Extended Abstract:

Title: Assessing the Impact of Climate Change on Women and Girls' Reproductive Health in Egypt

All Authors: Dr Tarek Genena, EcoConServ Environmental Solutions¹

Dr Soad Abd El Megied, Head of Primary Health Care and Nursery Sector, MoHP Egypt Ms. Dawlat Shaarawy, Population and Development Analyst, UNFPA Egypt

Background

With an estimated 104 million people as of January 2023, the majority of whom live in the Nile Valley and Delta, climate change poses significant threats to the health and well-being of women and girls in Egypt, their reproductive health (RH), livelihoods and overall resilience. This study conducted collaboratively by the Egyptian Ministry of Health and Population (MOHP), UNFPA and EcoConServ to examine the links between climate change (CC) and its diverse impacts on women and girls' RH.

Methods: The study employed a mixed-method approach using primary and secondary data. A review of literature addressing the impacts of climate change on women's RH and identification of hotspots² that witnessed critical climatic events during the previous five years were conducted. Six governorates were identified for their vulnerability to CC and were selected for the fieldwork. Data were collected in October 2022, through 10 focus group discussions, and 30 in-depth interviews³. A diverse range of stakeholders was consulted, including government officials, healthcare providers, and local residents. Officials were purposefully selected to target certain groups of stakeholders, the sample beneficiaries (both women and men) were randomly met on the day of the visit from the pool of individuals receiving health services in primary care units. All collected data was transcribed and analyzed through thematic analysis approach.

Findings: Women face heightened risks due to factors like limited access to resources, social norms, and biological differences. Climate events like extreme temperatures, flooding, and water scarcity exacerbate these vulnerabilities. Climate change disrupts access to healthcare services, hinders nutritional intake, and increases susceptibility to diseases, that might affect reproductive health outcomes. Livelihoods are disrupted, income opportunities dwindle, and the burden of household responsibilities disproportionately falls on women, leading to increased stress and potential for gender-based violence. While some understanding exists, comprehensive awareness of climate change impacts and specific strategies for adaptation remains uneven, especially in rural areas.

Conclusions and recommendations

Apply an intersectional lens to understand and address how CC differentially affects women's RH needs across diverse identities and vulnerabilities. Champion gender and RH mainstreaming within national climate policies and strategies, ensuring women's voices and needs are heard. Invest in health workforce training and resources to deliver quality, accessible RH services amidst climate challenges. Build resilient health systems with robust preparedness, response, and early warning systems that complement social protection programs and protect RH service continuity. Develop and implement robust health surveillance systems to capture climate-related impacts on RH indicators and inform evidence-based decision-making. Mobilize and equip communities, particularly women, to play a vital role in mitigating the impact of CC on their health and well-being.

¹ a team of experts from EcoConServ in environment, reproductive health and social aspects conducted the study.

² table 1: Governorates and Hotspot Regions

³ table 2: Data collection methods and sample distribution

Governorates	Area	Climate	Climate change events and impacts						Availability	Population	(v) Population	Economi
	Type Proposed	region	Flood ⁱ	Heat	Drought ⁱⁱⁱ	Water shortag e	Food insecurity	Damage to infrastructure	of Adaptation Plans	Size * (iv)	Density Thousand persons/ Km ²	c activity
Alexandria	Urban	North Coast	Yes	No	No	Yes	Yes	Yes	Yes, Current and Future	5,163,750 High	2,01 High	High
Beheira	Rural	North coast	Yes	Yes	Yes	Yes	Yes	Yes	Yes	6171613 High	0.56 Middle	High
Menya	Rural	Southern Upper Egypt	Yes	Yes	Yes	Yes	Yes	Yes	No	5,497,095 High	0,15 Middle	High
Sohag	Rural	Northern Upper Egypt	Yes	Yes	Yes	Yes	Yes	Yes	No	4,967,409 High	0,39 Middle	High
Aswan	Urban	Southern Egypt	Yes	Yes	Yes	Yes	Yes	Yes	No	1,473,975 Low	0,02 Low	Medium
Red Sea	Rural	East Coast	Yes	Yes	Yes	Yes	Yes	Yes	Yes, Current and Future	359,888 Low	0,003 Low	Low

Table 1: Governorates and Hotspot Regions

i. Flood: heavy rain that took place in the past five years and resulted in floods

ii. Heat: when heat temperatures rise during day to over 40 degrees for a week in early August. The history and projected climate for Egypt from 1991 to 2020 https://climateknowledgeportal.worldbank.org/country/egypt/climate-data-historical

iii. Drought: approximately 96% of Egypt's geographic area is mostly arid lands and 4% is agricultural land. About 98.6% of water sources in Egypt comes from the flooding of the Nile River. Egyptian farmers have never depended on rainfall, as 'drought' indicates 'lack of rain' (which is a few mm per year). Rainfall will occur only in the northern coast of Egypt and the Sinai Peninsula, and most often in the winter (source: <u>https://www.droughtmanagement.info/literature/UNW-DPC_NDMP_Country_Report_Egypt_2014.pdf</u>)

iv. Source National Census 2017 CAPMAS

v. Egypt Description by Information 2014

Table 2: Data Collection Methods and Sample Distribution

		Geographical Location									
Target Group	Method and Tool	Central Level	Alexandria	Aswan	Red Sea	Sohag	Menya	Bahira	Total		
Egyptian Environmental Affairs Agency (EEAA)	In-depth Interview	1							1		
МОНР	In-depth Interview attended by more than one	6					1		7		
Health Directorates	In-depth Interview attended by than one		1	1	2		1	1 (FGD)	5 IDI 1 FGD		
Healthcare Units	In-depth Interviews					1			1		
Ministry of Agriculture and Land Reclamation (MoALR)	In-depth Interview							1	1		
Ministry of Social Solidarity	In-depth Interview		1				1	1	3		
National Council for Women	In-depth Interview		1		2		1	1 (FGD)	4 IDI 1 FGD		
NGOs working with women and environment	In-depth Interview			1					1		
American university in Cairo Social Research Center (SRC)	In-depth Interview	1							1		
Ministry of Planning	In-depth Interview						1		1		
IDSC - Crises management central department (CM)	In-depth Interview		1		1			1	3		
National Research Centre	In-depth Interview	1							1		
General Secretary of the governorate	In-depth Interview		1						1		
Women-educated 20-49 years	FGDs				1FGD with 9 participants		1 FGD with 8 participants		2 FGDs		
Women-uneducated 20-49 years	FGDs					1FGD with 8 participants			1 FGD		
Young Women (educated) 15-19 years	FGDs				1FGD with 10 participants	1FGD with 8 participants			2 FGDs		
Young Women (low education) 15-19 years	FGDs					1FGD with 8 participants			1 FGD		
Men (educated) 20-40	FGDs						1FGD with 8 participants		1 FGD		
Men (uneducated) 41- 60	FGDs					1FGD with 8 participants			1 FGD		