



# Safe & Reliable Water for Five Communities in Ecuador

**Amelie Catheline**

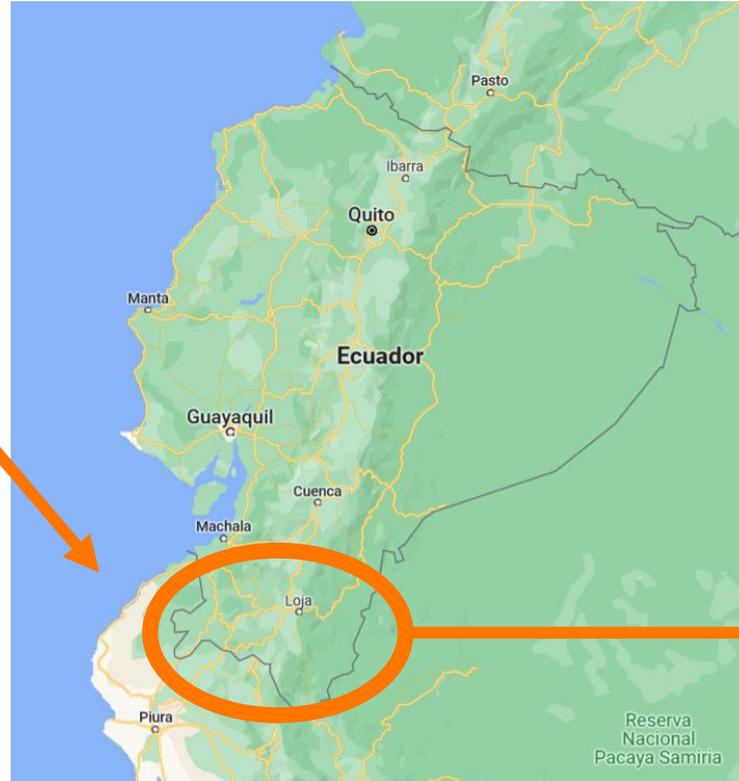
**Solana Beach Eco Rotary Club**

January 3<sup>rd</sup> 2023



# WHERE IN ECUADOR?

Solana Beach Eco  
**Rotary**  
Club



**CANTÓN PUYANGO**

**Rotary Club Loja Los Zarzas**  
Distrito 4400

**CACHAS & EL ARENAL**

**CAZADEROS**

**GRAMADALES**

**CABEZA DE TORO**

Google

# SPONSORS

- **International Club: Solana Beach Eco Rotary Club (D5340)**
- **Host Club: Loja Los Zarzas (D4400)**
- **Supporting Clubs:**
  - Del Mar
  - Encinitas
  - Escondido
  - Rancho Bernardo
  - Rancho Santa Fe
  - San Marcos

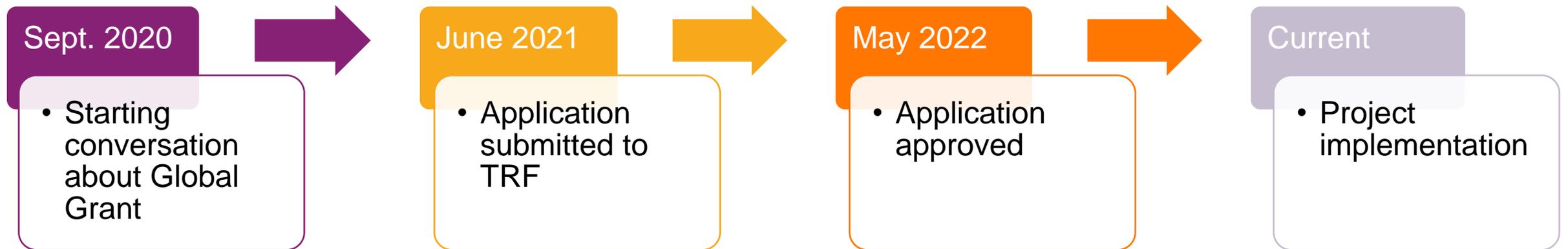


Total Budget  
\$ 69,420

# TIMELINE

- Community assessment
- Raising funds
- Filling online application

- Getting the funds
- Starting the project



- 1-year review
- 2 rounds of questions

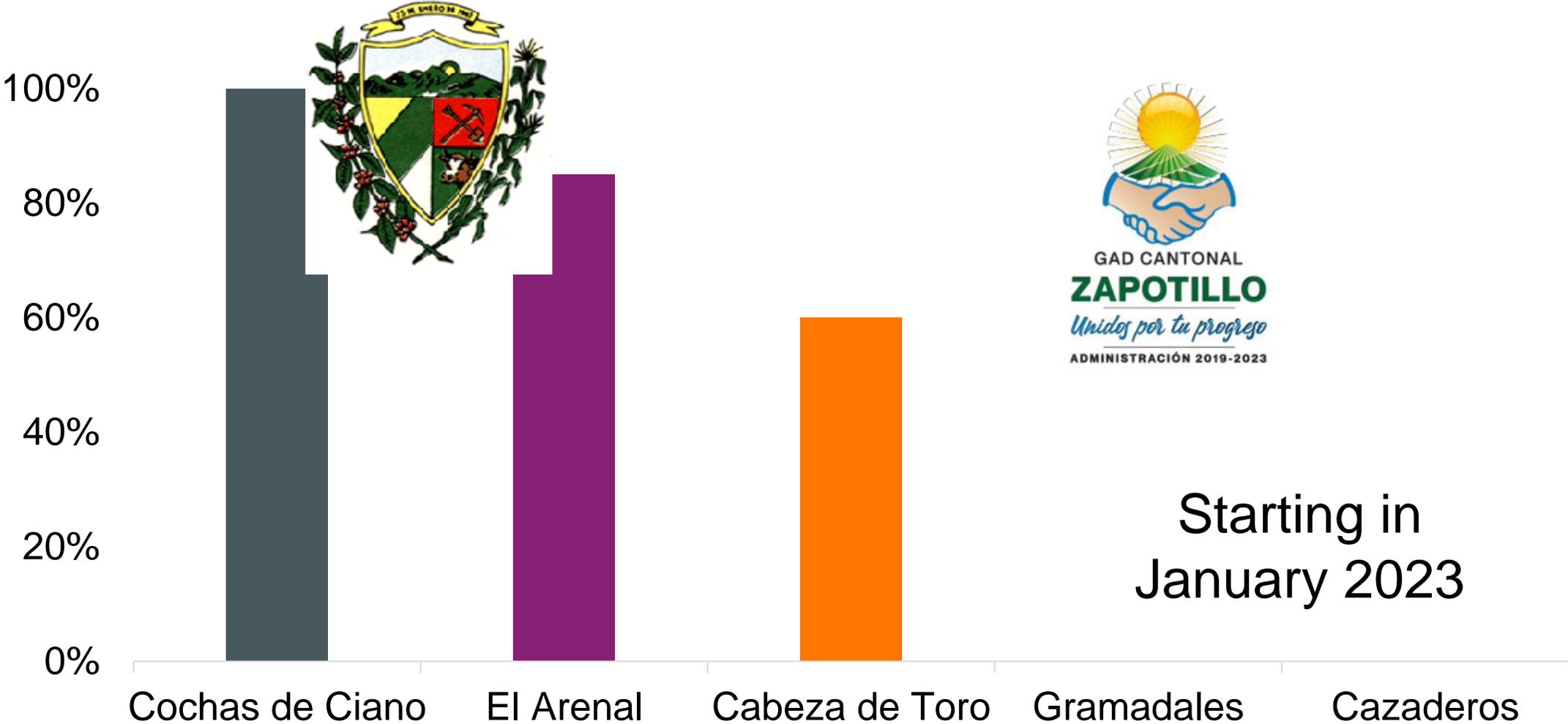
# COMMUNITY ASSESSMENT

1. Water system repairs and maintenance training
2. Conservation & restoration of water sources
3. Water & Sanitation training



# OVERALL PROGRESS OF ENGINEERING WORK

CANTÓN PUYANGO



Starting in  
January 2023



**COCHAS – NEED NEW TILES, FILTER CLEANING, REMODELING THE PLANT**



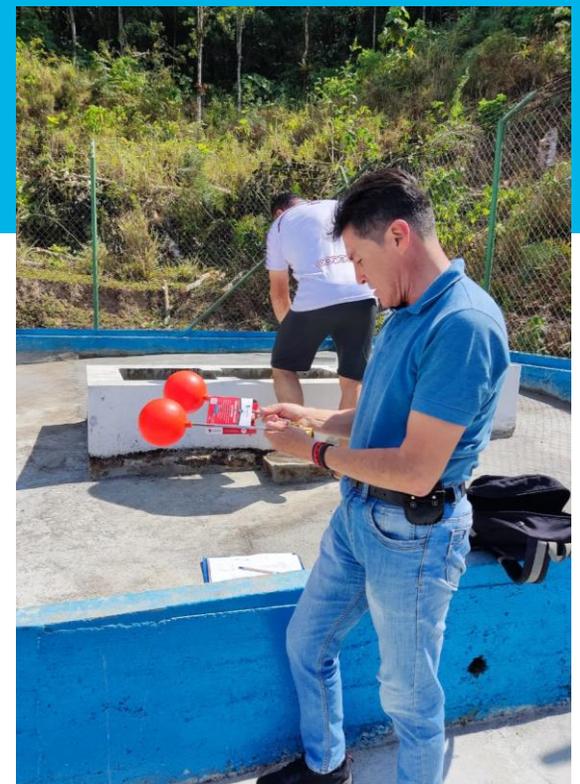
# NEW MATERIAL PURCHASED

---



# AFTER REMODELING

---



# INSPECTION

ENGINEERING WORK 100% DONE

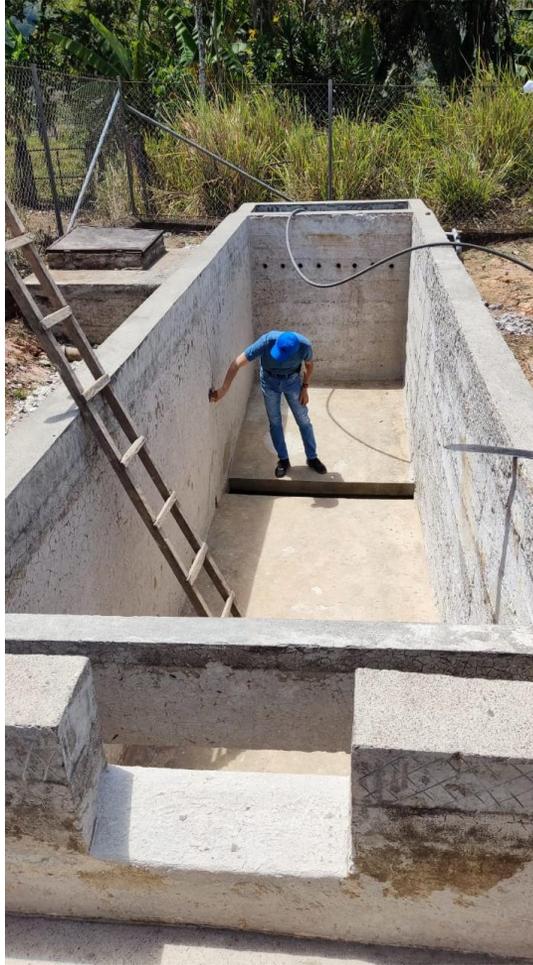
# WORK IN EL ARENAL

## MEETING WITH THE COMMUNITY





# REMOVING DEBRIS & CLEANING FILTERS



# INSPECTION AFTER CLEANING AND DEBRIS REMOVAL

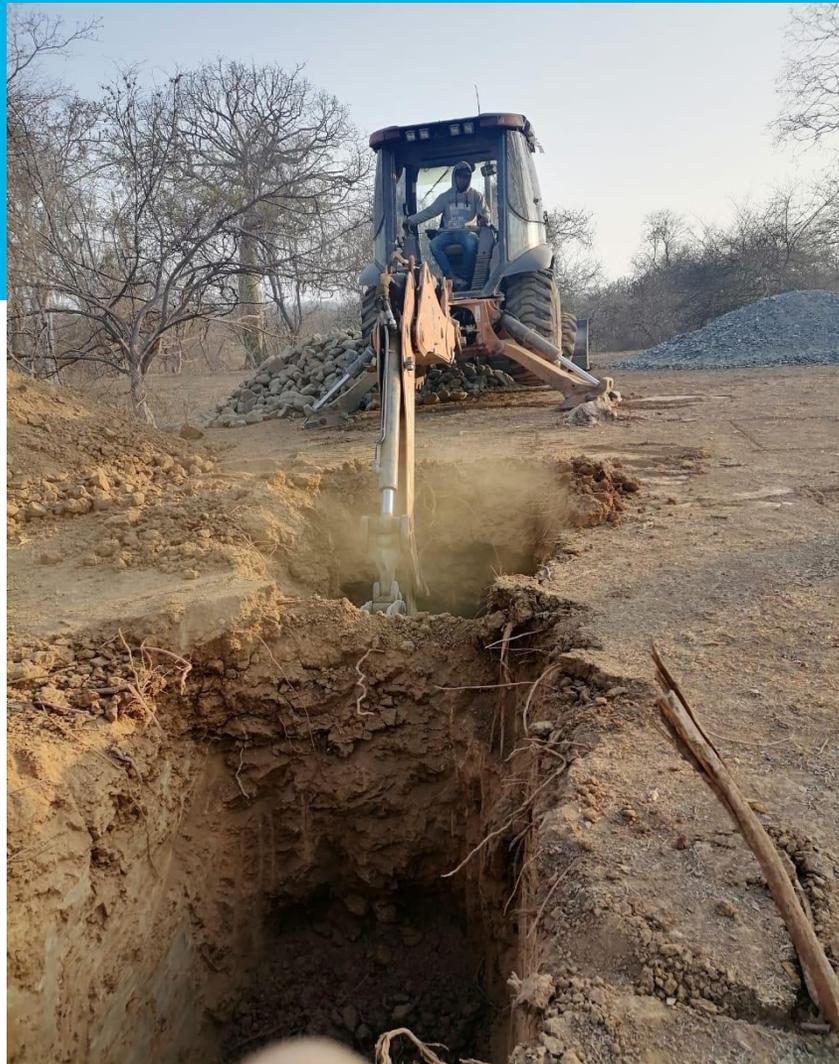
# REMODELING: TILE INSTALLATION





## **CABEZA DE TORO – NEED NEW TANK & STRUCTURE**

---



# EXCAVATION TO INSTALL NEW STRUCTURE

---



# PREPARATION OF THE REINFORCED STRUCTURE

---

# OVERALL PROGRESS OF CONSERVATION WORK



- Cabeza de Toro
- Cazaderos
- Gramadales

CANTÓN PUYANGO



- Cochas de Ciano
- El Arenal

- Process started in all communities
- Meeting and all proposed activities have been detailed, identified and agreed upon with community members
- No field activity yet

# CABEZA DE TORO

Pictures showing deterioration of vegetation

Presence of domestic animals drinking water in water catchment



# CABEZA DE TORO

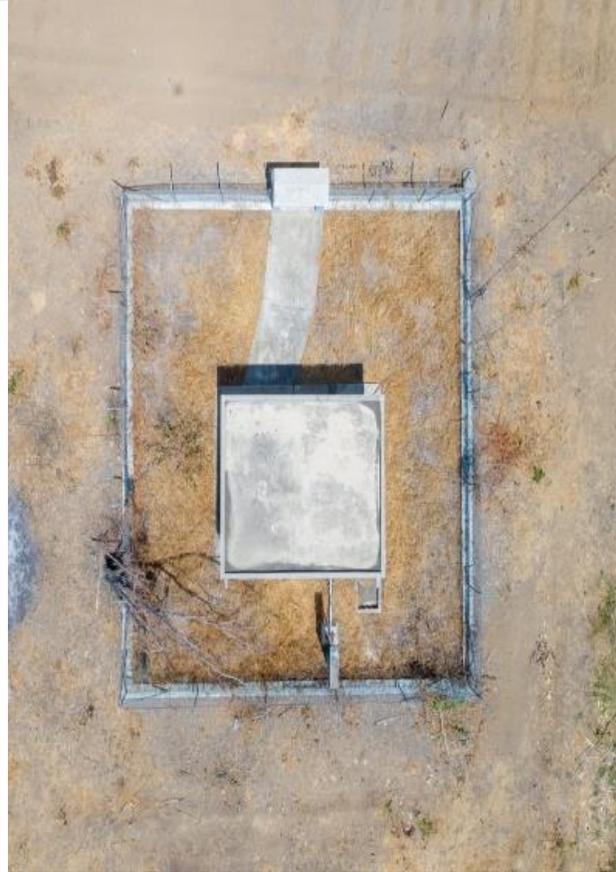
Proposed activities

Fencing to enable plant regeneration

Providing water points for animals

Signage and training





# CAZADEROS

Water is captured through a well; the well has a shed and is fenced – improvements required

Agricultural land surrounding the well

No adequate vegetation cover ensuring water will remain permanently available

Training and education needed

# GRAMADALES

- \*Appropriate vegetation cover
  - \*Cleaning and permanent maintenance of water source
- 

- Improve and expand existing protective fences of the watershed
- Training and education



# NEXT

## **Engineering Work**

expected to be done by the end of January in all communities

## **Operation & Maintenance Training**

will start once the engineering work is done

## **Sanitation & Hygiene Training**

will be done once the water systems are fully operational

## **Conservation Work & Training**

will start as soon as possible (fencing, planting and training)

Solana Beach Eco  
**Rotary**  
Club



**Thank you**

