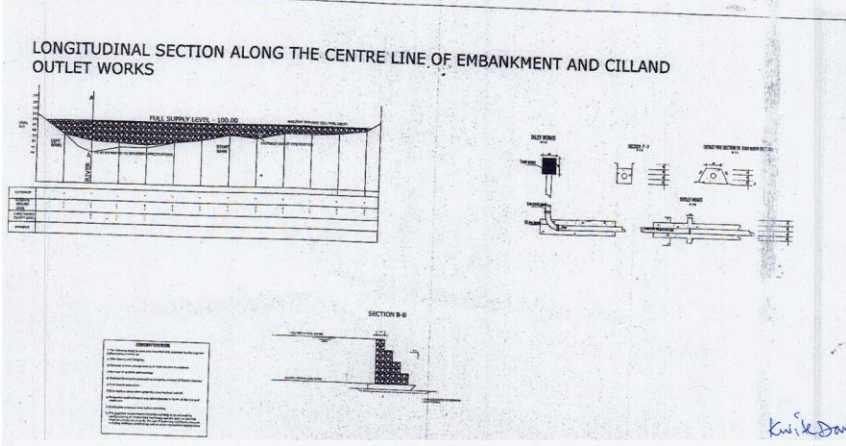
Over 60% of participants were women.

Community workers were supported by local-hired builders (masons) and supervised by Amalima engineers.

MZENTSHE DAM



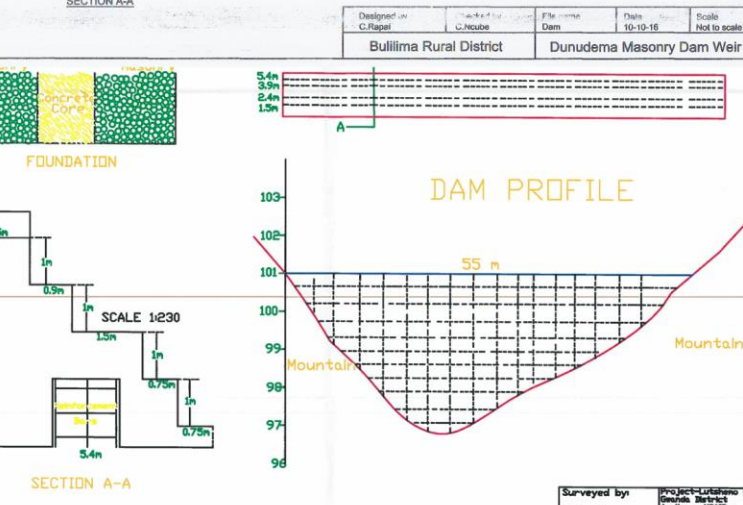
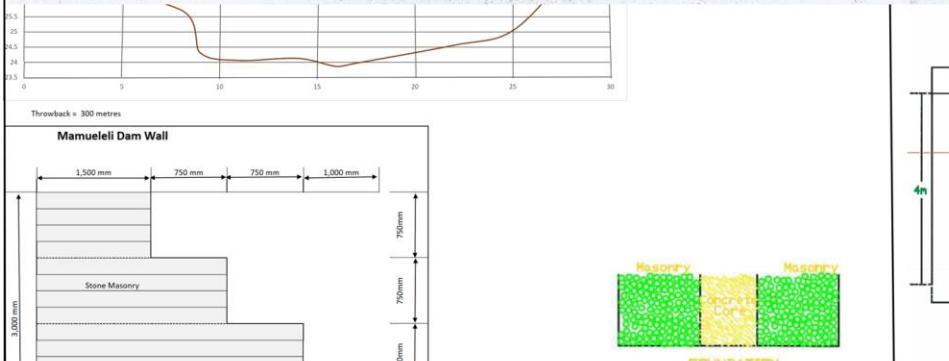
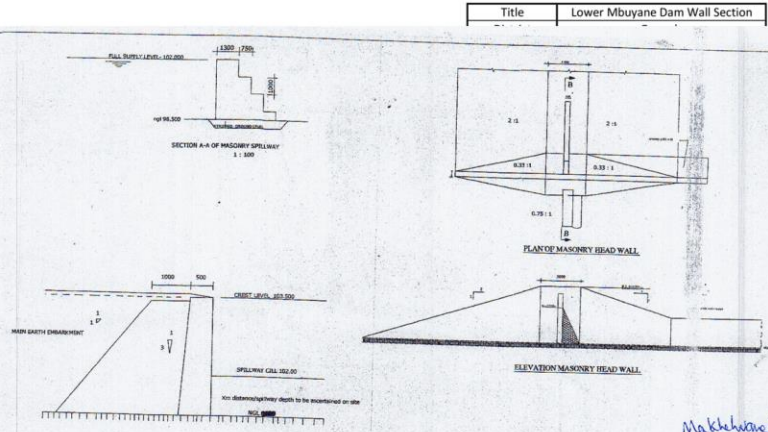
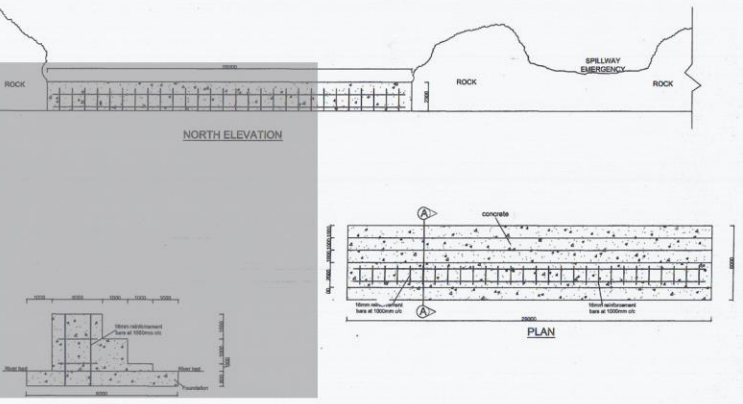
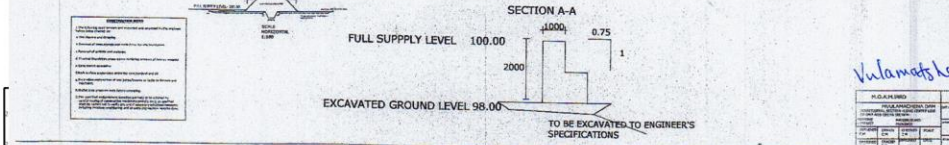
ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL
CONCRETE	m ³	100	100	10000
LABOUR	MAN-DAYS	200	200	40000
STEELWORK	kg	500	500	250000
WELDED REINFORCEMENT	m ²	100	100	10000
WOODWORK	m ³	10	100	1000



LONGITUDINAL SECTION ALONG THE CENTRE LINE OF EMBANKMENT & CILL



Dam Designs



Surveyed by: R Paradza
 Project Location: Mzentshe District
 Design by: R Paradza



Preparing Foundation

Collecting large stones



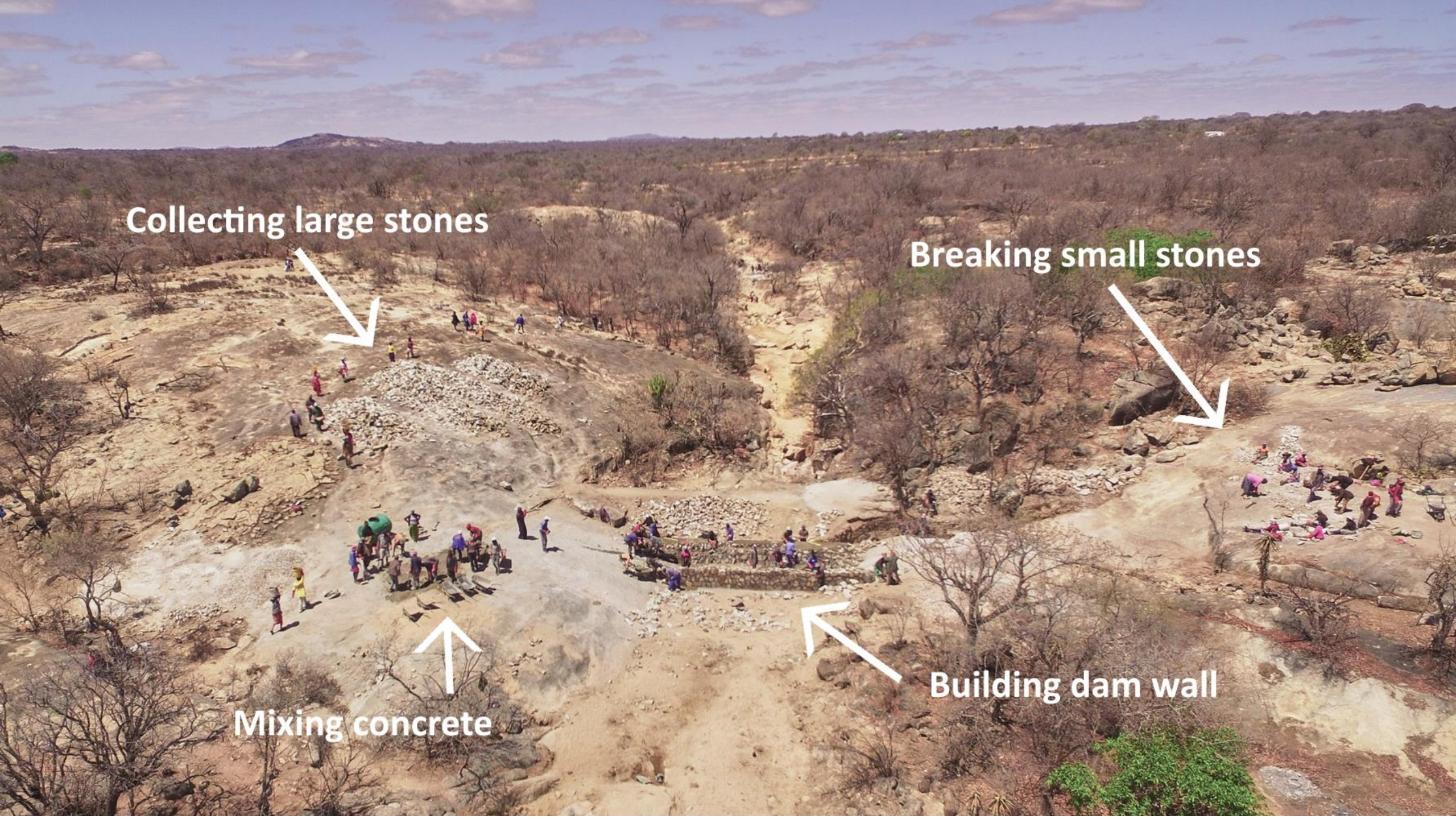
Breaking small stones



Mixing concrete



Building dam wall











Some workers provided childcare



Storekeeper



Communities frequently held celebrations after completion, inviting Amalima, USAID, GoZ...

USAID

AMALIMA

WELCOME TO
LUNYIMBI
DAM





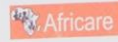




Amalima

Nodzima Dam

Established by local community members supported by the USAID-funded Amalima programme



Some sites have solid stone foundations



Others have poor substrates and require additional works



Earth wall

Downstream stone pitching and gabions

Spillway

Outlet pipe and valve















Remedial Works (e.g. leveling spillway)
conducted after first Year











Three levels of Mbuyane dam complex

Upper Mbuyane dam

Lower Mbuyane dam

Cattle drinking trough









Providing water for over 50,000 cattle in the driest seasons











And for Irrigation...

And even fishing!



All sites have catchment protection works to reduce siltation



Upstream catch dams

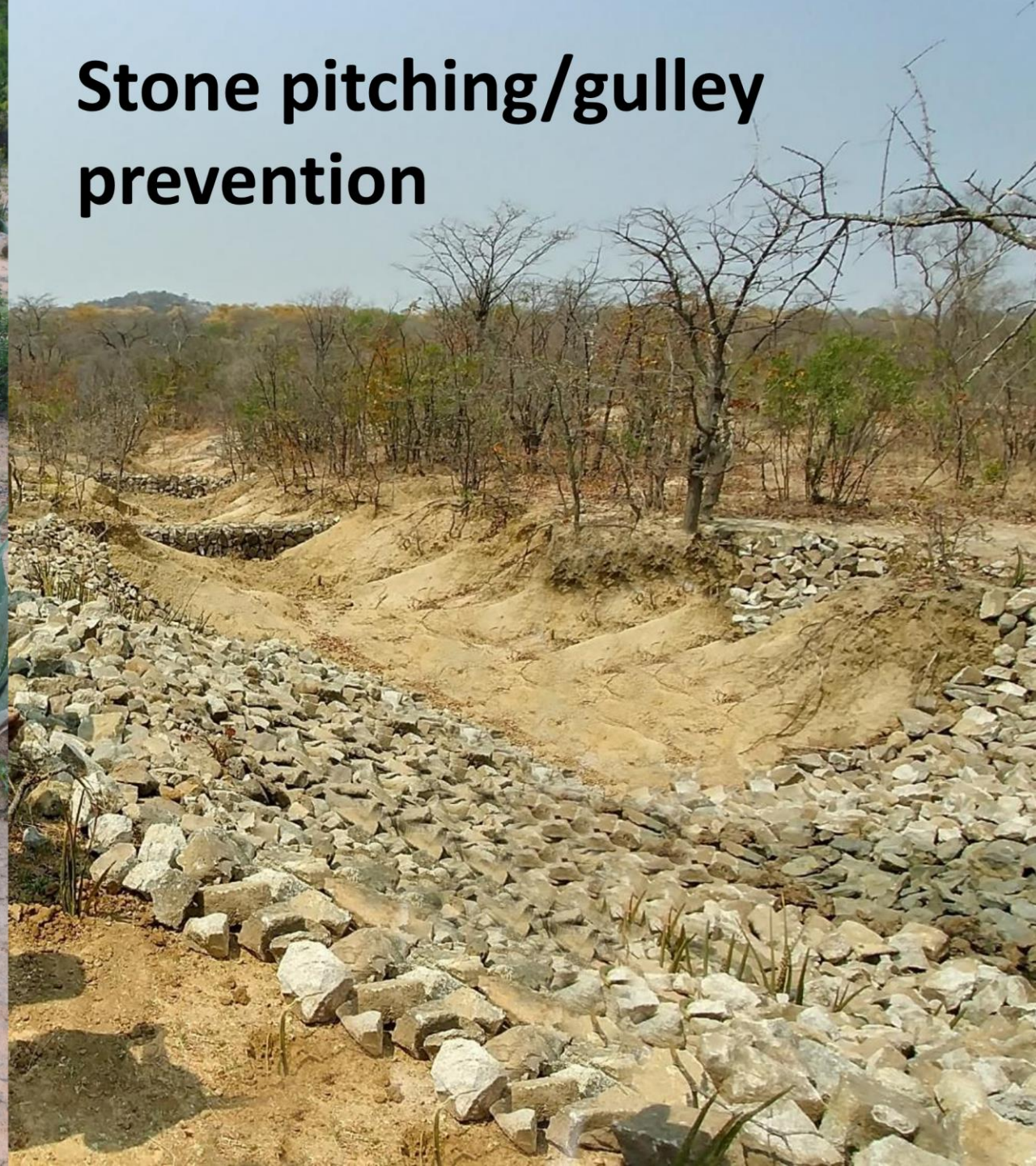




Gabions...



Stone pitching/gulley prevention



An aerial photograph showing a long, narrow structure across a dry, rocky landscape. The structure is composed of two parts: a concrete section on the left and a gabion section on the right. The surrounding terrain is sandy and rocky with sparse, dry vegetation. The text 'Catch dam' is overlaid on the left side of the structure, and 'Gabion' is overlaid on the right side.

Gabion

Catch dam