



META  
META



# Affordable portable solar pumps

# Goal



Creating a sustainable and scalable distribution model of affordable portable solar pumps for small-scale farmers.

- Each partner must benefit
- Repairable
  - Spare parts
  - Skilled retailers making a profit

# Initial pump design



[www.jacana.help](http://www.jacana.help)





# Current Design



## Components:

- Two solar panels
- Pump + cables
- Panel Stand
- Pre filter
- Hose

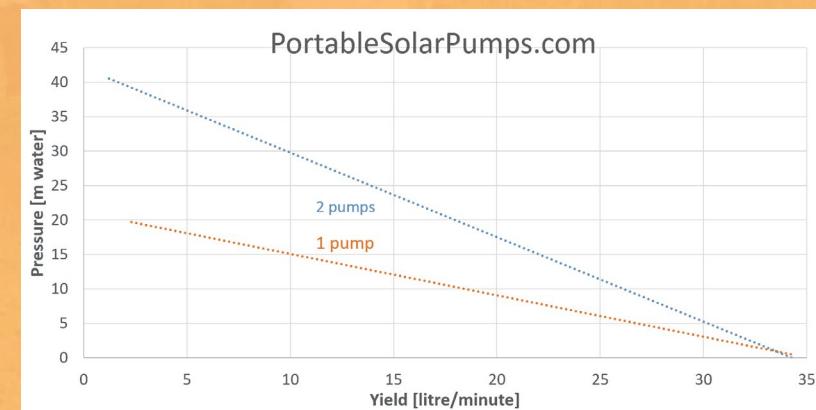
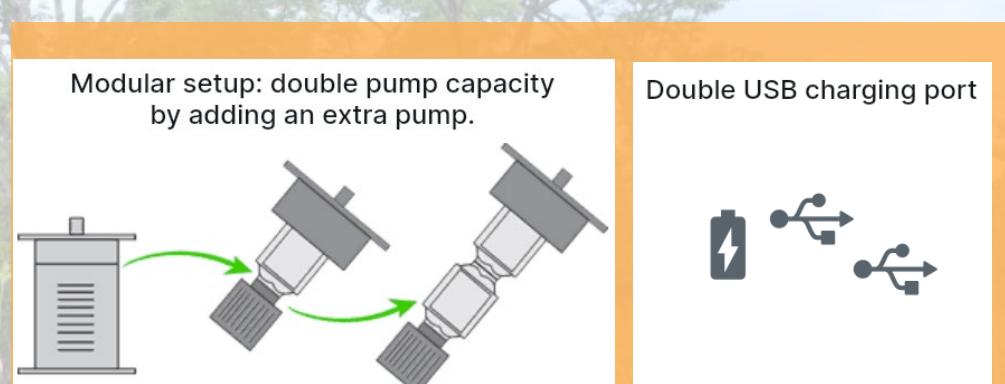


<https://portablesolarpumps.com/>

# Current Design



[www.jacana.help](http://www.jacana.help)



# Who are involved?

**Warehouse: import/distribute:**



**NGOs (like DAPP):**

DONATE



**DAPP**  
Development Aid from People to People in Zambia

**Retailer / SME:**



**Farmers:**



**Jacana / MetaMeta:**

 **meta**  
**META**



# The Innovations

## Optimizing pump design

- Flow rate
- Cost

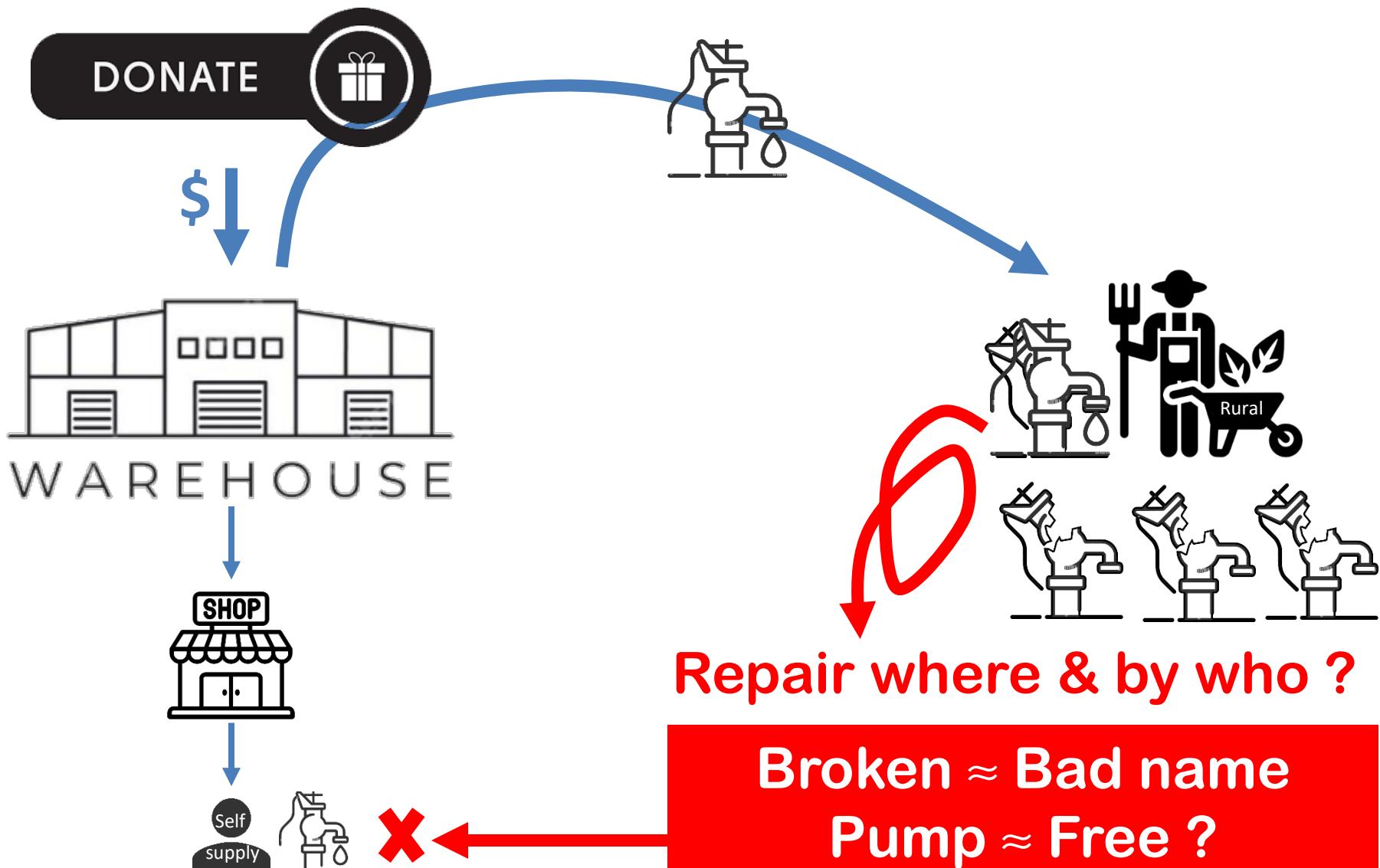
## Supply Chain

- Discount coupon
- Repairs and after sales
- Self-supply market

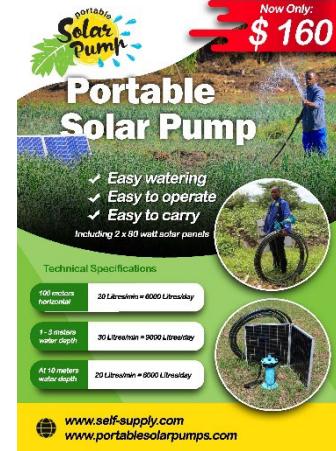
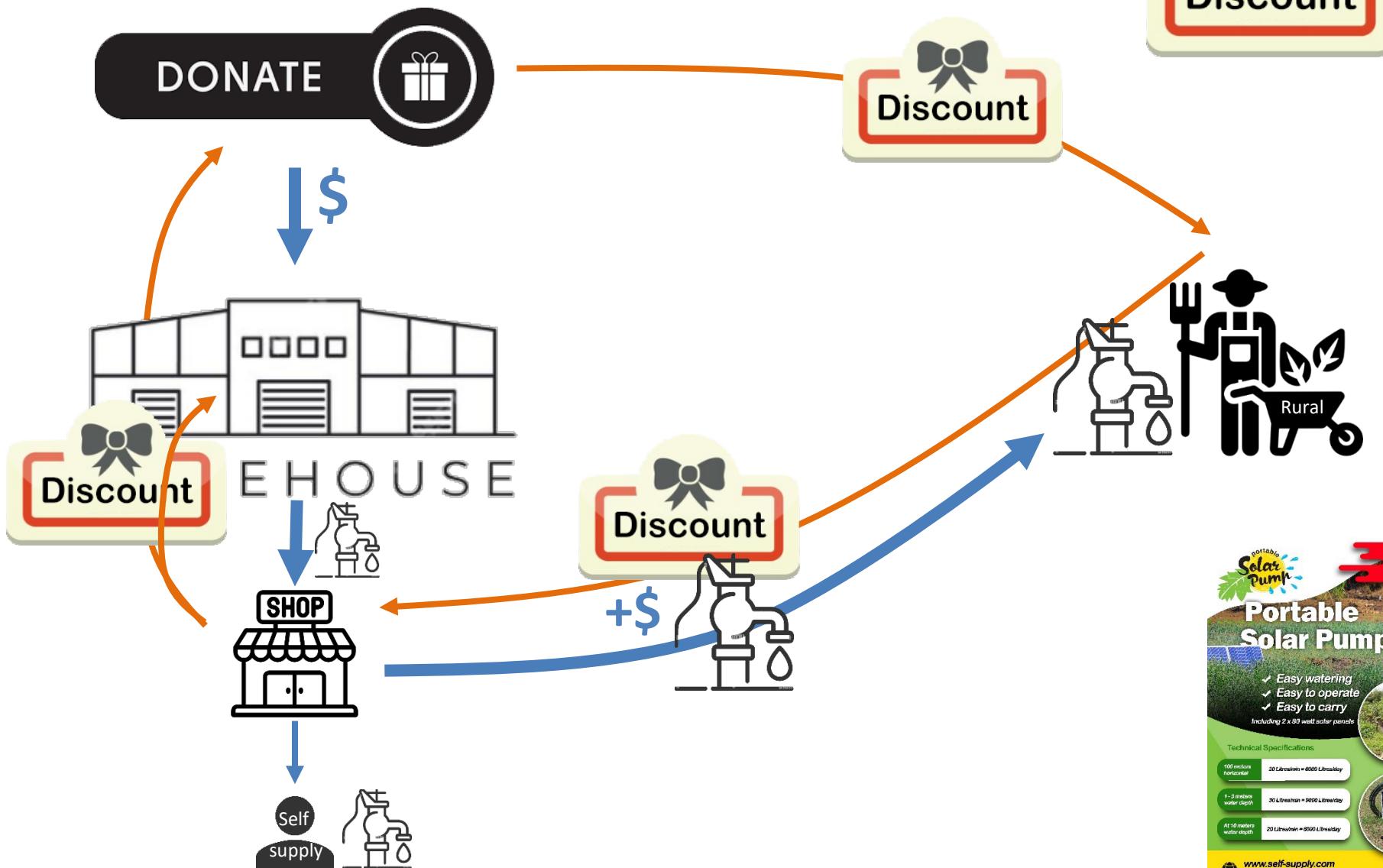
## Software

- After sales
- Quality control

# Donations distort the markets!

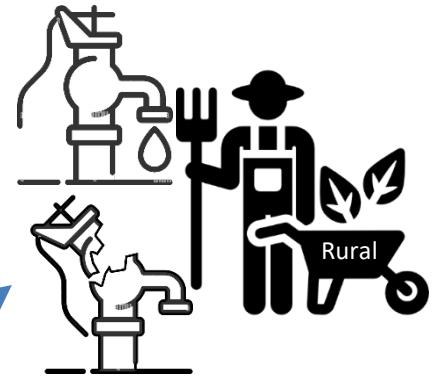
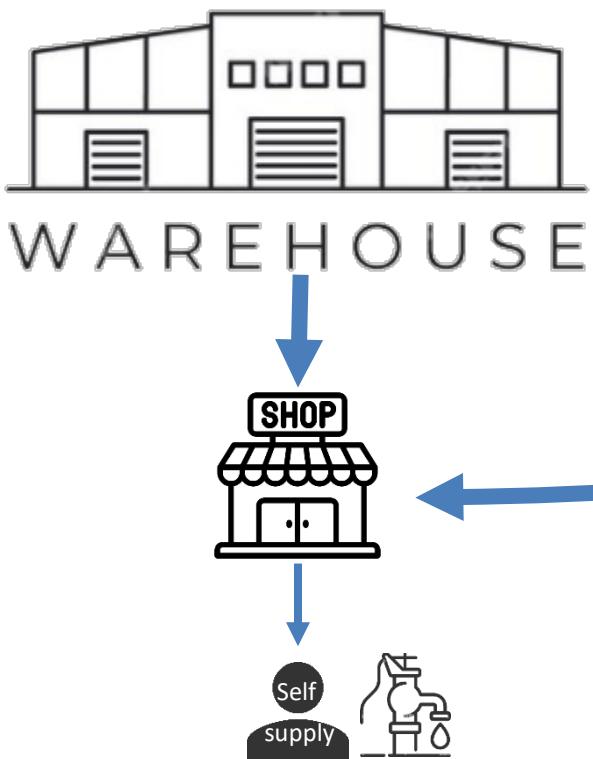


# Solution: Discount Coupons

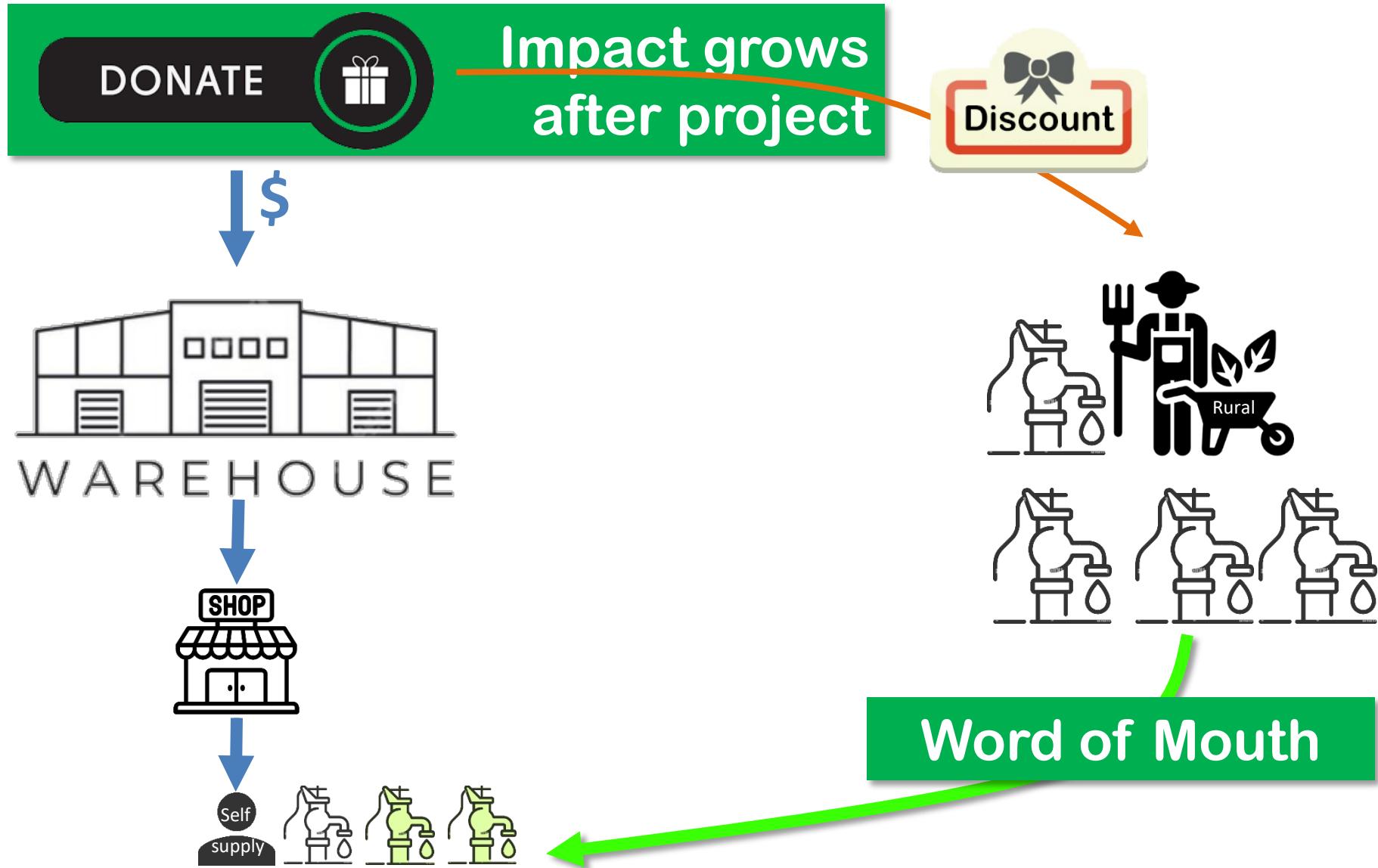


# New: Supply Chain

## New pumps and Repairs



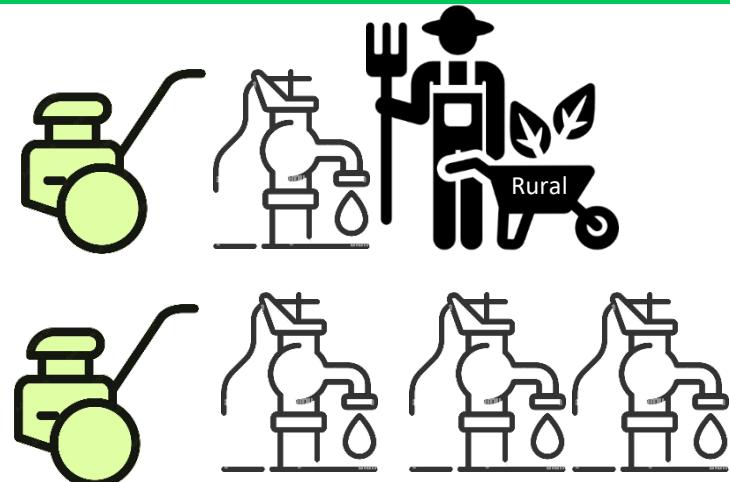
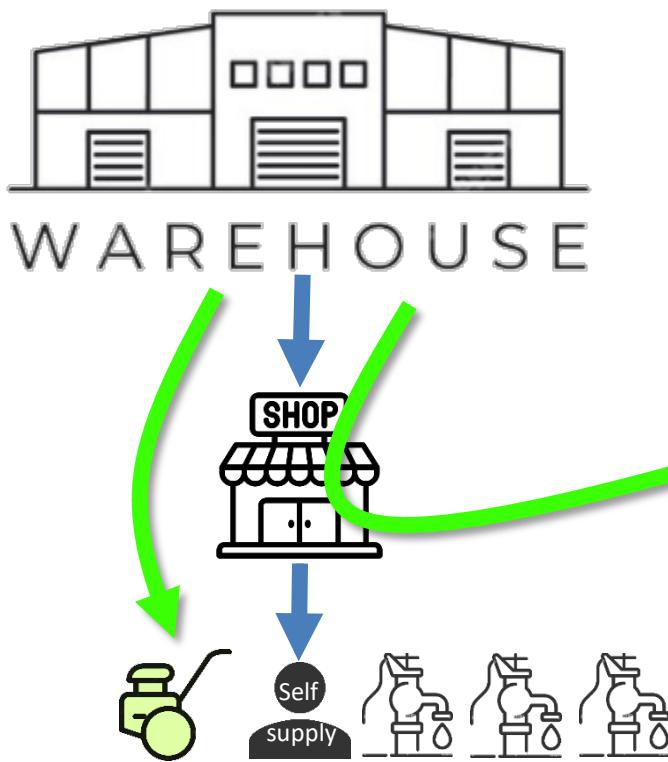
# New: Increase Self-supply



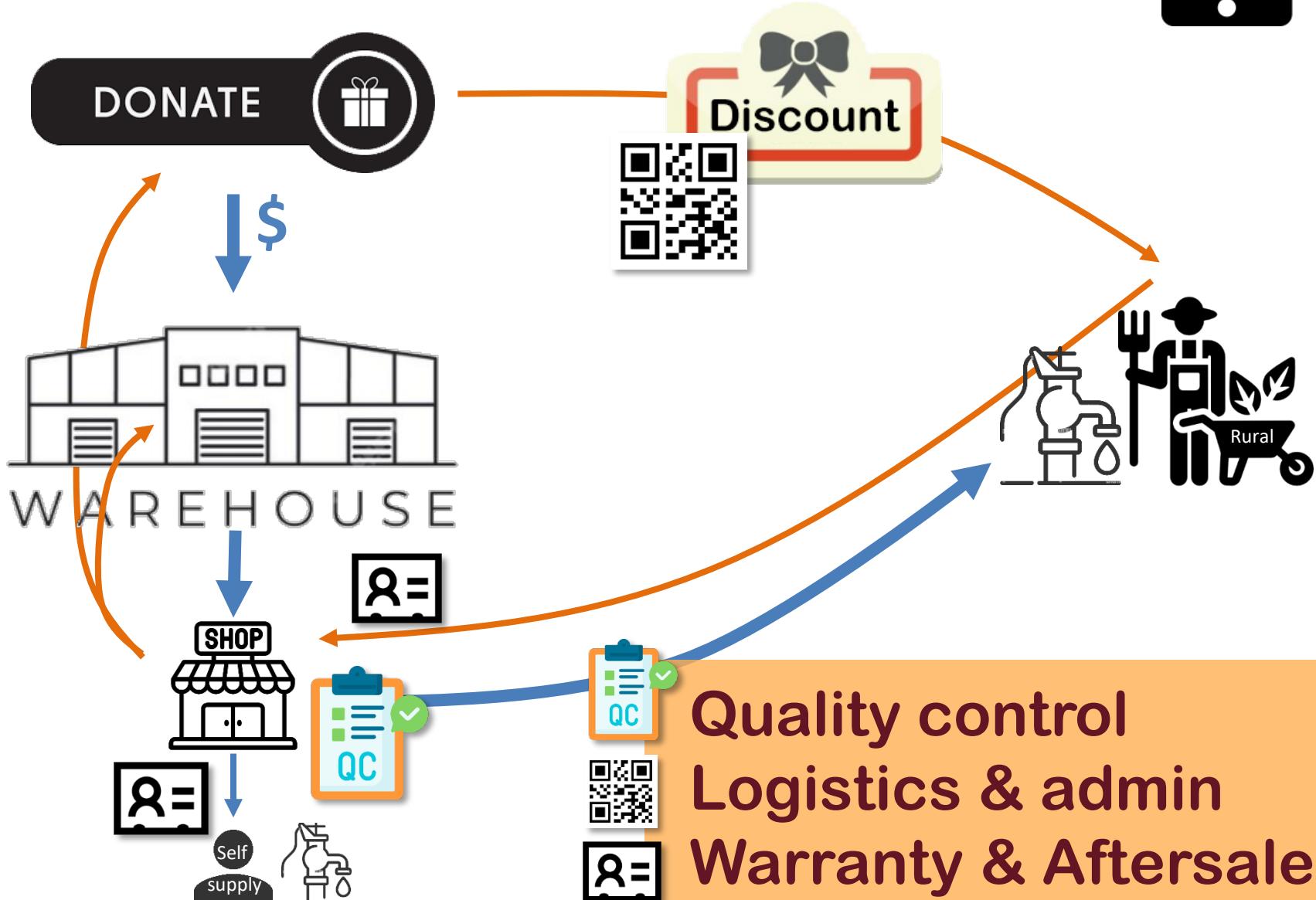
# New: After sales

Keeping customers  
is cheaper than finding new customers

We have contact details and know the users  
So sent SMS from time to time



# New: Software



# Project Summary



[www.jacana.help](http://www.jacana.help)



## Year 1:

- Re-design Construction kit
- Design Software
- Test in Eastern (70 pumps)
- Fine tune

## Year 2:

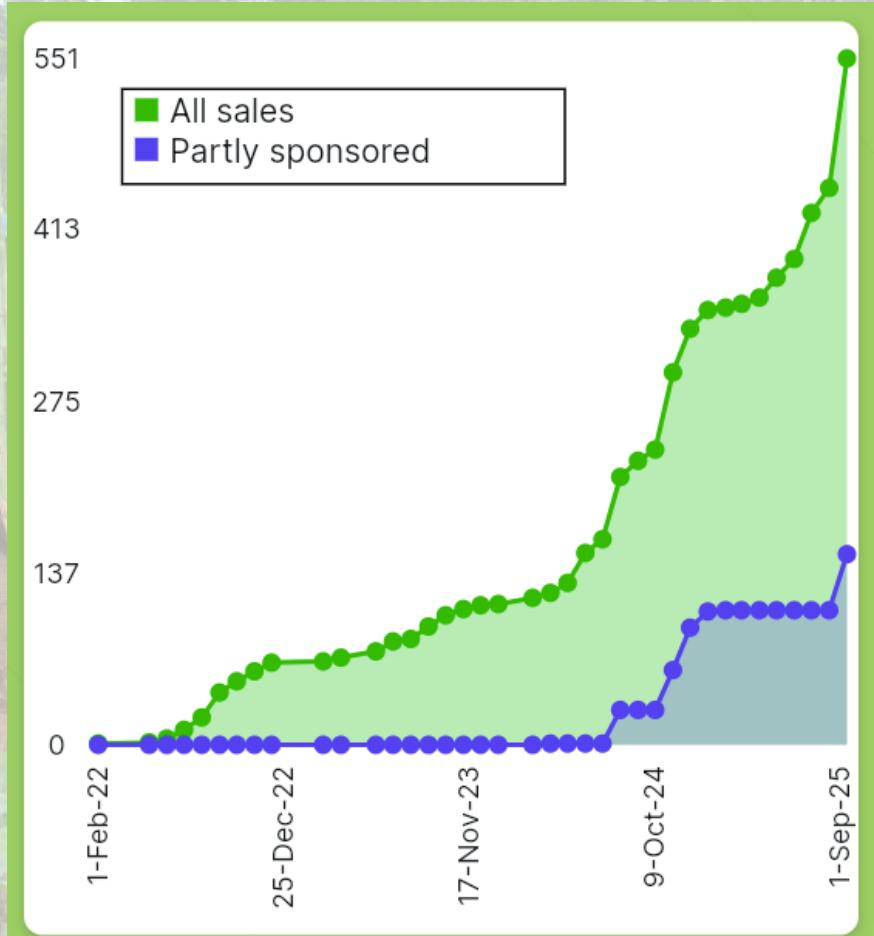
- Production in factory
- Test outside Eastern (300 pumps)
- Fine tune

Scale up

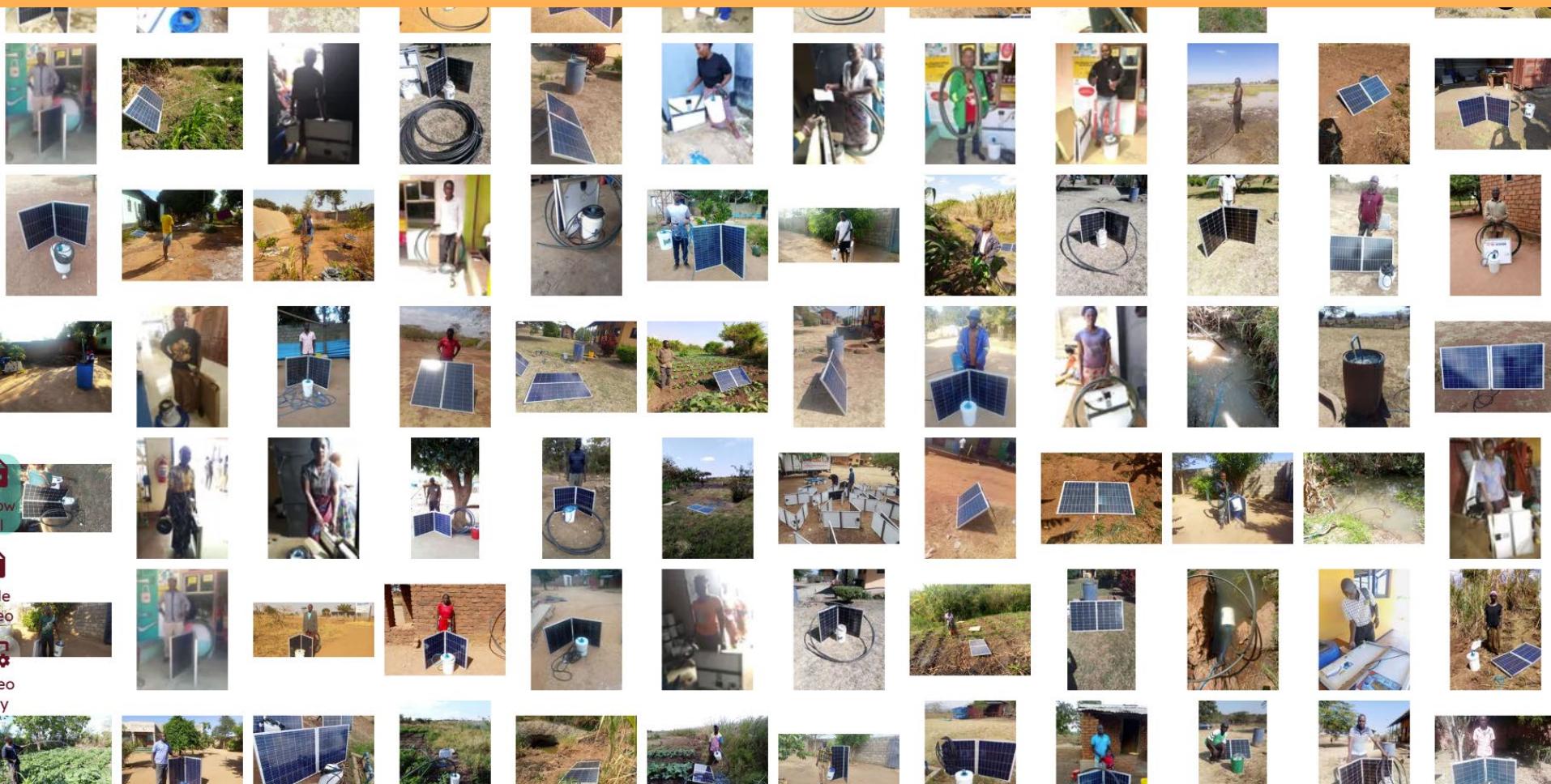
# Project Summary



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# Using the Pump



<https://self-supply.com/>