



### Concilia Mutasa

CeSHHAR

Integrating local voices via photovoice to shape heat early warning messages for pregnant and postpartum women in Rural Mt Darwin Zimbabwe.

## Background

- Climate change effects such as ambient heat presents a grave threat to global health, especially affecting vulnerable populations like pregnant and postpartum women in rural areas.
- Among the myriad consequences of climate change, the increasing frequency and severity of heatwaves stand out.
- Early notification of heat events, through mobile phone-delivered notifications, could encourage for adaptive behaviours.



To Identify priority areas where women encounter heat events and potential cooling

### **Objectives**

Draft and develop early warning messages tailored to socio-environmental context of pregnant and post-partum women in rural Mt Darwin



### Methodology

### Study setting and design

- Mt Darwin Rural District in Zimbabwe.
- Study Sites: Chitse Health Centre, Dotito Health Centre, Mt Darwin District Hospital
- Purposive Sampling

#### Methods

#### **Focus Group Discussion**

Establish the best approaches and platforms for messaging and to collect descriptive data that will inform the co-design of messages.

Focus Group Discussion

24 Community Health Workers (CHWs)

#### **Photovoice Workshops**

Information about women's day-today practices during pregnancy and post-partum with a focus on heat

Transect Walk
10 pregnant and
post partum

women

Photovoice
Workshops
23 pregnant and
Postpartum women

#### **Transect Walk**

Understand women's living environments, day-to-day practices, resources, and spatial parameters in the areas that they live in.

**In-depth Interviews** 

22 Pregnant and postpartum women

#### **In-depth Interviews**

Select photos according to their themes, express the themes in relation to heat and the meaning behind every image.

### Methodology

Photovoice Women 22 Pregnant and Post partum Monen Photovoice Contraction of the state of the

**Key Stakeholders** 

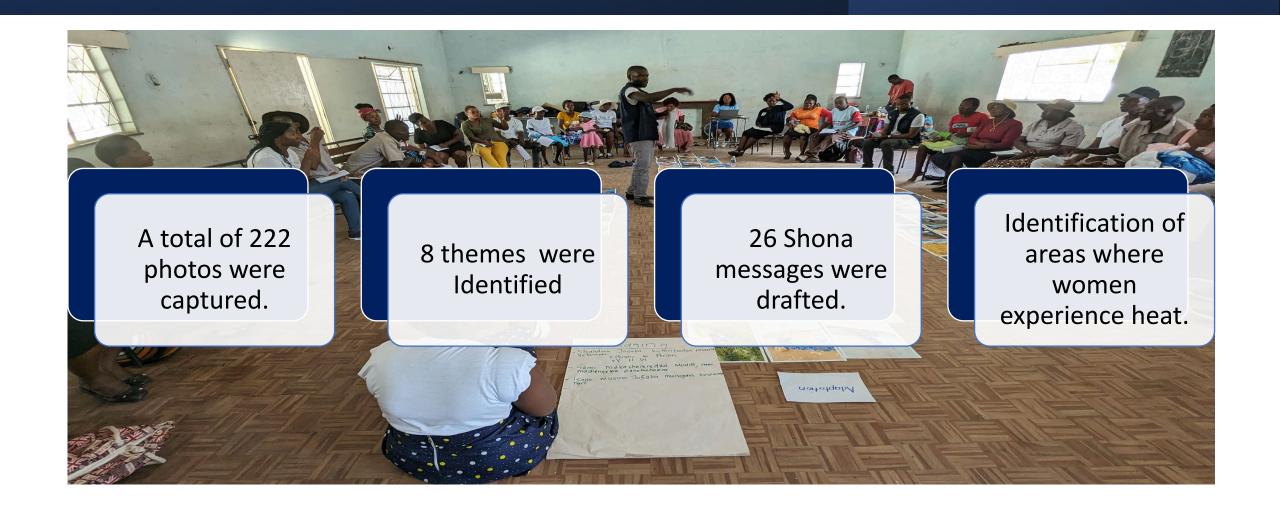
17 District Level
Stakeholders
Health, Social Services,
Environment, Agriculture

Community Health Worker 21 Community health care workers Transect Walk Women

6 Pregnant and Postpartum

**Co-creation Process** 

### Results





Areas where women experience heat







#### **Regulating indoor temperature:**

When it's too hot to sleep well, I covers them with a wet towel to cool them down..... this helps them sleep longer and prevents restlessness. Postpartum woman photovoice 2 workshop exhibition



#### **Clothing Choices:**

At home we only put light loose clothing such as a vest and a Zambia especially during the day. When we sleep, we sleep naked, and the baby will only wear a nappy. **Group 2 photovoice 1 post partum women.** 

Wrapping oneself with a cloth (*zambia*) up to the arms to allow for cooling without wearing clothes inside. *Group 3 photovoice 1 – Pregnant woman* 



#### **Cooling body temperature:**

I bath them three times a day during the hottest hours, around 11 AM, 2 PM, and 4 PM. Using warm water makes them feel better, and if I skips this routine, they become restless and cry frequently.



#### Staying hydrated:

To maintain hydration- ......they craft a Josaki, using cloth to cover a bottle of water, reflecting traditional cooling methods. **Photovoice 1 group 3** 

Drink cold water that is available to you maybe from a josack and a dish of water outside.

Photovoice 2 message formulation Pregnant group.

#### Cooling environments and shaded pathways

Identify and utilize shaded areas- If a house has no shade or a tree "you can walk along the gable of the house" [kutenderera berere reimba] and follow the shade of the house. Photovoice 1 Group 2

......sitting with my twins in the shade of a house, I employ this adaptation strategy to combat the heat. Postpartum woman –Follow-up IDI- Interview





#### Evaporative and passive cooling mechanism

- Sleeping with windows open.....
- Sleeping outside with Mosquito nets
- Using paper fans
- Using fans if you have a source of power such as electricity and solar power, this is commonly used by mothers who live in the urban .......

#### Scheduling activities

- Scheduling outdoor task during cooler parts of the day. Walking when its cool like early in the morning until 10 am and in late afternoon around 5pm.
- Start work (in the fields) as early 4am before the sun is out .....

Photovoice 1 group one Adaptation Strategy

#### Culturally Appropriate

In the absence of refrigerators, the participant suggests utilizing alternatives like "josaki" to cool water when it's extremely hot. **Postpartum** woman —Photovoice 2



**Engage Communities** 

Involve local voices in design and ensure messages resonates effectively

**Culturally Relevant** 

Develop messages that reflect the cultural practices and preferences of the pregnant and postpartum women.

Conclusion

**Social/Environments** 

Messages that account for varying social and environmental context

Mobile App Development

- A mobile App (MotherHeat Alert) for early warning notifications has been developed.
- Testing will be conducted in rural Mt Darwin to evaluate the app and the messaging system.



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# Thank you