INTEGRATING CLIMATE CHANGE INTO THE MANAGEMENT OF PRIORITY HEALTH RISKS IN GHANA

DEVELOPMENT OF A GENDER SENSITIVE CLIMATE RESILIENCE SCREENING TOOL FOR THE HEALTH SECTOR

Report

Submitted to the United Nations Development Programme

By

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List of Acronyms

ANC  Antenatal Care
DHIMS District Health Information Management System
EmONC Emergency Obstetric and Neonatal Care
EPA Environmental Protection Agency
FP Family Planning
GLSS Global Living Standards Survey
GSGDA Ghana Shared Growth and Development Agenda
ICCC Inter-Agency Coordinating Committee on Climate Change
IDSR Integrated Disease Surveillance and Response
IPCC Intergovernmental Panel on Climate Change
ITN Insecticide Treated Net
MOH Ministry of Health
NDPC National Development Planning Commission
PIU Project Implementation Unit
OPD Outpatient Department
ORS Oral Rehydration Salts
SP Sulfadoxine Pyrimethamine
TAC Technical Advisory Committee
UNDP United Nations Development Programme
UNFCCC United Nations Framework Convention on Climate Change
Glossary of Definitions

Gender refers to the socially constructed norms, roles and relations that a given society considers appropriate for men and women. Gender determines what is expected, permitted and valued in a woman or a man in a determined context.

Sex refers to the biological and physiological characteristics of women and men.

Vulnerability is the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity.

Resilience: The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change.

Adaptive Capacity: Is defined as the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with consequences.

Gender sensitive Climate resilience screening tool:
This is an assessment tool designed to identify strengths and weakness at the district level that when addressed will strengthen the capacity of health system to provide protection from climate change related risks and substantially improve the lives of all including men, women and the most vulnerable populations and at the same time build resilience of the district.
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CHAPTER ONE

Background

Climate Change
Climate Change is defined by the United Nations Framework Convention on Climate Change (UNFCCC) as a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.¹

The rising levels of greenhouse gas emissions such as carbon dioxide, methane and other heat-trapping gases in the atmosphere have warmed the earth and altered the global climate causing wide-ranging impacts, including rising sea levels; melting snow and ice; more extreme heat events, fires and drought; and more extreme storms, rainfall and floods.

In Ghana, data gathered over the last 50 years by the meteorological agency shows a progressive and discernible rise in temperature and a steady decline in rainfall in all ecological zones as well as flooding and drought in certain areas. Evidence is visible in the form of depleting fresh water resources, reduced farm productivity and an increase in air pollution.

Climate Change and Health
Anthropogenic climate change and natural climate variability are likely to add pressure/more burden to the determinants of public health, and to current health and social protection measures in high, middle and low-income countries.²

The future impact of climate change on population health includes a wide range of diseases and health outcomes from infectious diseases and non-communicable diseases to under nutrition and injuries with the greatest impact in low-income countries. The effects of climate change on health include increasing frequency and severity of heat waves, leading to more heat-related illnesses and deaths.²,³ There is also a changing range of disease-carrying vectors, such as mosquitoes, ticks, and fleas that transmit West Nile Fever, dengue fever, Lyme disease, and malaria to humans²,³. Climate change could also lead to increased exposure to pollen, due to increased plant growing seasons. Air pollution due to increased temperature and humidity, can worsen allergies and other respiratory diseases, such as asthma⁴.

Increasing temperatures also cause poor air quality that can affect the heart and worsen cardiovascular disease⁵. When there is an increase in flooding and sea levels rise water gets contaminated with harmful bacteria, viruses, and chemicals, causing food borne and waterborne illnesses³. An increase in the frequency and severity of extreme weather events, causing injuries, deaths, illnesses, malnutrition and effects on mental health from damage to property, loss of loved ones, displacement, and chronic stress³ places added stress on
hospital and public health systems, and limiting people’s ability to obtain adequate health care during extreme climate events.

**Climate Change and Gender**

Climate change threatens to increase existing inequalities, and as the United Nations Development Programme (UNDP) mentioned in its Human Development Report of 2007, gender inequality is one of the most pervasive of these.\(^4\)

In many societies, vulnerability to climate change differs for men and women. In many cases, but not always, women are more vulnerable to climate change than men through their socially constructed roles and responsibilities, and because they lack adequate power and assets.\(^5,6\)

In general, women have **less access to basic assets and natural resources** such as shelter, food, fertile land, water and fuel that are essential in climate change preparedness, mitigation and rehabilitation. Due to gender based divisions of labour men and women perform different tasks. Climate change will alter what they can do exposing man and women to different risks and opportunities e.g. In coastal areas men may migrate to work in productive water possibly in other countries leaving women behind to become, defacto heads of households in addition to their traditional roles. **Women produce 70% of subsistence crops and distribute 85% of fish and crops in the country. Climate change may affect agricultural** production and consequently affect food insecurity. Women who are the center stage in the food value chain could lose or have reduced livelihoods.

**Lack of energy sources, clean water, safe sanitation and health challenges** often put burdens on women’s shoulders, adding to their reproductive and care giving tasks.\(^7\) In the face of disaster, men are often the first to migrate, while in many societies, **sociocultural norms and care giving responsibilities** prevent women from migrating to look for shelter and work when climate change events occur.

Women’s diverse reproductive and productive roles and positions such as land use, water management, forest use, energy provision and use, urban development and conservation in the household and at community level are impacted adversely by climate changes. The socially constructed gender specific vulnerability of women leads to higher female disaster mortality rates compared to those of men.

Lower levels of education and training can reduce their ability to access necessary information before, during and after disasters. Women are likely to be hindered by the fact that they are less mobile, more confined to the house, are not warned due to lack of access to modern technology such as mobile phones. And have less decision making power.\(^8,9\)
At the same time, other studies show that during floods, drowning risk is much higher among men than women. This is probably because in many cultural contexts, men are expected to take more risky or ‘heroic’ behavior.1011.

Women, like men have developed several coping strategies. As there is often no choice, measures such as adaptations in diets, longer working days, shifting to other fuels, employment under safe conditions or even forced migration are all coping strategies that women delve into.

Too often, women are primarily perceived as victims of climate change, with men as actors. However, there are cases in which men are victims and often women can be positive agents of change. Because of their work on the land and dependency on resources, many women have acquired knowledge of local circumstances and changes but planners and decision makers do not yet consider these contributions adequately.12

Studies have shown that women are effective in mobilizing communities to respond to disasters and in disaster preparedness and mitigation and they have ideas on how to mitigate and adapt to climate change. Gender mainstreaming in climate change is slowly taking shape at national, regional and international climate change arenas. Therefore more women with different backgrounds should be actively involved and have a say in climate change negotiations and decisions at all these level. There is also the need for climate change policies and practices to be sustainable and just.

**Climate Change, Gender and Health**

The different health impacts of climate change on the population depends on several factors such as the vulnerability and adaptive capacity of groups of men and women to changing meteorological conditions and the associated human and social consequences as well as capacities, resources, behaviors and attitudes.

Evidence suggests that the health impacts of climate change will be different for women and men. These differences arise from a combination of factors, including

1. Biological and socio-cultural factors (e.g. gender norms, roles and relations),
2. Differences in access to and control over resources.
3. Differences in health impacts caused by direct weather hazards and those by indirect (usually longer-term) effects of climate change.13

**a) Direct effects of meteorological hazards**

Meteorological hazards such as heat waves, windstorms, floods and drought impacts on the health of men and women differently and reflect a combined effect of physiological, behavioral and socially constructed influences. Heat waves and increased hot weather cause heat related fatalities and heat related exhaustion. These climate impacts pose a higher risk
for women for pre-eclampsia and hypertension due to high levels of sodium in drinking water especially along the coast. Whilst the elderly men may be at increased risk of social isolation which is a risk factor for heat wave mortality.14, 15 This is because more elderly men live on their own because they lose the social relationship that women retain as they grow older.

**b) Indirect and long-term effects of climate change**

Men and women also differ in their vulnerability to the indirect and long-term effects of climate-related hazards. This is seen in drought and other weather conditions. For example, droughts imply reduced water availability for drinking, cooking, hygiene, and also food insecurity, especially in developing countries. Health consequences resulting from food insecurity and nutritional deficiencies disproportionately affect women and girls compared to men and boys.

**Drought**

Women and girls often have the responsibility of water collection for the family, and droughts increase their burden as they would need to travel further to collect water. As a result, in periods of drought, it is often women and girls who are most impacted by the health and social consequences of water shortages.

Because society has commonly assigned women the responsibility for providing water to their families, droughts cause a significant added burden on them. A study conducted in Ghana concluded that water scarcity renders women particularly vulnerable because they typically prioritize their husbands’ needs. This meant that women would ensure that their husbands were provided their water needs before attending to their own.16 Additionally, water collection can cause exhaustion because of the need for long walking trips to wells, and carrying heavy pots of water. It can also cause early ageing of vertebral column as a result of cumulative damages to the spine, neck muscles and lower back.

Finally, water collection is accompanied by extremely high opportunity costs, since women who are involved do not have the opportunity to invest their time in other activities, like school or work that would yield greater benefits in the medium and longer term. Drought may reduce water availability, worsen sanitation and personal hygiene with consequent increase in waterborne and water-washed diseases (e.g. trachoma and scabies).

**Vector-borne diseases**

Changing weather patterns may also increase the geographical range and seasonality of certain vector-borne diseases, with some groups more vulnerable than others such as under 5 and pregnant women.17 For example, compared to non-pregnant women, pregnant women are twice as vulnerable to malaria infection due to their reduced immunity and
hormonal changes. Maternal malaria increases the risk of spontaneous abortion, premature delivery, stillbirths and low birth-weight.\textsuperscript{18}

**Sea Level Rise, Heavy rainfall and Flooding**

Sea level rise, heavy rain and flooding cause contamination of drinking water sources with increased waterborne diseases (e.g. cholera, diarrhoeal diseases, and exposure to saline-contamination). Men and women may have different levels of exposure to risk factors due to gender differences in occupation and the division of household chores. E.g. Men take more risks are likely to drown

**Migration and displacement**

Migration and displacement disrupts food supply with consequent malnutrition and mental stress. Food distribution hierarchy, demands in pregnancy and breastfeeding will have negative effect more on women. During the aftermath of natural disasters people are often displaced and forced to find temporary shelters. In addition, temporary shelters usually lack privacy, are overcrowded and are disruptive of regular routines. All of which increase mental stress, anger and sexual and domestic violence, with women and children being the most vulnerable.\textsuperscript{19, 20}

In general disaster relief efforts pay insufficient attention to women’s reproductive and sexual health and consequently their health suffers disproportionately. This could often result in unwanted pregnancies, abortions, prostitution and sexually transmitted infections.

A 2001 study in Malawi showed that female children were married off early in times of drought, usually to older men with numerous sexual partners. They were even forced to sell sex for gifts or money, which resulted in accelerated spread of HIV/AIDS in the country.\textsuperscript{21}. Women also bear the burden of taking care of the sick and the disabled.

**Urban health**

An individual’s place of residence and their status within that place are important determinants of health. Urbanization is a dominant trend, with more people living in marginal conditions in cities in developing countries. Urban populations have distinct vulnerabilities to climate related health hazards.\textsuperscript{34}

Limited access to land in rural areas, conflict, divorce and unemployment forces increasing numbers of women into living in marginalized urban and peri-urban areas and slums. These dwellings are often situated on ground with particular environmental risks, such as hillsides and low-lying plots. The rising rate of female-headed households in urban/peri-urban areas results in a shift of urban sex ratios and feminization of urban poverty. Poverty, exposure of dwelling, and managing on their own the disproportionate daily burden of infrastructural needs such as waste management, fuel, water and sanitation make urban female heads of households particularly vulnerable to natural disasters.\textsuperscript{33}
Climate induced disruption to food production, transport and storage either in the urban area itself or in distant farmland could affect food supply and prices in urban areas. For residents of informal urban settlements, food insecurity is also the consequence of lack of space to store and cook food, lack of time to shop and prepare meals, inadequate access to clean water and often non-existing sewerage systems which could have negative impacts on the health of men, women and children.

Framework for describing the health impacts of climate change on gender
Understanding the reasons why the health impact of climate change differs for men, women and children is critical for designing effective health adaptation strategies and developing a Gender sensitive climate risk screening Tool for the health sector. This is explained by the different vulnerabilities and adaptive capacities of women men, girls and children resulting from biological and socio-cultural factors. These relationships are depicted in the framework below.

Definition of key terms used in the document

In this document;

**Gender** refers to the socially constructed norms, roles and relations that a given society considers appropriate for men and women. Gender determines what is expected, permitted and valued in a woman or a man in a determined context. Source: WHO (2011a)

**Sex** refers to the biological and physiological characteristics of women and men. Source: WHO (2011a)

**Vulnerability** is the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity (IPCC WG2 2007:883).

**Resilience**: The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change (IPCC WG2 2007: 880).

**Adaptive Capacity**: Is defined as the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with consequences.

**Gender sensitive Climate resilience screening tool:**
This is an assessment tool designed to identify strengths and weakness at the district level that when addressed will strengthen the capacity of health system to provide protection from climate change related risks and substantially improve the lives of all including men, women and the most vulnerable populations and at the same time build resilience of the district.
Rationale
Climate change is increasingly being recognized as a global crisis, but responses to it have so far been overly focused on scientific and economic solutions, rather than on the significant human and gender dimensions.

Awareness of gender mainstreaming has grown over the years and has reflection in improved institutional arrangements and documentation in Ghana. These include the establishment of Ministry of Gender, Children and Social Protection), Domestic Violence Act 2007 (Act 732), the national Health Insurance Act 2004 (Act 650) and the Health Sector Gender Policy (MOH 2009), the Reproductive Health Policy, GSGDA II and the National gender and children Policy.

However, many national surveys including the fifth round of the Ghana Living Standard Survey (GLSS 5) provide evidence of inequality in all socio-economic indicators in favour of men. To ensure gender equality and equity it is imperative that gender concerns are integrated into mainstream policies, programmes, projects, and in institutional structures and procedures through gender mainstreaming in all sectors including the health sector.

Policies specifically relating climate change and human health to gender issues have been slow to emerge in Ghana. It is known that sex and gender are important determinants of health and both influence the exposure of men and women to the risk factors for ill-health, access to health information and services, health-seeking behaviour, treatment options, and experience in health-care settings which in turn can lead to differences in health outcomes for women and men.

A gender sensitive tool aims at assessing climate risk and health in reducing inequities in health status and access to health care between men and women so both men and women can have the same chances and opportunities from health policies, programmes and decision making (gender equality) while ensuring that the different and unequal needs and barriers affecting men’s and women’s health status and access to health care are addressed.

The goal of developing a gender sensitive climate risk screening tool is to provide a set of gender-sensitive, easy to collect and analyse set of indicators to provide the needed information that will enable gender concerns to be integrated into all decision making, policies, plans and practices at all stages within the health system, while building resilience into health systems operations in Ghana.
Terms of Reference
The overall project’s objective is to identify, implement, monitor, and evaluate adaptations to reduce current and likely future burdens of malaria, diarrheal diseases, and meningococcal meningitis in Ghana.

The project is being executed through three principal components:

i. Strengthen technical capacities to manage climate change-related health risks
ii. Climate change health risk mainstreamed into decision-making at local and national health policy levels
iii. Information management and effective dissemination of climate change health risk knowledge base.

The project has the following outcomes:

i. Improved national and local health technical sector capacity to plan for and manage climate change related alterations in the geographic range and/or incidence of climate-sensitive health outcomes, including malaria, diarrhoeal diseases and meningococcal meningitis
ii. Mechanisms established for cross-sectoral coordination to support climate change-resilient health policy formulation and implementation at national and local policy-making levels.
iii. ‘Lessons learned’ collected and knowledge management components established.

In line with the strategic results framework of the project document, the project is required to develop a gender sensitive climate risk-screening tool for the health sector. This assignment takes into consideration:

(a) Lessons from the use of EPA/NDPC climate risk screening tool
(b) Existing relevant climate risk screening tools
Objectives
The Ministry of Health in collaboration with UNDP Country Office in Ghana initiated the assignment in order to support the health sector to develop, test and implement a gender sensitive climate resilience tool.

The main objectives of the assignment are to:

1. Develop gender-sensitive climate resilience screening tool
   - Assess EPA/NDPC climate risk screening tool and other existing relevant climate risk/resilience screening tools, and their suitability and adaptability for the health sector;
   - Present lessons learnt and best practices from the use of the climate resilience screening tools
2. Pre-test the developed climate risk screening tool in at least one pilot district
   - Revise the climate change and health risk screening tool based on the field experience
3. Provide guidelines for the use of the tool.
Scope
As a scope, the assignment studied and analysed all available and relevant data, studies, and tools applicable to the development of a national climate resilience-screening tool, in particular for the health sector. It also focused on institutional basis for screening climate risks and its impact on the health sector, the management of those risks; identification of deficiencies in terms of climate vulnerability and risk assessment, coordination among agencies and information management and implementing climate risks actions.
Deliverables
The following are the deliverables presented to the Ministry of Health through the UNDP Country Office:

a. Inception report submitted on 19th August, 2014
b. Draft report submitted on 14th October, 2014
c. This Final report presented with annexes including the gender sensitive climate risks screening tool and guidelines
d. An executive summary including findings and recommendations.
CHAPTER TWO

Methodology
The process of developing the final assessment tool involved several approaches. These included literature review, interview with stakeholders, pre-testing of draft Tool, consultative meeting with stakeholders and experts group meeting on draft report and review of draft tool and draft report.

Literature Review
Extensive literature review on current gender and health issues as they relate to climate change was carried out.

Analysis was made of existing relevant climate risk/resilience screening tools and data applicable to the development of the screening tool. Matrix of tools reviewed (Appendix I)

A number of documents were obtained from Ghana Health Service, Ministry of Health, EPA and the GEF operational focal point.

Interviews
To identify climate risk assessment good practices, Interviews were held with stakeholders selected based on institutional responsibilities in relation to the assignment and those that have a major role to play in implementing and assessing Climate change specific interventions, some of which impact on health and gender. These include Environmental Protection Agency, National Development Planning Commission, and Ministry of Health & Ghana Health Service, Pilot districts, GEF operational focal point and the Technical Advisory Committee.

Draft Tool Pre-testing
Based on the literature review, consultative meetings and interviews, a draft screening tool was developed with 134 questions. The draft tool was pre-tested in two pilot districts (Keta and Bongo) representing the southern and northern ecological zones in Ghana respectively. The District Health Teams were the main respondents.

Using a score of “1” for a “Yes” response and “0” for a “No” response, the total “Yes” scores in each thematic area was calculated as a proportion of number of questions in that Thematic area. The overall “Yes” score was computed as a proportion of total number of questions to determine how gender sensitive climate resilient a district is. Below is one example of how the resilience of the two Districts compare.
Diagram 1: Performance of Thematic Areas of Gender Sensitive Climate Resilience Assessment, Keta and Bongo Districts

Consultative Meetings on the Tool

Stakeholder’s Consultative Meeting
At a stakeholder meeting held on 8th October, suggestions were made to speak to the tool and to justify why the indicators chosen were relevant. In Chapter 3, those suggestions have been addressed.

Meeting with Mr. Isaac Adams (TAC Chair)
A meeting was held with Mr. Isaac Adams, Chairman of TAC and Director for Research, Statistics and Information Management Ministry of Health, to review the draft report, tool and guidelines who suggested inclusion of a write up on how the results will be interpreted given the importance of need for effective communication of results.

Meeting with Expert Team
A team from Abantu for development, The National Development Planning Commission, the Project Implementation Unit (PIU), UNDP and the Ghana Health Service was constituted to review the consultancy outputs. Suggestions were made to clarify some aspects of the literature review. The team proposed the indicators be limited to about fifty and to include
some high score and moderate score indicators from the TAC resilient indicators. It was also suggested that.

In addition there were suggestions to reframe some questions to capture levels of performance as coverage (proportions) and delete others. Suggestions and comments from the meeting have since been used in finalizing this report, the tool and the guideline. (Details of suggestions and comments can be found in the minutes of the meeting in Annex 3).

This final report together with the annexes is presented electronically, with 3 printed, professionally bound hard copies.
CHAPTER THREE

EPA/NDPC climate risk screening tool
As required in the TOR, EPA/NDPC could not make available a climate risk screening tool. What was made available was a guide book for integrating climate and disaster risk reduction into National Development Policies and Planning in Ghana.

The Final Assessment Tool
The final Tool is shown in Annex 2. The Tool, which has 59 questions, is subdivided into seven thematic areas, each with a set of indicators as shown in the table below:

<table>
<thead>
<tr>
<th>#</th>
<th>Thematic Area</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Governance</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Socio-Cultural</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Economic</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Access to Health Care</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Vulnerability</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Epidemiology and Disease Control</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Demography and Human Resource</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>59</td>
</tr>
</tbody>
</table>

Brief on Thematic Areas
Below is a brief on governance, socio-cultural, economic, access to health care, vulnerability, epidemiology and disease control, and demography and human resource thematic areas.

Governance
Evaluation studies of vulnerability and resilience have affirmed the integral role that governance plays in the ability to cope with and adapt to climate change. It includes the structures, processes and mechanisms that better facilitate coping with immediate disasters and long term adaptations. In the development of this tool governance indicators selected relate to the presence and absence of policies and plans and gender responsive budgeting.

Gender responsive budgeting seeks to make the gender impact of budgets visible and to transform them into an instrument for increasing gender equality. In resilient societies, governance supports productive lives, regulates markets for the good of producers and consumers, provides safety nets when people cannot help themselves, and ensures that all citizens including minorities and females have equal rights and the means to assert them.
The main governance concerns addressed are:

1. Coordination and leadership
2. Planning and gender responsive budgeting
3. Institutional capacity assessment
4. Performance tracking (monitoring and evaluation)

**Socio-cultural**

A resilient society reflects the social and cultural values that contribute towards social, human, and natural capital. The society respects the range of cultures within the society that promote social, human and natural capital.

The way families are defined and supported within society by governments and local communities and members’ duties to one another, their relationship with nature, and the tendency to accept (or reject) outside help or technology are integral parts of the society’s ability to change along with the climate.

The culture of societies can describe to an extent the health seeking behavior of its people. Socio-cultural values can result in increased stress for men resulting from lack of opportunity to provide for families during drought and other climate related events. There could also be increased morbidity from lack of decision-making power and loss of income and financial distress.

The following are among the key socio-cultural factors considered in the Tool:

1. Education
2. Access to potable water and sanitation facilities
3. Marital status
4. Household decision making
5. Use of tobacco and alcohol
6. Social support systems
7. Women’s role in providing food, water, fuel for the family
8. Women’s limited power in household and community decision-making processes
9. The burden of having to care for the sick at home
10. Access to resources and their control influence.

**Economic**

Studies have also shown that similar climate events produce very different levels of socio economic impact depending not only on the location and timing of occurrence but also on the resources and agility of the societies who experience the climate change impacts.
In developing this tool, some socio economic indicators have been included as these characteristics are also of value in pinpointing and including all vulnerable groups in a society. Researchers have chosen to focus on livelihoods instead, that is the ways families obtain goods they need for the way of life and the extent to which livelihood are diversified as indicators of resilience). Household is often examined as the unit of analysis instead of the individual. Access to assets, markets and off farm employment as well as the burden sharing necessary to grow crops, gather fuel and water and manage economic resources may be good economic indicators for resilience to short term shocks or long term climate change impacts.

Among the economic indicators selected are:

1. Average household income
2. Ownership of means of transport
3. Ownership of means of communication
4. Ability to take financial decisions
5. Health insurance enrolment

Access to Healthcare
The objective of this thematic area is therefore to reduce financial, geographical and socio-cultural gender barriers in accessing health care. Where decision to seek care requires approval, distances are long, out of pocket payments are made, health care professionals and in short supply and quality of care is poor, women, children and the aged tend to suffer the most and these worsen when there is a climate related incident.

Where health infrastructure is weak or not appropriately maintained, essential medicines are lacking, power supply is absent or unreliable and no back-up power, insufficient and fluctuating potable water supply without adequate storage facility, the facility resilience is weakened and unable to support the population to cope and to recover from climate change event.

Access to health care issues addressed includes:

1. Initial and continuous utilization of services as ANC, SD, FP, OPD, EmONC
2. Availability and use of ACT, ORS, SP, ITN
3. Transport systems and Distances to nearest health facilities
4. Health facility resilience including power and water supply
5. Deaths audits, especially maternal deaths and still births
**Vulnerability**

In developing the tool, indicators have been included to show the degree to which certain groups are susceptible to or unable to cope with the adverse effects of climate change.

There is increasing recognition that adaptation is important in reducing vulnerability or increasing resilience to changes in both long-term average conditions and extreme events.

In developing this tool, indicators have been identified that if tracked and improved will reduce present and future vulnerability to climate change. Also, learning about new risks such that a resilient health care facility, will build the capacity of staff to ensure they are knowledgeable and aware of climate change and how it may impact the health of the population. This will ensure that staff are equipped to handle impacts of climate change on health and gender.

The main vulnerability and gender concerns were:

1. Availability of District rapid emergency evacuation services
2. Identifying a place for housing vulnerable groups in the event of climate change event
3. Availability of record of proportion of communities that have documented vulnerability risks (sea level rise, flood, drought, aged, women, children and people with disability)
4. The particular vulnerability of women to climate change
5. Vulnerability to illness, which gender differences could influence disease and health outcomes.

**Epidemiology and Diseases control**

Epidemiology plays a role in predicting and preventing additional effects in human populations already affected by common diseases sensitive to climate change such as diarrhoea, malaria, Acute Respiratory Tract Infections (ARI) and non-communicable diseases.

In developing the tool incidence and prevalence indicators were used. Understanding and analyzing when infants and adults die and different mortality patterns for males and females and children can also contribute to understanding resilience.

Increasing incidence of malaria and diarrhoea diseases may point to immediate effects of climate change as flooding. Persistence of high prevalence of malaria may indicate failure of control measures and tracking median and 3rd quartile monthly incidence of malaria can help predict malaria epidemic.

Included in the epidemiology and disease control indicators are the following:
1. Incidence of selected diseases
2. Prevalence of selected diseases
3. Surveillance system

**Demography and Human resource**

Demography has significant contributions to resilience analysis. Demographic analysis will describe more characteristics of the people who are vulnerable, who will be affected by climate change and who will undertake any mitigation or adaptation activity. Approaches to studying resilience of societies will benefit from demographic knowledge including fertility and mortality patterns. E.g. Knowing how many children people have and why they have that number could help understand the patterns of resilience and adaptation. Analyzing when infants and adults die and different mortality patterns for males and females and children can also contribute to understanding resilience.
Best Practices and Lessons Learnt

It is important to highlight some of the best practices that come as lessons observed in the pilot districts.

- The district plans have Climate Change and gender indicators that can be critically looked at for improvement.
- The existence of an Inter-agency (multi-sector) Climate Change Committee (ICCC) in the districts provided opportunity to obtain information required by the tool.
- In each district there is integrated monitoring checklist in use which can incorporate gender sensitive climate change indicators.
- There is a functional Integrated Disease surveillance and Response (IDSR) system in the district and combined with the District Health Information Management system (DHIMS) promises a good opportunity to obtain data for the Tool.
- Each district has a Tele-consultation technology on Climate Change which use is Gender-sensitive and can be very useful as community coping strategy.

Some observed Gaps

- Climate Change/Health Planning and implementation are not based on district operational plans, but on Project as and when funds are made available.
- District plans have no budget line for gender responsiveness.
- Lessons learnt during programmes implementation are not generally documented.
- Districts have not conducted Health facility and gender risk assessments and have limited capacity to assess health facility for climate risk.
- There are no monitoring and reporting systems on Climate Change gender and health.
- The integrated disease surveillance system (IDSR) does not incorporate Climate Change gender indicators.
- The districts do not carry out routine assessment of climate risk and health resilience.

Lessons Learnt on use of Tool

- The high degree of commitment demonstrated by the District Teams enhanced the tool administration.
- When questions last beyond two hours, respondents get exhausted and lose concentration.
- The tool administration interferes with routine work and interruptions are expected.
- Validating some responses may require giving time for the team to go into archives or retrieve from files.
- Where coverage figures and trends are required, the team may need a reasonable time, up to a week to gather the data.
- It is easier for analysis to use “Yes” and “No” assessment score than open ended questions.
- Where proportions are required, e.g. Literacy rate, trend may be required to see improvement and values can be compared across similar entities (Districts) to make meaningful conclusion
- The Tool can be used by the ICCC to conduct climate change and health assessment and use the findings to improve the District Development planning process

Guidelines

The purpose of the Guidelines (Presented as Separate document) is to create understanding on what is required to use the Tool, guide the choice of indicators and where to obtain the data and to stress the importance of team work and multisector approach to the use of the Tool.

The Guideline provides for the following:

- What is required to administer the Tool
  - Planning the Assessment
  - Technical support
  - Financial and logistics resource requirements
  - Assembling the Assessment Team
  - Setting for Tool administration
  - Training and
  - The Tool administration
- Findings and interpretation
- Possible data sources

The Guidelines used appropriately will significantly facilitate the use of the Tool.
CHAPTER FOUR

Conclusion
It is possible to administer a simple tool at the district level to assess and help build the district resilience for a gender sensitive health system that can lend itself to local modifications and adaptations and yet make it also possible to compare performance across districts.

Recommendations
To ensure that gender dimensions of climate change are addressed to improve the resilience of health systems operations in Ghana, it is recommended that:

1. UNDP/MOH does everything possible to support the operationalization of the Tool and Guidelines

2. Regional Health Directorates administer the Tool to gauge the level of resilience of their districts.

3. The pilot Districts begin to use the Tool for self-assessment and improvement, particularly working through the ICCC.
REFERENCES


11. Kovats S and Allen M. Flooding, windstorms and climate change. In: Department of Health and Health Protection Agency of the UK. Health effects of climate change in theUK 2008:


20. Davis I et al. eds. Tsunami, gender and recovery. Special Issue for International Day for Disaster Risk Reduction. Ahmedabad, All India Disaster Mitigation Institute, 2005.


22. TAC (2014) Indicators For Measuring Climate Change Resilience In The Health Sector provided by the Technical advisory committee on the climate change project


26. UNDP (2011) Climate risk screening tools and their application

27. Gender perspectives: integrating Disaster risk reduction into climate change adaptation


## APPENDIX 1: Matrix of climate risk screening tools reviewed

<table>
<thead>
<tr>
<th>Tool</th>
<th>Sector</th>
<th>Highlights</th>
<th>Strengths</th>
<th>Limitations/gaps in respect to assignment</th>
<th>Remarks(suitability and adaptability for the health sector)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA/NDPC Climate Change Mainstreaming guide (EPA, NDPC, UNDP, NAD MO)</td>
<td>Sector/district</td>
<td>-vulnerability</td>
<td>-Scopes out climate change and disaster risk implications at Sectoral and district levels in Ghana</td>
<td>-Not a risk screening tool but rather a guide book to facilitate mainstreaming of climate change activities into national plans and policies</td>
<td>Guide is very useful especially for mainstreaming climate change but needs to be used together others specifically to incorporate gender dimensions and resilience building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Climate change</td>
<td></td>
<td>-does not provide indicators</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-disaster risk reduction</td>
<td></td>
<td>-gender climate resilient indicators are missing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-mainstreaming</td>
<td></td>
<td>-health sector indicators are scanty</td>
<td></td>
</tr>
<tr>
<td>Malone and La Rovere (2005) tool for assessing resilience to climate change</td>
<td>Cross-sectoral</td>
<td>-Vulnerability</td>
<td>Has Indicators for socio-demographic conditions, economics, culture, natural resource use, policy and governance</td>
<td>Very general in focus and not specific for the health sector</td>
<td>Tool is useful for current assignment but has to be complemented with other specific tools with climate related health indicators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Resilience</td>
<td></td>
<td>-Disease related indicators are missing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Climate change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-gender sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health care Facility Climate</td>
<td>Health sector</td>
<td>-Gender sensitive</td>
<td>-Used at the health facility level to assess resilience to climate change</td>
<td>-Demographic and socio economic parameters are missing</td>
<td>Tool is quite suitable for use in the health sector but needs to be</td>
</tr>
<tr>
<td>Change Resiliency checklist (The Canadian coalition for green health care)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-It includes a checklist with health facility specific questions such as emergency management, facilities management, health care services and supply management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Questions were not weighted based on their determining factors of healthcare facility resiliency to climate change which could then be used to generate specific top concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>used together with others specifically to incorporate other parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CVCA-Climate Vulnerability and Capacity Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmes and projects</td>
</tr>
<tr>
<td>-Gender sensitive -Vulnerability -Climate change</td>
</tr>
<tr>
<td>-The tool is intended to produce climate change adaptation in a way that promotes gender equality and builds resilience. -The tool assesses gendered needs in climate change adaptation including vulnerability of women to hydro meteorological hazards like floods, droughts and changing rainfall patterns</td>
</tr>
<tr>
<td>Although tool can be used to understand vulnerability. It is used to mainstream climate change adaptation in to livelihood programmes and not specific for health system</td>
</tr>
<tr>
<td>Tool is quite useful but Would have to be used together with others to make it suitable for use in the health sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CRiSTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmes and projects</td>
</tr>
<tr>
<td>-Gender specific -Vulnerability -climate change</td>
</tr>
<tr>
<td>-CRiSTAL allows a detailed analysis of hazards and their impacts on livelihoods at the local level -It also provides a gender specific vulnerability analysis for different parts of the population particularly highlighting coping strategies of women and resulting in clear pointers of how gender</td>
</tr>
<tr>
<td>Although tool can be used to understand vulnerability. It is used not specific for health sector</td>
</tr>
<tr>
<td>Tool is useful but has to be complemented with other tools specific for the health sector</td>
</tr>
<tr>
<td>ASTHO Climate change Population Vulnerability Screening Tool</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Tool provided by UNDP “Development of indicators for measuring climate change resilience in the health sector</td>
</tr>
</tbody>
</table>
## APPENDIX 2: Gender Sensitive Climate Resilience Screening Tool

**GENDER-SENSITIVE CLIMATE-RESILIENCE SCREENING TOOL**

<table>
<thead>
<tr>
<th>Date:</th>
<th>District:</th>
<th>Region:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. Governance</th>
<th>Yes/No</th>
<th>Number/Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Is there a gender-sensitive code of conduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Is there a District Development/operational plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Does district plan have climate change and Gender/Health indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Existence of monitoring and reporting system on Climate Change and Gender/Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>Does Plan have budget line for gender specific health activities (Gender responsive budgeting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Does the district have a budget line for climate change activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Explicit strategies to mobilize resources for health and gender adaptation to climate change activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Does the district have a plan for the enrolment of the vulnerable onto social intervention programmes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Demography &amp; Human Resources</th>
<th>Yes/No</th>
<th>Number/Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Is there record of population distribution by religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1</td>
<td>If &quot;Yes&quot;Indicate the proportions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.1</td>
<td>Christianity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.2</td>
<td>Islam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.3</td>
<td>Traditional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1.4</td>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Is there record of population distribution by ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1</td>
<td>If &quot;Yes&quot;Indicate names and the proportions of 5 main ethnic groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1.2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 2.2.1 Development of a Gender Sensitive Climate Resilience Screening Tool for the Health Sector

| 2.2.1.3 | 3 |
| 2.2.1.4 | 4 |
| 2.2.1.5 | 5 |
| 2.2.1.6 | 6 |

**2.3** Is there a record system for health and/or demographic events (Immunization, Mass drug administration, Births, Disease, Deaths etc.).

**2.4** What proportion of communities have a record of Health and/or demographic events (immunization, mass drug administration, births, disease, deaths etc.)

**2.5** Is a record of contraceptive prevalence rate? If Yes, indicate the contraceptive prevalence rate

**2.6** What proportion of communities have a record of updated population structure (Age, sex, migrants etc.) (Community demographic register)?

**2.7** Is there record of Population : Nurse ratio? If Yes, indicate

**2.8** Is there record of Population : Midwife ratio? If Yes, indicate

**2.9** Is there record of Population : Doctor ratio? If Yes, indicate

### 3. Sociocultural

**3.1** Is there a record of the proportion of communities that have adequate solid waste disposal system (public toilet)? If Yes, indicate

**3.2** Is there a record of the proportion of communities that have access to potable water? If Yes, indicate

**3.3** Is there a record of the proportion of communities that have access to energy sources such as LPG, electricity? If Yes, indicate

**3.4** Is there a record of level of education? If Yes indicate proportions

| 3.4.1 | Primary |
| 3.4.2 | Middle/JHS |
| 3.4.3 | Secondary/SHS |
| 3.4.4 | Higher |

**3.5** Is there a record of the adult literacy rate? If Yes indicate the proportions

| 3.5.1 | Male |
| 3.5.2 | Female |
### Development of a Gender Sensitive Climate Resilience Screening Tool for the Health Sector

#### 3.6 Is there a record of marital status of women? If Yes indicate the proportions

| 3.6.1 Single |  
| 3.6.2 Married |  
| 3.6.3 Divorced |  
| 3.6.4 Separated |  
| 3.6.5 Widowed |  

#### 3.7 What proportion of communities have functional social support systems (Counseling systems)

#### 4. Economic

| 4.1 Is there a record of the proportion of communities with own means of transport such as bicycle, motorcycle, car, boat, truck? If Yes, indicate |  
| 4.2 Is there a record of the proportion of households that own Radio or TV set? If Yes, indicate |  
| 4.3 Is there a record of the proportion of households that own mobile phones? If Yes, indicate |  
| 4.4 Is there a record of the proportion of women benefit from the exemption policy/system that covers all diseases and complications related to childbearing? If Yes, indicate |  
| 4.5 Is there a record of the average annual income of a household? If Yes, indicate average for |  
| 4.5.1 Urban |  
| 4.5.2 Rural |  

#### 5. Epidemiology and Disease control

| 5.1 Is there a system to periodically assess the prevalence of malaria in pregnant women? |  
| 5.1.1 If Yes indicate the trend for the last 5 years [ ] [ ] [ ] [ ] [ ] |  
| 5.2 Is there record of Institutional Maternal Mortality Ratio Trend? |  
| 5.2.1 If Yes indicate the trend for the last 5 years [ ] [ ] [ ] [ ] [ ] |  
| 5.3 Is there a system to periodically assess the prevalence of the following diseases in children 0 to 59 months? |  
| 5.3.1 Malaria |  
| 5.3.2 Acute Respiratory Infection |  
| 5.3.3 Diarrhoea |  
| 5.3.4 If Yes for any, indicate the trend in the last 5 Years |  

---

36 | Development of a Gender Sensitive Climate Resilience Screening Tool for the Health Sector
### 5.3.5 Malaria

|  |  |  |  |  |  |  |  |

### 5.3.6 Acute Respiratory Infection

|  |  |  |  |  |  |  |  |

### 5.3.7 Diarrhoea

|  |  |  |  |  |  |  |  |

### 5.4 Is there a functional integrated disease surveillance system?

If Yes, describe:

### 5.5 Is there a functional Community level early warning and disaster response mechanism?

If Yes, describe:

### 5.6 Does district surveillance system incorporate climate change and gender indicators?

### 6. Access to health care

#### 6.1 Is there a record of use of antenatal care?

If Yes indicate the trend for the last 5 years [  ] [  ] [  ] [  ] [  ] [  ]

#### 6.2 Is there a record of SP use during pregnancy?

If Yes indicate the trend for the last 5 years [  ] [  ] [  ] [  ] [  ] [  ]

#### 6.3 Is there a record of skilled delivery rate?

If Yes indicate the trend for the last 5 years [  ] [  ] [  ] [  ] [  ] [  ]

#### 6.4 Is there availability and access to Emergency Obstetric and Neo-natal Care? If Yes indicate below:

6.4.1 Basic EmONC

6.4.2 Comprehensive EmONC

#### 6.5 Is there record of vaccination coverage for children 0 - 11 months?

If Yes indicate the trend for the last 5 years [  ] [  ] [  ] [  ] [  ] [  ]

#### 6.6 Is there record of vaccination coverage for children 12 - 23 months?

If Yes indicate the trend for the last 5 years [  ] [  ] [  ] [  ] [  ] [  ]

#### 6.7 Is there record of use of ORS during Diarrhoea episode?

If Yes indicate the trend for the last 5 years [  ] [  ] [  ] [  ] [  ] [  ]
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8</td>
<td>Is there record of proportion of communities within 8 km of the District hospital? If Yes, indicate</td>
<td></td>
</tr>
<tr>
<td>6.9</td>
<td>Is there record of proportion of communities within 5km of CHPS zone or Health centre? If Yes, indicate</td>
<td></td>
</tr>
<tr>
<td>6.10</td>
<td>Is there a system in place in health facilities that take care of men’s reproductive and other health needs?</td>
<td></td>
</tr>
<tr>
<td>6.11</td>
<td>Availability of Health Promotion Plan for Climate Change and Gender</td>
<td></td>
</tr>
<tr>
<td>6.12</td>
<td>Is there a system to assess health facility resilience</td>
<td></td>
</tr>
<tr>
<td>6.12.1</td>
<td>If Yes, Describe:</td>
<td></td>
</tr>
<tr>
<td>6.13</td>
<td>Is there record of availability of electrical power supply in health facilities? If Yes indicate</td>
<td></td>
</tr>
<tr>
<td>6.13.1</td>
<td>Grid: ECG</td>
<td></td>
</tr>
<tr>
<td>6.13.2</td>
<td>Backup: Genset, Solar, etc</td>
<td></td>
</tr>
<tr>
<td>6.14</td>
<td>Is there record of availability of potable water supply in health facilities? If Yes indicate</td>
<td></td>
</tr>
<tr>
<td>6.14.1</td>
<td>Mains: Pipe borne water</td>
<td></td>
</tr>
<tr>
<td>6.14.2</td>
<td>Backup: Wells, boreholes, etc</td>
<td></td>
</tr>
<tr>
<td>6.14.3</td>
<td>Stored: Water tanks</td>
<td></td>
</tr>
<tr>
<td>6.15</td>
<td>Is there record of regular stock taking for medicines used by women and children?</td>
<td></td>
</tr>
<tr>
<td>6.16</td>
<td>Is there a case management protocol for victims of gender-based violence?</td>
<td></td>
</tr>
<tr>
<td>6.17</td>
<td>Is there record of unmet need for family planning by year?</td>
<td></td>
</tr>
<tr>
<td>6.17.1</td>
<td>If Yes indicate the trend for the last 5 years [ ] [ ] [ ] [ ] [ ] [ ]</td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>Availability of District rapid emergency evacuation services</td>
<td></td>
</tr>
<tr>
<td>7.2</td>
<td>Availability of a place for housing vulnerable groups in the event of climate change event</td>
<td></td>
</tr>
<tr>
<td>7.3</td>
<td>Availability of record of proportion of the communities that have documented vulnerability risk factors (Sea level rise, flood, drought, aged, women, children, people with disability, poverty etc.)</td>
<td></td>
</tr>
<tr>
<td>7.4</td>
<td>Does the District keep record of distribution of vulnerability risk factors such as Sea level rise, flood, drought, aged, women, children, people with disability, poverty etc</td>
<td></td>
</tr>
<tr>
<td>7.5</td>
<td>Is CHPS deployment linked to vulnerability map?</td>
<td></td>
</tr>
<tr>
<td>7.6</td>
<td>Is there a record of Proportion/Number of Health Workers trained on Climate change in the past three years?</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3: Minutes of Meeting to Review Consultancy Outputs

MINUTES OF MEETING TO REVIEW DRAFT REPORT, THE GENDER SENSITIVE CLIMATE RESILIENT SCREENING TOOL AND GUIDELINES FOR THE USE OF TOOL

PARTICIPANTS

1. Nafisatu Yussif, ABANTU For Development
2. Felix Addo-Yobo, National Development Planning Commission (NDPC)
3. Abena Nakawa, Project Implementation Unit (PIU) UNDP
4. Beatrice Heymann Dr. Ghana Health Service (GHS)

DATE: 24th October, 2014  START TIME: 10:00 am
VENUE: Occupational and Environmental Health Unit of GHS conference room

APPROACH: Step by step review of documents by all present.

KEY SUGGESTIONS:

Output 1: Draft Report including Tool

- To clarify some aspects of the literature review
- That the indicators be limited to about fifty and to include some high score and moderate score indicators from the TAC resilient indicators.
- It was also suggested that some questions be reframed to include proportions
Below is a list of detailed suggestions made by the team

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd paragraph under background</td>
<td>2</td>
<td>Zero in on specifics in Ghana</td>
</tr>
<tr>
<td>2nd and 3rd paragraphs under background</td>
<td>2</td>
<td>Break up sentence</td>
</tr>
</tbody>
</table>
| 3rd paragraph under climate change and gender| 3    | (i) “women have less access to resources” Give examples of such resources e.g. land  
(ii) need to capture urban experiences of women  
(iii) “Gendered divisions of labour often result in the over representation of women in Agriculture and informal sectors, which are vulnerable to disasters resulting from climate change” Sentence might be misconstrued to mean women rather benefit from agricultural sectors. Hence must be rephrased. |
| 6th paragraph under climate change and gender| 3    | (i) Women are likely to be hindered by the fact that they are less mobile likely to impact on their ability to, more confined to the house, do not leave the house alone, are not warned due to lack of access to information and have less decision making power.  
Change to read ‘some women cannot swim. Are not warned due to lack of access to modern technology like mobile phones. |
| 7th paragraph under climate change and gender| 3    | (i) Add a statement on men to this paragraph e.g. that nomads usually men have to walk long distances for water and food for their cattle and this could also lead to an increase in sexual partners resulting in sexually transmitted infections.  
(ii) Add an increase in suicide rates for men during drought |
| 10th paragraph under climate change and gender| 4    | (i) “Therefore more women with different backgrounds should be participating having a say in climate change negotiations and decisions at all these level”. Should be rephrased to read Therefore more women with different backgrounds should be actively involved and have a say in climate change negotiations and decisions at all these level. |
| 3rd paragraph under climate change, gender and health | 5 | (i) Explain why health impacts pose a higher risk for pre-eclampsia and hypertension for women as there are different kinds of storms  
(ii) change subheading windstorms to storms and loss of life and injury is a direct effect whilst psychological stress is an indirect effect  
(iii) under subheading vector borne diseases explain a bit about why pregnant women are more vulnerable to malarial infection |
| Under Sea Level Rise, Heavy rainfall and Flooding | 5 | (i) Have a section for working definitions such as gender, screening tool etc.  
(ii) Explain the difference between sex and gender |
| Migration and displacement | 6 | (i) Give examples for women e.g. The Probability of women being carried away.  
(ii) Delete headings of temporary shelters and lack of access to sexual and reproduction health services and put all information under migration and displacement  
(ii) Include under this section men have more sexual partners leading to STIs |
| Framework for describing the effect of different factors on vulnerability to health risks of climate change | 7 | (i) Framework not easy to understand  
(ii) Heading should change to read Framework for describing the health impacts of cc on gender  
(iii) include a small introduction |
| Rationale Paragraph 2 | 8 | (i) Add the GSGDA II  
(ii) National gender and children’s policy 2004 |
<p>| Rationale paragraphs 6&amp;7 | 8 | Rephrase paragraphs 6&amp;7 |
| Deliverables under TOR | 12 | Revise dates |</p>
<table>
<thead>
<tr>
<th>THEMATIC AREA</th>
<th>Indicator number</th>
<th>Indicator</th>
<th>comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>1.7</td>
<td>Does the district have a plan for enrolment of the vulnerable onto the LEAP</td>
<td>Replace this indicator with an indicator like does the district have a plan for enrolment of the vulnerable on social intervention programmes</td>
</tr>
<tr>
<td></td>
<td>1.8</td>
<td>Existence of record on coverage for the LEAP</td>
<td>Delete</td>
</tr>
<tr>
<td>Human resources and demography</td>
<td>2.3</td>
<td>Is there a record of unmet need for family planning</td>
<td>Move under access to health care. Just asking about record not enough</td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>Is there a record of spontaneous abortions or still births by year</td>
<td>Delete</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>Is there a record of use of modern methods of contraception</td>
<td>Move under access to health care. Just asking about record not enough</td>
</tr>
<tr>
<td></td>
<td>2.6</td>
<td>Does the District Keep record of Births, Disease, Deaths, Age &amp; sex distribution</td>
<td>How many will give a yes answer? Consider restructuring</td>
</tr>
<tr>
<td>Socio-cultural</td>
<td>3.1</td>
<td>Is there a record of the kind of toilet facility household member’s use.</td>
<td>Consider reframing and using proportions</td>
</tr>
<tr>
<td></td>
<td>3.1.1</td>
<td>Flushed toilet and flush</td>
<td>delete one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>toilet</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Is there record of fuel use by household</td>
<td>Consider reframing and using proportions</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Is there record of main source of household drinking water</td>
<td>Consider reframing and using proportions</td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>Is there record of who usually decides how money earned by married women is used</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Is there record of who usually makes decisions about Health care for the woman</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>3.7</td>
<td>Is there record of marital status of women</td>
<td>Include single in options</td>
<td></td>
</tr>
<tr>
<td>3.8</td>
<td>Is there record of Tobacco use by type and gender</td>
<td>Delete not really related</td>
<td></td>
</tr>
<tr>
<td>3.10</td>
<td>Availability of record of proportion of adults 15-49 years of age who can read and write</td>
<td>To follow 3.4 Is there a record of level of education</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Code</td>
<td>Question</td>
<td>Notes</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>3.11</td>
<td></td>
<td>Availability of social support systems (Counseling systems)</td>
<td>To go under demography</td>
</tr>
<tr>
<td>ECONOMIC</td>
<td>4.1</td>
<td>Is there record of household ownership of</td>
<td>Include house as a possible option for household ownership</td>
</tr>
<tr>
<td></td>
<td>4.3</td>
<td>Husband/Partner entrust her with money</td>
<td>Delete</td>
</tr>
<tr>
<td></td>
<td>4.4</td>
<td>Husband/Partner not refuses to pay childrens school fees</td>
<td>Reframe to read who pays school fees in household</td>
</tr>
<tr>
<td>EPIDEMIOLOGY AND DISEASE CONTROL</td>
<td></td>
<td>Indicators too many</td>
<td>Include indicators from TAC report</td>
</tr>
<tr>
<td>ACCESS TO HEALTH CARE</td>
<td></td>
<td>Indicators too many</td>
<td>Include indicators from TAC report</td>
</tr>
<tr>
<td>VULNERABILITY/ADAPTATION</td>
<td>7.1</td>
<td>Husband/Partner jealous or angry if she talk/talked to other men</td>
<td>Data can be obtained at national level. Would be difficult to get data at district level</td>
</tr>
<tr>
<td></td>
<td>7.2</td>
<td>Husband/Partner frequently accuses/accused her of being unfaithful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.3</td>
<td>Husband/Partner threaten to hurt or harm woman</td>
<td></td>
</tr>
</tbody>
</table>
Output 2: Guidelines for use of the tool

- In general the comments were to paraphrase some sentences.

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part iii paragraph 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part iii paragraph 3</td>
<td>5</td>
<td>National level should read Ministry of health</td>
</tr>
<tr>
<td>Part iii under subheading assembling the team paragraph 2</td>
<td>6</td>
<td>“It is important to involve persons with the technical skills to conduct the assessment and persons with decision-making power”. Should read “It is important to involve persons with the requisite technical skills to conduct the assessment and persons with decision-making power”.</td>
</tr>
<tr>
<td>Part iii under subheading the setting paragraph 1</td>
<td>6</td>
<td>“The Tool is meant for use at the District level”. Should read “The Tool is meant for use at the District /institutional level”</td>
</tr>
</tbody>
</table>

Suggestions have been used to revise the final report, tool and guidelines.