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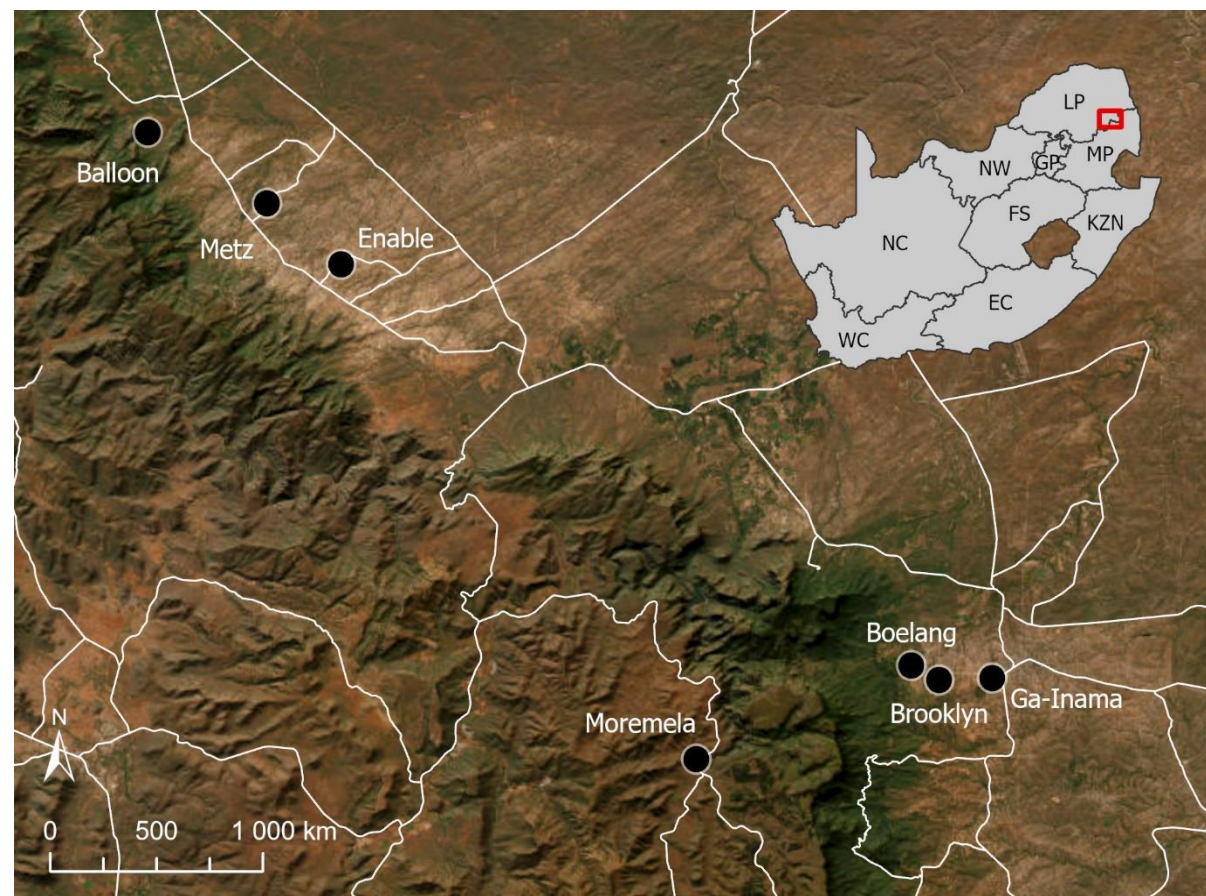
Managing disposable diapers in the K2C Biospheres

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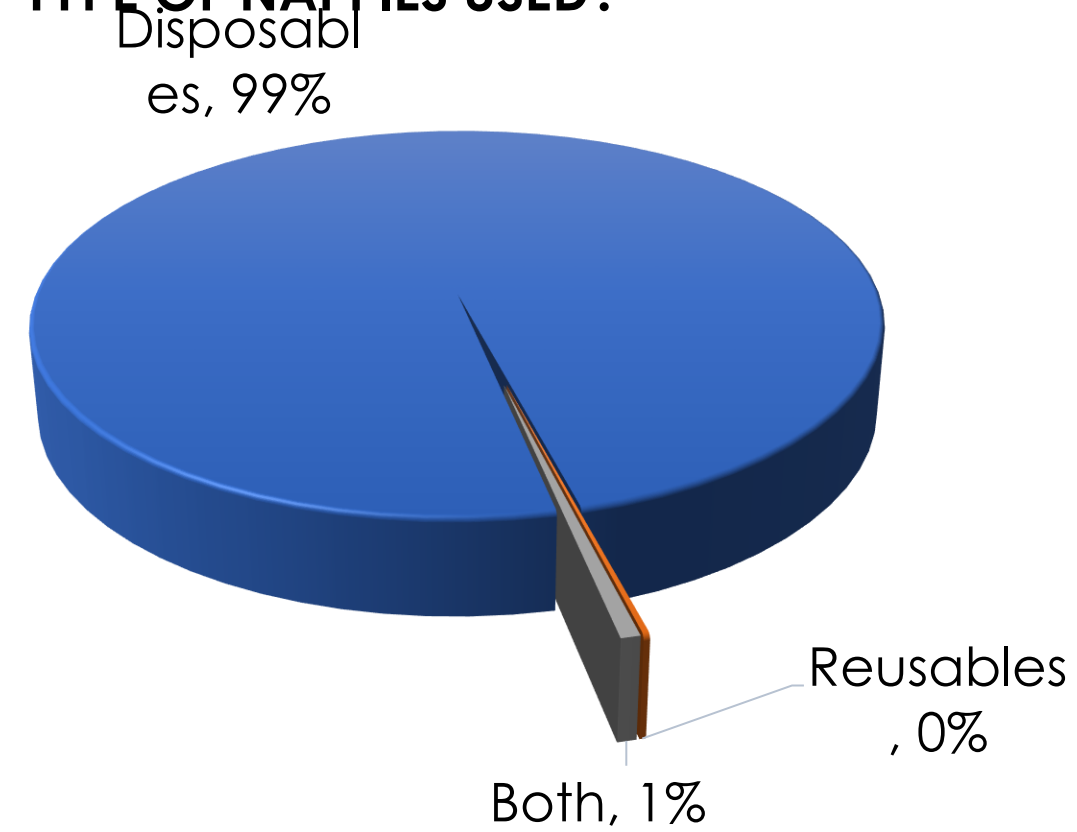
Phase 1: Baseline study- Aim and Data collected

- 1575 baseline questionnaires conducted
- 18 focus group discussions held
- 24 thematic drawings generated
- GPS coordinates of diaper dumpsites collected over 6 month period

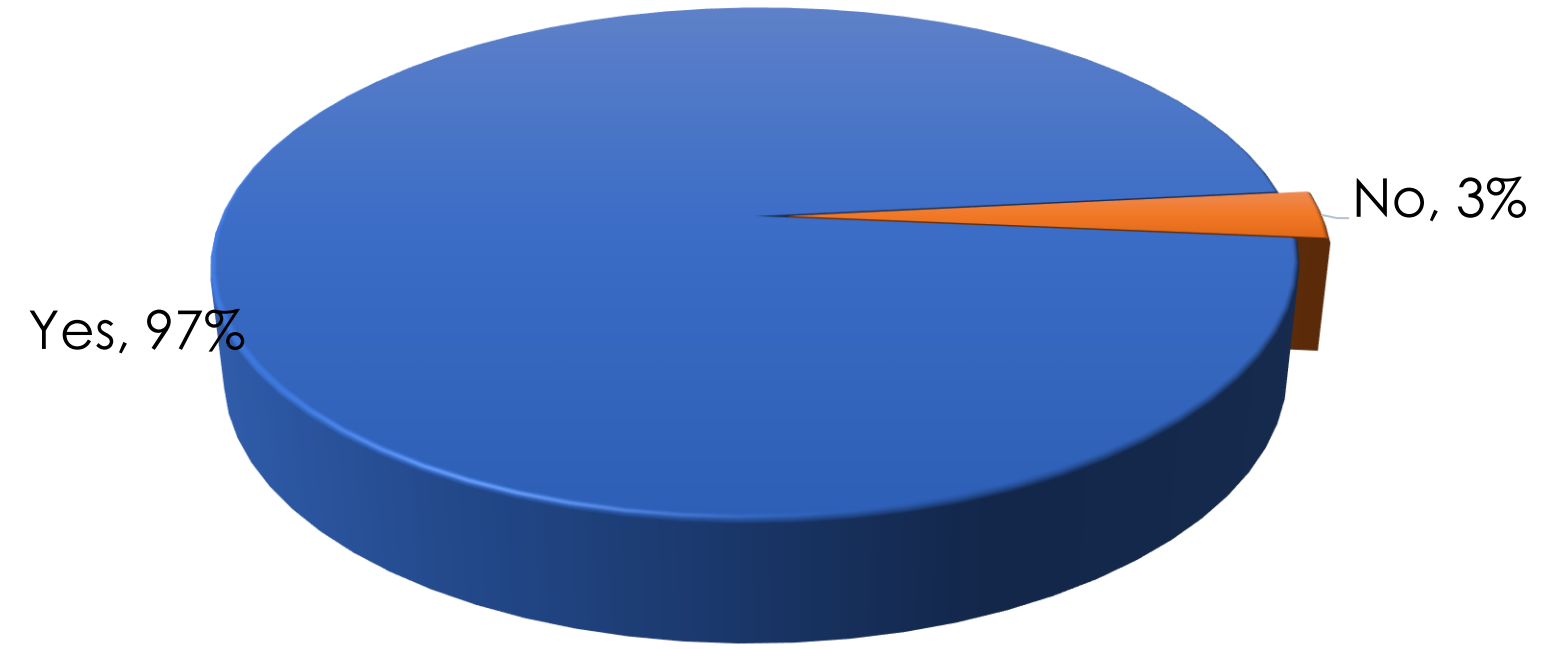


Phase 1: Results

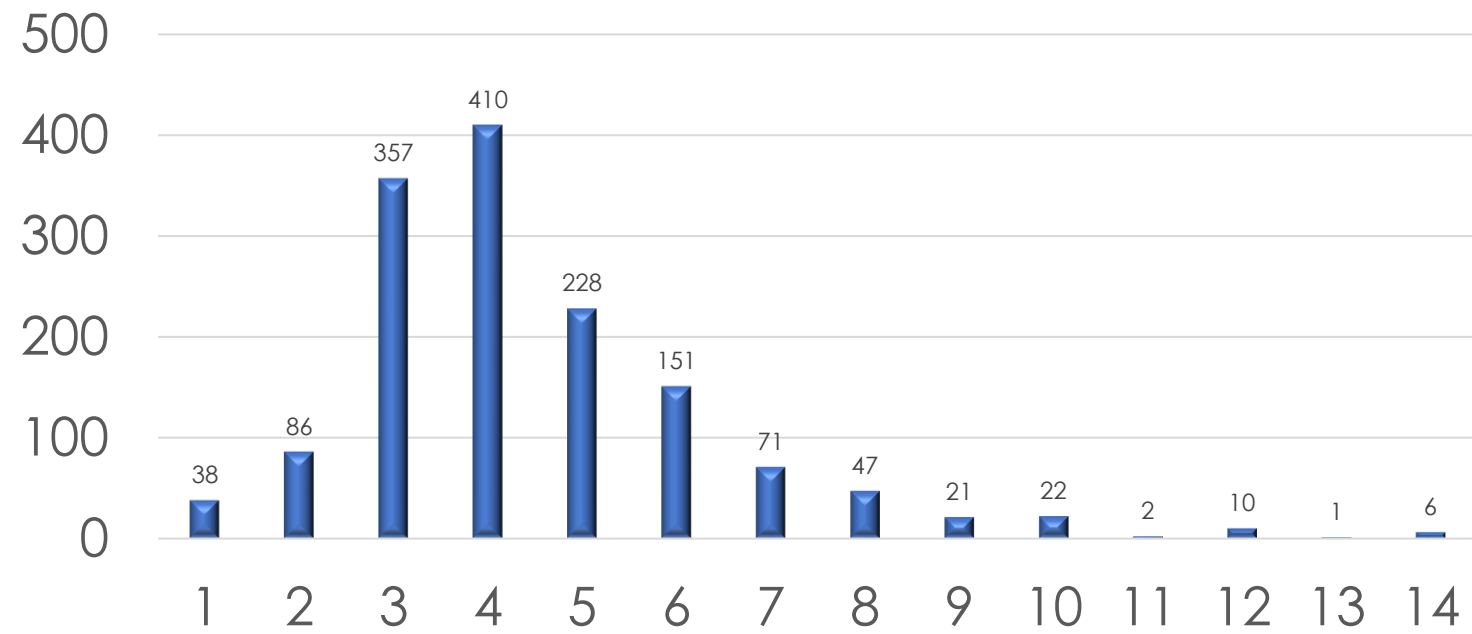
TYPE OF NAPPIES USED?



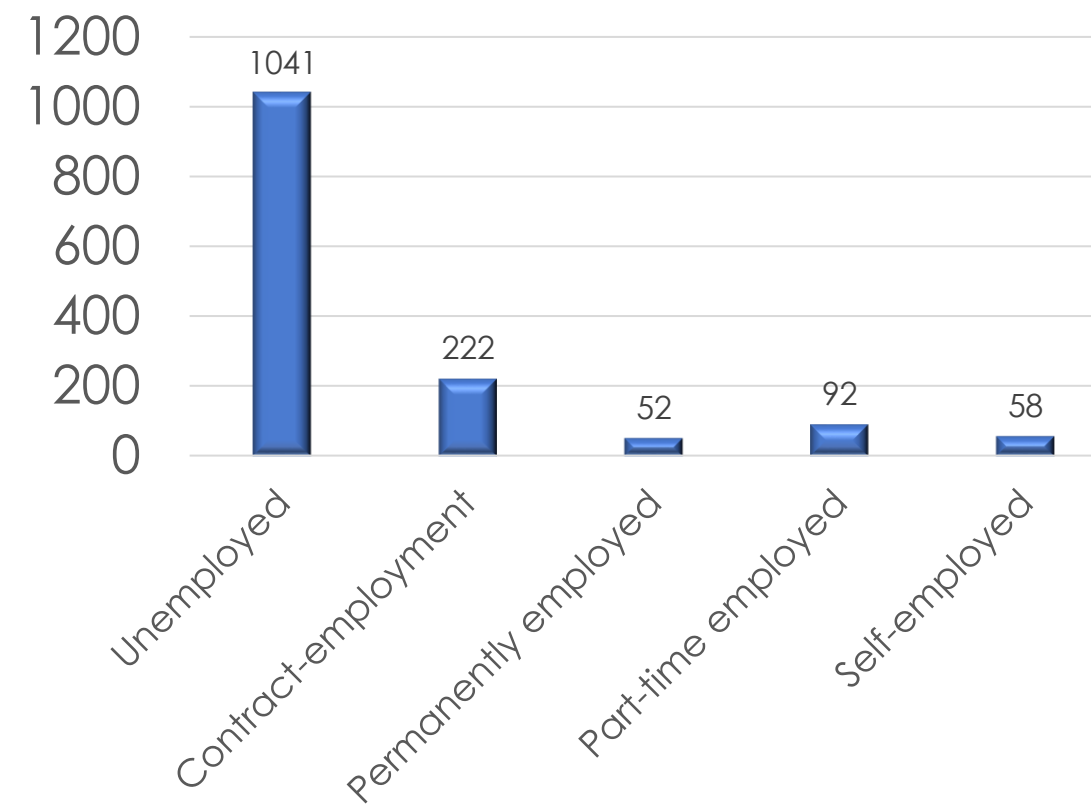
GRANT RECIPIENTS IN HOUSEHOLD?



NUMBER OF DISPOSABLE DIAPERS PER DAY



RESPONDENT'S EMPLOYMENT STATUS (71%)



Images diapers management



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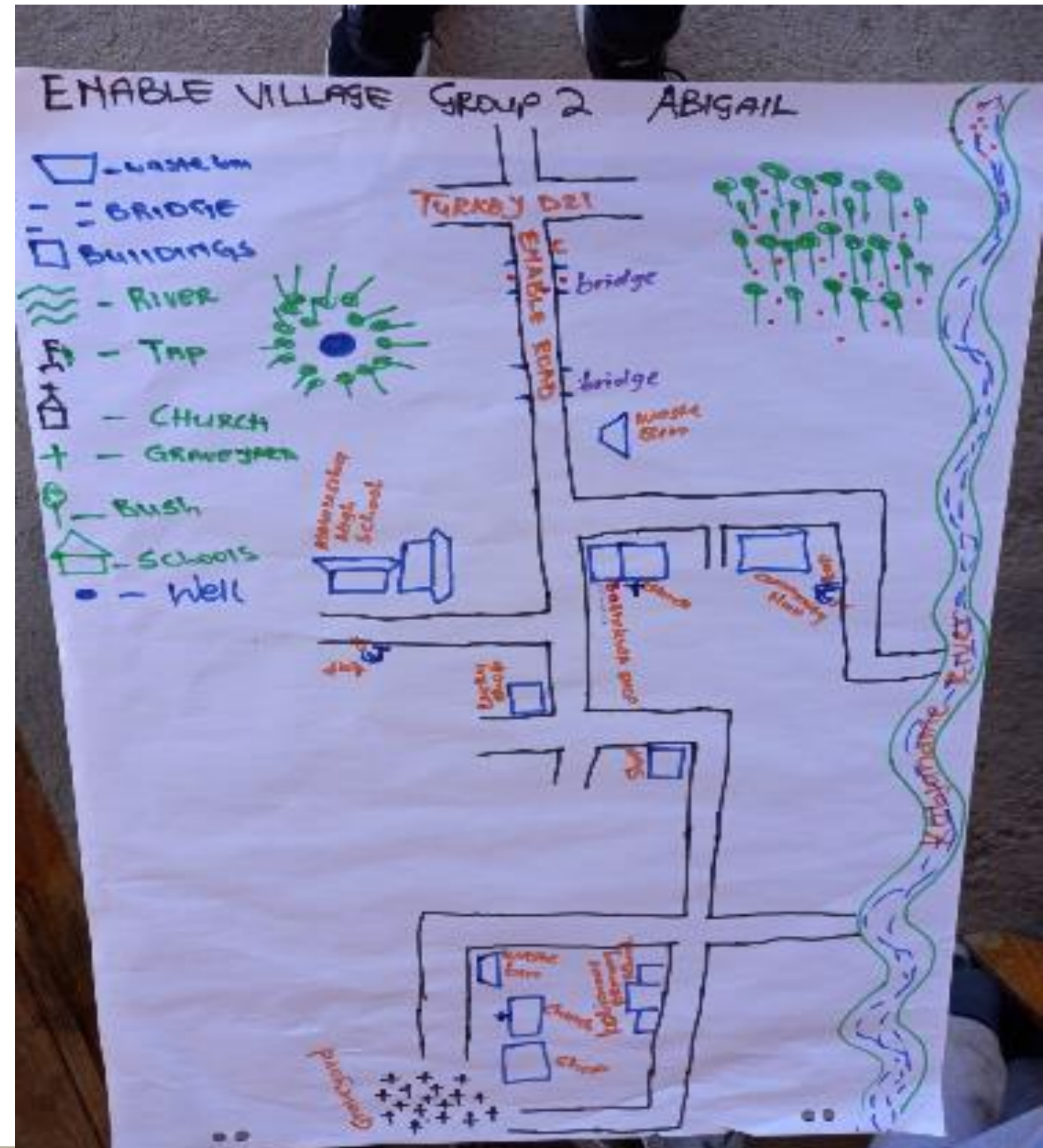
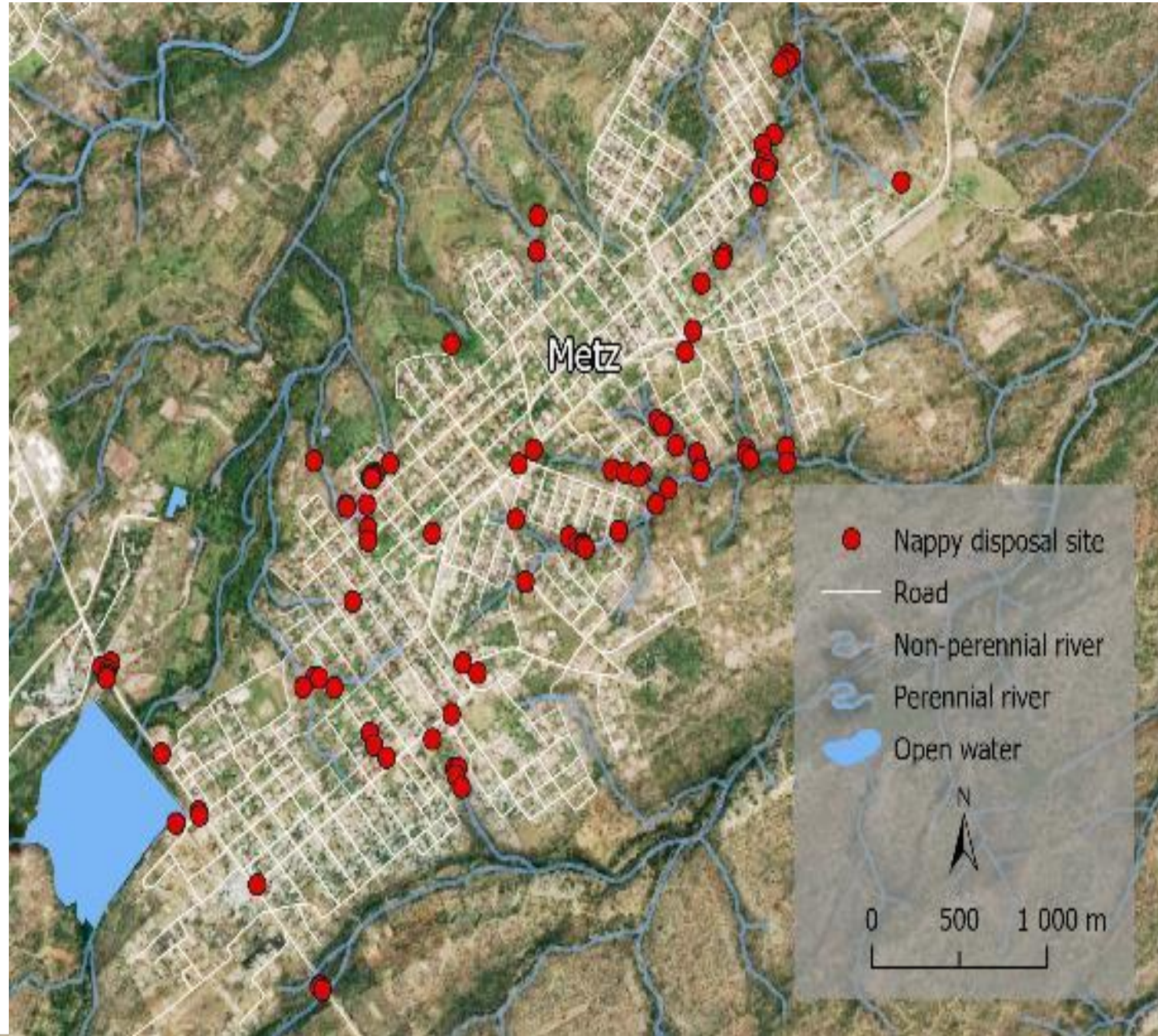


Nappies were being hanged so they can dry at one of the Households I visited today, the lady explained how she does it. They first remove the stool and throw it in the toilet then remove the cotton from inside and dump them in a waste hole then dry the remaining Nappy then later burn it.

Why do you prefer to use disposable diapers rather than reusable?

- “Because they are convenient”
- “Because I don’t have to wash them”
- “Lack of water”
- “They are more comfortable than cloth nappies”
- “They are more absorbent than cloth diapers”
- “They are affordable” (don’t need to pay for water, electricity and soap)
- “It is the modern fashion”

Dumped diapers



DIAPER WASTE CALCULATIONS MARULENG MUNICIPALITY

1.37,000 diapers per day generated (Prof Johann Joubert -UP)

2. $37,000 \times 365 \text{ days} = 13,505,000$ diapers per year

3. Each diaper weighs 0.23 kg on average $\times 13,505,000 = 3,106,150$ kg per year

4. $3,106,150$ kg diaper waste per year = 3,106 tons of diaper waste per year

5. Diaper density: 210 kg/m^3

6. 12 m^3 skip can handle 2.52 tons of diaper waste per skip

7. $3,106$ tons of diaper waste divided by 2.52 tons per skip = 1223 full skips per year

8. 1223 full skips per year divided by 365 days per year = 3.4

skips filled per day

DIAPER WASTE CALCULATIONS **BUSHBUCKRIDGE MUNICIPALITY**

1.172,000 diapers per day generated

2. $172,000 \times 365 \text{ days} = 62,780,000$ diapers per year

3. Each diaper weighs 0.23 kg on average $\times 62,780,000 = 14,439,400$ kg per year

4. $14,439,400$ kg diaper waste per year = 14,439 tons of diaper waste per year

5. Diaper density: 210 kg/m^3

6. 12 m^3 skip can handle 2.52 tons of diaper waste per skip

7. $14,439$ tons of diaper waste divided by 2.52 tons per skip = 5,729 full skips per year

**8.5,729 full skips per year divided by 365 days per year = 16 skips filled
per day**

Phase 2: Collaborative Governance

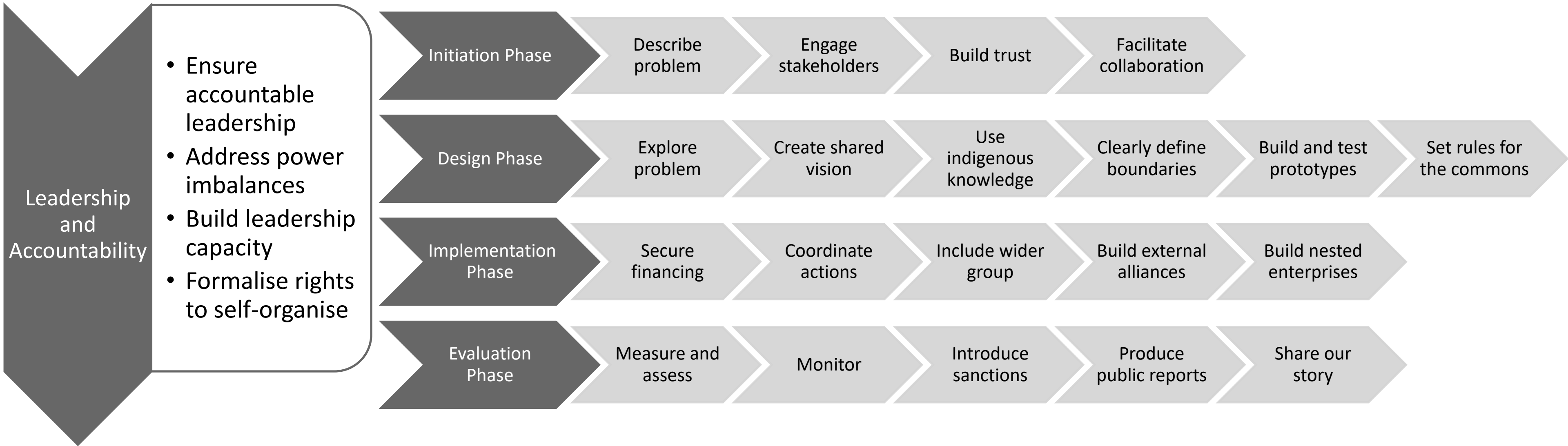


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Project framework- Collaborative Governance for diaper waste





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Thank You.

Questions?