

**Impact of climate changes on the day-to-day
lives of the women and their family members in
Thatta Pakistan: Voices of local community
research participants**

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Outline

- Common climate challenges (Thatta Pakistan)
- Effects of climate change on:
 - Women
 - Families
 - Research

Voices of the local community and study participants
(FGDs, informal conversations, and observations)
- Coping mechanisms

Thatta Pakistan



Common climate challenges: Thatta Pakistan



Heat stress (June-July)



Annual heavy rainfall
(August-September)



Floods (2010 and 2022)

Effects of heat stress: voices of research participants

“During pregnancy, we can not eat iron tablets in this high heat because it causes burning and we feel like our **bodies (mainly hands) are burning in the summer** when the sun is scorching. We can take calcium tablets in water because that gives us more relief but it is **hard to take iron tablets** during heat”
(FGD: Women First study participants)

“After we cook food on the stove during summer, **appetite decreases** due to high heat, and we fulfill our tummy with water to quench our thirst. Since we can not eat, we **become weak** and **get tired** after working for some time” (women from Thatta)



Effects of heat stress

“ I have observed more *miscarriages* during June and July when the sun is scorching. This may be because during heat stress families need more water to drink and *pregnant women fetch water from remote areas by carrying heavy pots* on their heads and walking for around 1.5 miles in the sun. The heavyweights may result in *abortions*”
(WF research staff)



Effects of working in hot summer

- “Pregnant and lactating women support the male members (farmers) in the fields during crop harvesting (E.g, tomatoes or okra). After lifting heavy weights, during hot weather, women feel thirsty and drink water from small canals in the fields that are *polluted with pesticides*. The exposure to pesticides (drinking and breathing) *may be dangerous for mother and their babies*” (local health care provider).



Effects of annual heavy rainfall

- “Due to heavy rains, we need to save our cattle from mosquitoes by moving to the mountains. In the new place, we can not find food easily as we move far from the city or our village to save our animals. Sometimes, *we sleep without eating*” (Informal conversations with women)



Effects of annual heavy rainfall

- “Due to heavy rains, families move to the mountains with limited access to water and food. Women and their families have to drink unhygienic rainwater, resulting in **diarrhea and weakness**. Also, there is a burden on the health care system because one health facility gets overburdened” (*WF research staff*)

“Women and family members sleep with animals and now they are used to and do not feel bad/uncomfortable but that can develop **unknown diseases**” (*WF research staff*)



Effects of annual heavy rainfall

“During monsoons, families move on the carts with luggage and their *husbands do not care about the pregnant women*. The carts are heavily loaded with luggage and women. There is a *risk of falls*. Also, it is too high to climb the cart and women may feel uncomfortable or may lose babies. The roads are not smooth and there are jumps on the way, which may lead to *miscarriages or premature delivery*” (WF research staff)



Effects of floods

“ During floods, crops are affected badly. Having money from crops helps villagers to buy flour and household items. They do not earn money and face hunger. Lactating women do not eat more, and their milk is not formed. ***Both baby and mother become weak***, but baby becomes ***malnourished*** as infant relies heavily on mother’s milk” (*local health care provider*)

“ Due to lack of food, if a pregnant mother is not eating properly, her baby in the womb may not get enough food and ***a weak baby will be born***” (*WF research staff*).



Effects of floods

“Pregnant women and their families are displaced and migrate to new places with limited water and food supply. Women drink unhygienic water and develop *vomiting and diarrhea*. If women are not well, they end up giving birth to *low-birth-weight babies* or *deliver prematurely*” (WF research staff)

“Roads are affected badly with no access to health care facilities. Big vehicles such as suzuki and cars can not move in heavy water. If a woman enters labor, her husband or another family member will take her to the health facility on the motorbike, which is dangerous for a woman because she can either *deliver on way or start bleeding* and sometimes *even may die* on the way if not reached on time due to poor road infrastructure” (WF research staff)



Effects of climate change on research activities (Observations and experiences)

- Supplement sachets started melting in the heat.
- Heavy rains---migration-----no electricity to charge phones----- loose connection with participants----biweekly visits missed.
- Migration-----poor connection with facilities----home delivery----fail to collect placental and other biological samples.
- Heavy rains---migration----new places-----more resources (vehicles and human) to find women and collect data.
- During heat stress, the productivity of staff also decreases.

Coping mechanisms

“ In the heat, women and their kids take baths in small canals and streams where animals also take baths. They use the *same water for bathing, washing, and drinking*” (*WF research staff*)

“We drink buttermilk (*lassi*) to quench our thirst or drink water if that is available. Milk is only available with families who own the cows or buffaloes” (*WF research participants*)



Coping mechanisms

“ Women fetch water from hand pumps but that also contains *heavy metals* that may produce bad effects in long term ” (*local health care provider*)

“Not all villages can use groundwater. For example, Jungshai (one area in Thatta) has bitter/salty groundwater so hand pumps can not be built. Therefore, families purchase water trough tanks and that is *costly* and not safe” (*WF research staff*)





Thank You!

