

# Managing disposable diapers in the K2C Biospheres

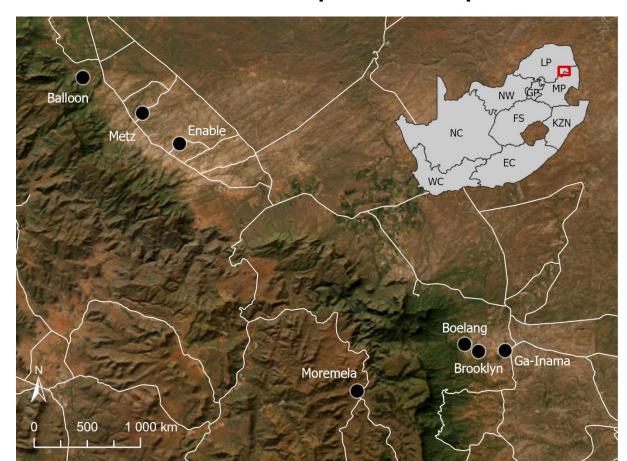
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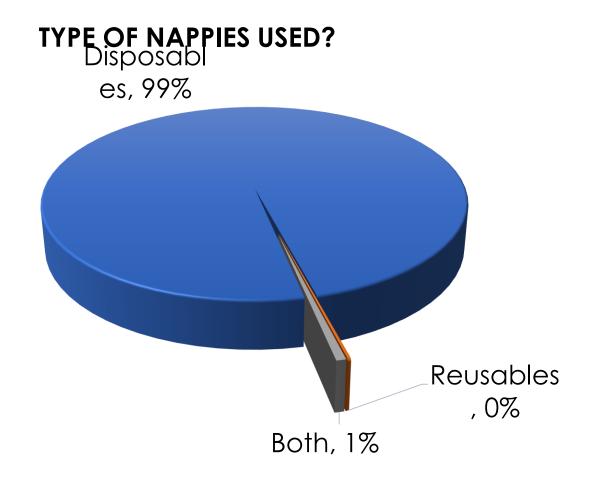
- 1575 baseline questionnaires conducted
- 18 focus group discussions held
- 24 thematic drawings generated
- GPS coordinates of diaper dumpsites collected over 6 month period

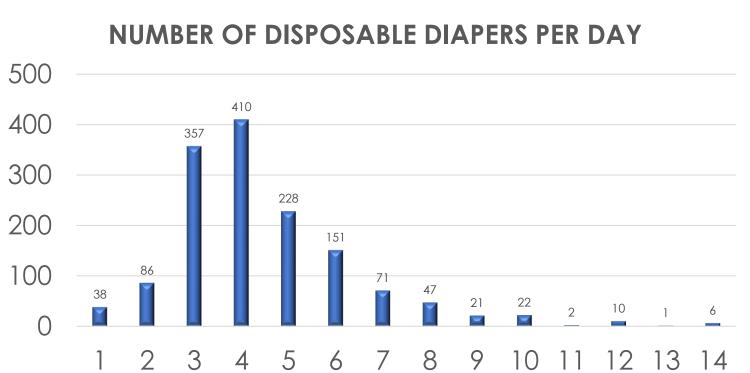


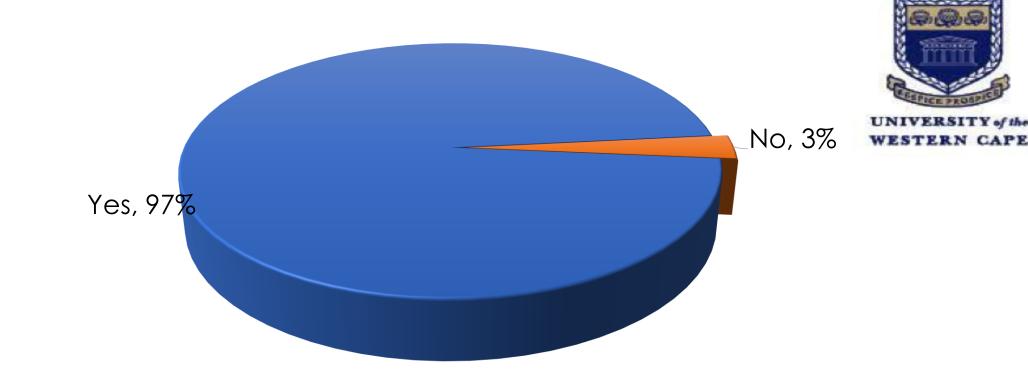


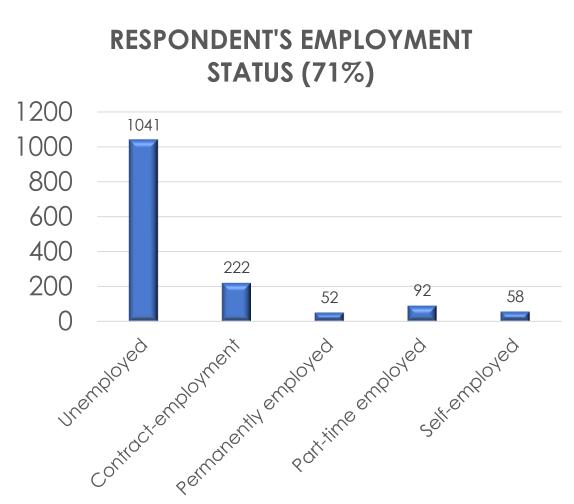
#### **GRANT RECIPIENTS IN HOUSEHOLD?**

#### **Phase 1: Results**











#### Images diapers management









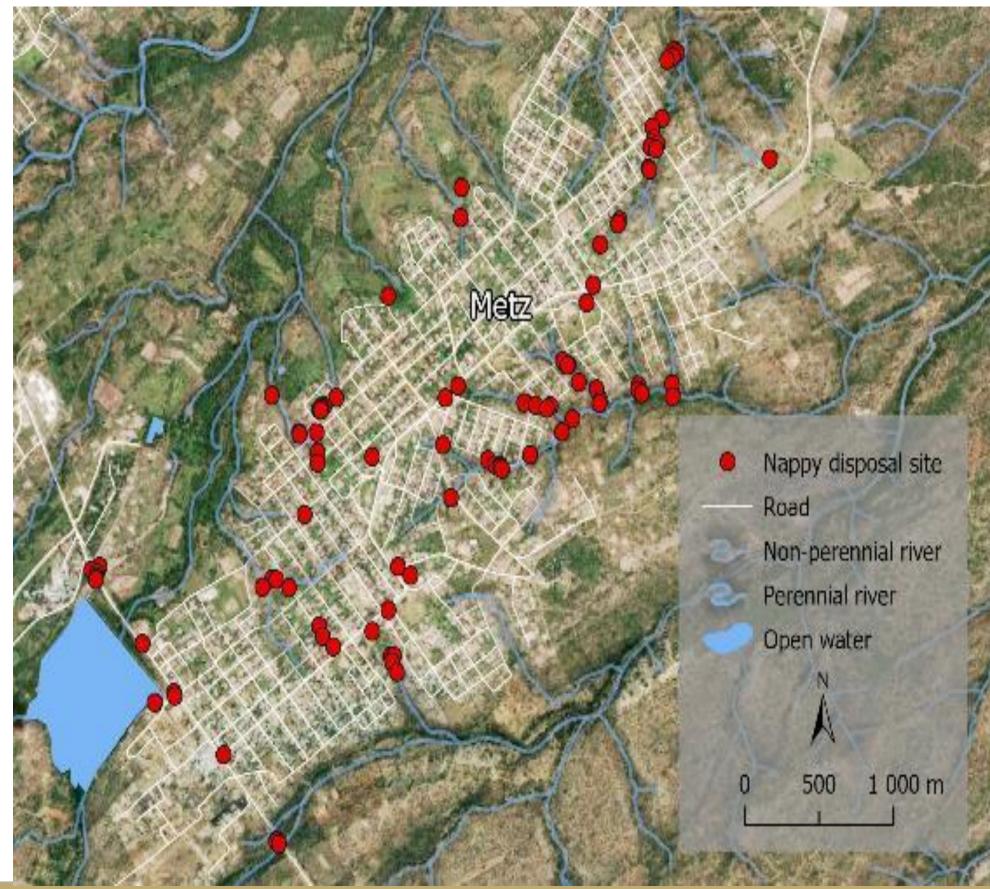
Nappies were being hanged so they can dry at one of the Households I visited today, the lady explained how she does it. They first remove the stool and throw it in the toilet then remove the cotton from inside and dump them in a waste hole then dry the remaining Nappy then later burn it.

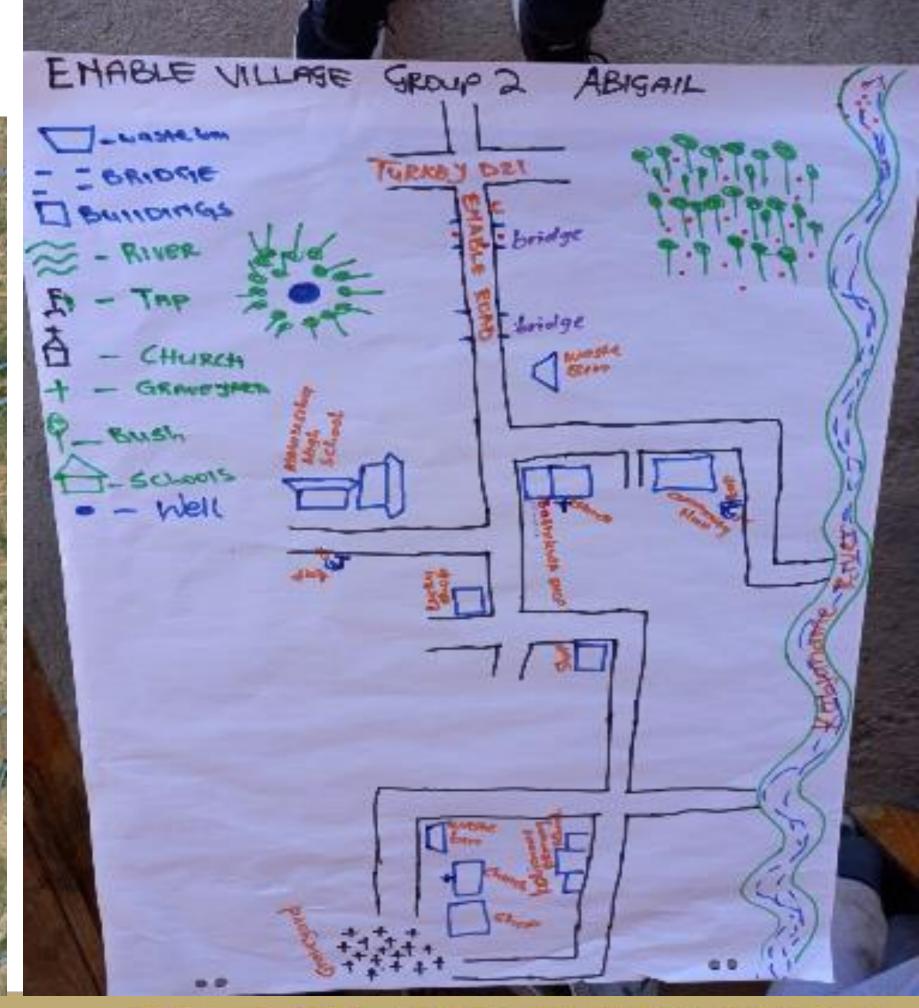


#### Why do you prefer to use disposable diapers rather than reusable?

- "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)

- $2.37,000 \times 365 \text{ days} = 13,505,000 \text{ diapers per year}$
- 3.Each diaper weighs 0.23 kg on average x 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: 210kg/m<sup>3</sup>
- 6.12m³ 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



## DIAPER WASTE CALCULATIONS BUSHBUCKRIDGE MUNICIPALITY

#### 1.172,000 diapers per day generated

- 2.172,000 x 365 days = 62,780,000 diapers per year
- 3.Each diaper weighs 0.23 kg on average x 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: 210kg/m<sup>3</sup>
- 6.12m³ 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**



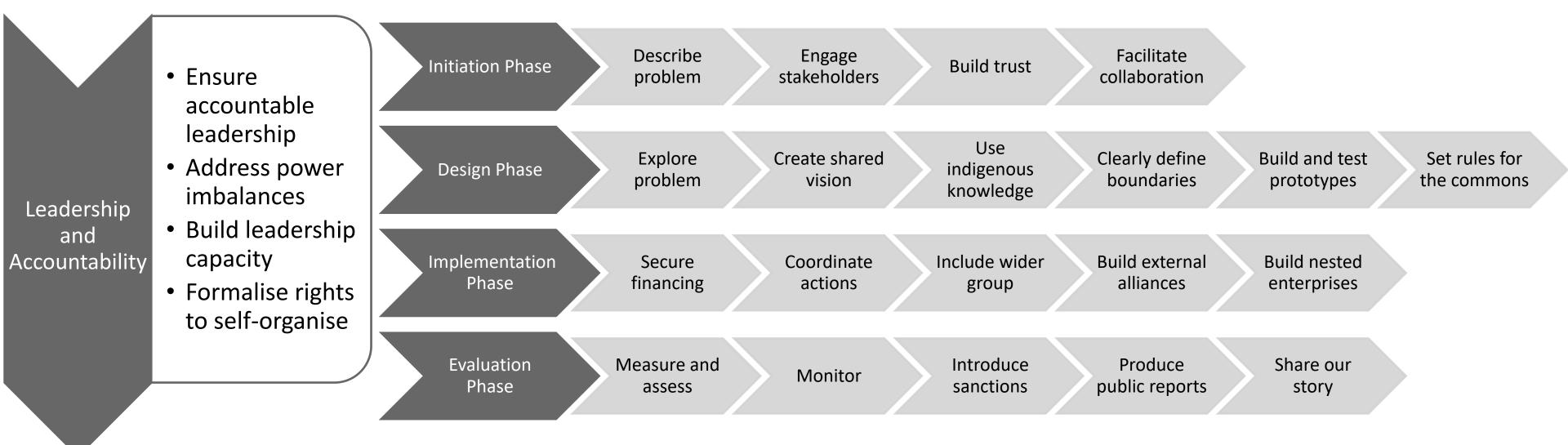








#### Project framework- Collaborative Governance for diaper waste





#### Thank You.

Questions?