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# **GENDER ANALYSIS OF ADAPTATION STRATEGIES OF WATER STRESS AMONG ARABLE CROP FARMERS IN ASA LOCAL GOVERNMENT AREA OF KWARA STATE, NIGERIA**

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# Problem statement 1/2

- Over the years, Nigeria has devoted large area to the cultivation of arable crops, but , productivity has remained low due to:
- Shortage in water supply, changes in atmospheric carbon dioxide, changes in average temperatures, inefficient management practices that had led to low soil fertility.
- Arable crop Farmers in Nigeria depend on rainfall for supply of water
- The rise in temperature and decrease in rainfall has resulted in increased moisture stress on crops directly through increasing evapo transpiration as well as the atmospheric holding capacity for water vapour.
- Thus making farmers vulnerable to water stress

# Problem statement 2/2

- The need to effectively employ adaptation strategies to water stress so as to ensure the availability of water throughout the cropping season becomes necessary
- These adaptation strategies may vary among male and female arable crop farmers, and these differences may distinguish people who are more or less exposed to water stress
- The fact that women have different roles makes them have higher exposure to water stress
- Therefore, the need to examine the adaptation strategies to water stress across gender becomes very imperative with a view to increasing food production in the study area.

# Methods

- Study Area: Asa Local Government Area, Kwara State, Nigeria
- Sampling Technique: Multi stage sampling was employed
- A total of 140 respondents (86 male and 54 female) were selected and the sample was stratified randomly to ensure gender representative sample of the arable farmers.

# Key Findings

**Table 1: Level of occurrence of water stress across gender**

	Male		Female	
Level	Freq.	%	Freq.	%
Very serious	11	12.8	28	51.9
Serious	53	61.7	17	31.4
Not serious	22	25.5	09	16.7

Data analysis, 2014

**Table 2: Distribution according to the constraints faced by arable crop farming**

	Male		Female	
Constraints	Mean	Standard deviation	Mean	Standard deviation
Inadequate contact with extension agents	0.52	0.69	0.57	0.72
Inadequate farm inputs	0.45	0.66	0.51	0.64
Lack of credit facilities	0.96	0.74	1.29	0.86
Insufficient water supply	0.91	0.84	1.13	0.81
High cost of farm labour	0.87	0.65	1.10	0.75

Data analysis 2014

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# Key Findings

**Table 3: Distribution based on the adaptation to water stress utilized across gender**

	Male		Female	
Adaptation strategies	Mean	SD	Mean	SD
Cultivation of cover crops to retain soil and moisture	2.33	1.20	1.08	1.47
Use of irrigation facilities	1.97	1.41	1.34	1.45
Contour planting	2.51	0.99	1.01	0.75
Rain water harvest	2.13	1.33	2.52	1.43
Adoption of drainage or ditches	1.94	1.49	1.83	1.38
Planting of shed trees	1.33	1.51	1.74	1.42
Migration to another area	1.24	1.44	1.09	0.93
Changed crop variety	1.54	1.26	1.98	1.49
Changed from crop to livestock production	2.05	1.46	1.02	1.32
Mulching	1.98	1.56	2.63	1.51

Data analysis 2014

# Conclusions/Recommendations

- The study revealed clearly the difference between men and women adaptation options as women in the study employed more of the adaptation strategies in the study area.
- The study recommends that local adaptation strategies need to be built on in order to strengthen underlying systems so as to support capacities of women and men to adapt.
- In addition, investment in integrated water supply and demand management that takes into account gendered roles and responsibilities for water management should be employed in order to ensure sustainability of water resources