

PHILIPPINES

Linking Sexual and Reproductive
Health and Rights, Population,
Health, Environment and
Climate Change Initiatives:
A Scoping Study
on Women and Fishers
in the Philippines

SCOPING STUDY

Building New Constituencies for Women's
Sexual and Reproductive Health and Rights (SRHR):
Climate Change and SRHR



PATH Foundation Philippines, Inc.

ALLEVIATING POVERTY * IMPROVING HEALTH * PROMOTING ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT



A Scoping Study

Linking Sexual and Reproductive Health and Rights, Population, Health, Environment and Climate Change Initiatives: A Scoping Study on Women and Fishers in the Philippines

© 2015

PATH Foundation Philippines, Inc. (PFPI)

Asian-Pacific Resource and Research Centre for Women (ARROW)

Any part of this publication may be photocopied, reproduced, stored in a retrieval system or transmitted in any form by any means, or adapted to meet local needs, without prior permission, provided that it is for non-profit purposes and credit is given to ARROW. A copy of the reproduction/translation should be sent to ARROW.

ISBN: 978-621-95244-0-7

Published by:

PATH Foundation Philippines, Inc. (PFPI)

10/F Unit 1008 Tower II
Cityland Condominium 10
154 H.V. dela Costa Street
Salcedo Village
Makati City 1227, Philippines
Tel: (632) 817-5049
Fax: (632) 893-5360
Email: info@pfpi.org
Website: www.pfpi.org

Asian-Pacific Resource and Research Centre for Women (ARROW)

1 & 2 Jalan Scott, Brickfields
50470 Kuala Lumpur, Malaysia
Tel: (603) 2273 9913/9914
Fax: (603) 2273 9916
Email: arrow@arrow.org.my
Website: www.arrow.org.my
Facebook: The Asian-Pacific Resource and Research Centre for Women (ARROW)
Twitter: @ARROW_Women
YouTube: [youtube.com/user/ARROWomen](https://www.youtube.com/user/ARROWomen)

Production Team:

Writers: Joan Castro and Enrique Hernandez

Reviewers: Zonibel Woods, Sunitha Bisan, Javed Hussain, Leona D'Agnes, Dr. Genevieve David

Copy Editor:

Layout: Christine Nueva

Cover Photo Credit: PATH Foundation Philippines, Inc.

CONTENTS

ACKNOWLEDGEMENTS	1
LIST OF ACRONYMS	2
EXECUTIVE SUMMARY	3
INTRODUCTION	4
Objectives.....	6
Methodology.....	6
UNDERSTANDING THE INTERLINKAGES	8
Climate Change Impact	8
Effects of Climate Change on Resources, Livelihoods and Health	8
Effects of Climate Change on Women and Fishers	9
Responses to Climate Change	10
Women and Fishers Perspectives on Climate Change	11
The Burden of Climate Change	11
SRHR, Population, Health, Environment and Climate Change Dynamics	12
The Woman at the SRHR, Population, Health, Environment and Climate Change Nexus.....	12
Policymakers' Perceptions on SRHR, Population, Health and Environment and Climate Change ...	14
Existing Policies and Plans.....	15
Climate Change Policy and Practice	16
Collective Action	17
CONCLUSION	19
RECOMMENDATIONS & ADVOCACY	20
LIST OF REFERENCES	22
APPENDICES	25
Focus Group Discussion Questionnaire	25
In-depth Interview Questionnaire for Stakeholders and Policy/ Decision Makers In National and Local Level	27

ACKNOWLEDGEMENTS

The authors extend many thanks to Lawrence Castro and Karell Calpito for all the hard work they performed in making this scoping study possible.

Much appreciation also goes to all the policymakers and decision makers from the various agencies and offices that agreed to be part of the survey. We also thank the provincial and municipal government units of Oriental Mindoro, Baco, San Teodoro and Puerto Galera for their cooperation and support. To all the women and fishers who shared their time, stories and insights unconditionally during the whole process in making this initiative possible and the members of the community who were generous with their time making our discussions possible even at night, thank you.

We are especially grateful to the following women: Gracita Peliño and Girlie Garcia who were tireless in organising the community discussions with women and fishers. We also acknowledge those who helped in many other ways.

This report was prepared by the PATH Foundation Philippines, Inc. (PFPI) in partnership with the Asian-Pacific Resource & Research Centre for Women (ARROW) and produced with financial support from the Norwegian Agency for Development Cooperation (NORAD).

The views and opinions of authors expressed here do not necessarily reflect those of ARROW or NORAD.

LIST OF ACRONYMS

ARROW	Asian-Pacific Resource and Research Centre for Women
FGD	Focus Group Discussion
FP	Family Planning
LGU	Local Government Unit
NORAD	Norwegian Agency for Development Cooperation
PFPI	PATH Foundation Philippines, Incorporated
PHE	Population, Health and Environment
RH	Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
VIP	Verde Island Passage

EXECUTIVE SUMMARY

The study on Linking Sexual and Reproductive Health and Rights (SRHR), Population, Health, Environment (PHE) and Climate Change (CC) Initiatives on Women and Fishers in the Philippines was conducted by PATH Foundation Philippines, Inc. with support from the Asian-Pacific Resource and Research Centre for Women to determine the following: awareness/knowledge on CC; interlinkages of SRHR, PHE and CC; benefits of integration and; the factors and actions towards CC resiliency. The study area is the Philippines which ranks one of the world's most vulnerable country to climate change phenomenon and severely suffered from extreme weather events along with Haiti in 2012. Methodologies include focus group discussions with women and fishers in selected fishing communities in the Verde Island Passage (VIP) marine bioregion and in-depth interviews with key local and national decision/policymakers and stakeholders.

Findings indicate that women and the fishers are aware of climatic changes and have long been experiencing its impacts. They understand SRHR as it relates to family planning, reproductive health and responsible parenthood. While this does not fully describe the embodiment of SRHR adapted as defined by UN, WHO, ICPD, the respondents expressed that SRHR is needed to adapt to climate change impacts because their family's health, children's education and coastal resource and environment conservation will be given more attention. They believe the climate change is inevitable and will adversely affect the coastal/environment resources which they depend for food and livelihood. Results also show that the added pressures posed by climate change are more challenging for families with many children and fisher households. The added pressures brought about by climate change also highlight the burden on the woman as a result of the complex factors making her vulnerable to the effects of climate change.

The women and fishers in VIP call on the leaders for good governance, to recognize and support practical and integrated solutions that addresses the unmet need for sexual and reproductive health service, poor health, loss of biodiversity (environment) and climate change. All of which undermine a health body and a healthy environment - critical elements to climate change resilient communities and a better future for their children.

INTRODUCTION

The people and the planet are at a crossroads with climate change, a major environmental problem faced thus far. Evidence points to anthropogenic or human-induced factors as the main cause (USEPA, 2014). Rising sea levels and extreme weather patterns are more pronounced and varied compared to previous decades and increasingly distressing humanity and the earth we live and depend upon.

The Philippines is one of the countries especially vulnerable to climate change. In the aftermath of the devastating typhoon Yolanda that hit the Philippines in November 8, 2013, people's lives and the state of the natural resources were severely damaged. More than a year after the calamity, the people affected are still recovering. Addressing the short and long term effects of climate change vary depending on geography, demographic characteristics, gender, socio-economic status, recurrence, etc. In order to improve community resiliency particularly among the vulnerable and marginalised, policy and decision makers need to institute policies and actions to address climate change impacts.

While various initiatives have been instigated globally and domestically, the coastal communities located in the Verde Island Passage (VIP) marine key biodiversity area remain concerned about food, their livelihoods and the future. The VIP ecosystem is recognised by international scientists as the world's "centre of the centre" of marine shorefish biodiversity (Samaniego, 2014). It provides food and livelihood to over 7 million people who live in the provinces of Occidental Mindoro, Romblon, Marinduque, Batangas and Oriental Mindoro. Recent assessment however points that the ecology of the VIP is particularly vulnerable to climate variability leading to increased sea surface temperature, sea level rise and increased storm frequency and intensity (CI, 2010). These changes pose threats to the ecosystems' functions and services and would have detrimental impacts on the lives of the people in the VIP.

Family health survey in 2011 shows a contraceptive prevalence rate (CPR) for modern contraceptive methods of 39.93 in Region IVB, comprising Occidental Mindoro, Oriental Mindoro, Marinduque, Romblon and Palawan (MIMAROPA) where VIP ecoregion is located. The CPR rate is proximate to the national rate and serves as a proxy measure to assess access to reproductive health services. Modern family planning use is correlated to poverty and education. With a very high poverty incidence of 47.1% recorded in Oriental Mindoro, the increasing maternal mortality ratio of 129/100,00 live births in 2009 (51 in 2006) poses a challenge to improving the SRHR status of women and achieving the country's commitment to the millennium development goals (MDG) in 2015.

Moreover, the changing population demographics, i.e. increasing population, population density of 467 persons per square kilometre (vs. 308 in 2010) and the high proportion of women who died of pregnancy in 2011 (.36%) will affect particularly the poor households with their health and sexual and reproductive health status more compromised with climate change.

From September to December 2014, the PATH Foundation Philippines, Inc. (PFPI) investigated the extent of awareness and knowledge among women and fishers in rural coastal communities of Oriental Mindoro on climate change, sexual and reproductive health and rights (SRHR), and population, health, environment (PHE) dynamics and linkages. The study will follow the definition of SRHR and PHE as follows:

Reproductive Health: Reproductive health implies that people are able to have a responsible, satisfying and safe sex life, and that they have the capacity to reproduce and the freedom to decide if, when and how often to do so. Implicit in this are the right of men and women to be informed of and have access to safe, effective, affordable, and acceptable methods of fertility regulation of their choice, and to appropriate healthcare services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of healthy infant (WHO).

Reproductive Rights: Reproductive rights embrace certain human rights that are already recognised in national laws, international human rights documents, and other consensus documents. These rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing, and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health. It also includes their right to make decisions concerning reproduction free of discrimination, coercion and violence, as expressed in human rights documents (ICPD).

Sexual Health: Sexual health implies a positive approach to human sexuality and the purpose of sexual healthcare is the enhancement of life and personal relations as well as counselling and care related to reproduction and sexually transmitted diseases (adapted, UN).

Sexual Rights: Sexual rights embrace human rights that are already recognised in national laws, international human rights documents and other consensus documents. These include the right of all persons, free of coercion, discrimination and violence, to the highest attainable standard of health in relation to sexuality, including access to sexual and reproductive healthcare services; seek, receive, and impart information in relation to sexuality; sexuality education; respect for bodily integrity; choice of partner; decision to be sexually active or not; consensual sexual relations; consensual marriage; decide whether or not, and when to have children; and pursue a satisfying, safe and pleasurable sexual life (WHO working definition).

Climate Change: The Intergovernmental Panel on Climate Change (IPCC) defines climate change as any change in climate over time, whether due to natural variability or as a result of human activity. Climate change results in temperature increases that is attributed to the rise of greenhouse gas (GHG) emissions (Spratt & Sutton, 2008) and is causing severe instabilities in the earth's biosphere. The effects include higher global temperatures, an increase in frequency and intensity of extreme weather events and related natural disasters, and severe impacts to sustainability of ecosystems (UNFPA; WEDO, 2009).

PHE: A developmental approach that addresses the inter-relationships between population, health and environment dynamics. The goal of the PHE approach is improve the well-being of people living in critical biodiversity areas, and at the same time improve the health of the ecosystems upon which people depend upon (BALANCED Project 2008-2013).

The study also assessed the knowledge and perceptions of policymakers on climate change, SRHR and PHE, its linkages and related individual and societal actions and responsibilities. The findings of the scoping study aim to contribute to related body of knowledge, enrich efforts on related policy reforms and practice, and provide recommendations that support sustainable development efforts that are gender-responsive and rights-based towards climate change resilient people and ecosystems. PFPI is a non-government organisation that promotes and implements integrated PHE as a community-based adaptation approach to enable people adopt to climate change effects and the environment to improve food security and adapt to climate change. It has developed and applied policy briefs and other advocacy and educational tools and materials to inform and motivate decision makers and communities to take action for climate change adaptation and mitigation.

Objectives

The purpose of the scoping study is to determine the interlinkages of SRHR, PHE and climate change. Specifically, the paper explores the following:

- 1) What is the current level of awareness and knowledge on climate change?
- 2) How are SRHR, PHE and climate change linked and why they should be integrated?
- 3) What are the actions and policies needed to enable women and fishers to become resilient to climate change?

Methodology

To illustrate the complex and critical dynamics between SRHR, PHE and climate change, a conceptual framework was prepared based on secondary information derived from previous integrated PHE projects implemented in coastal communities by PFPI (Figure 1).

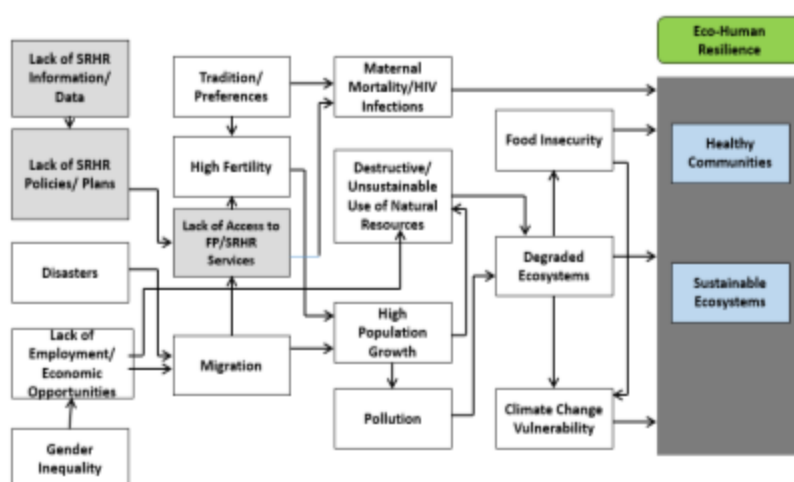


Figure 1: Integrated Population, Health, Environment and Climate Change Framework. PFPI 2014

Figure 1 illustrates the vision of “eco-human resilience” which hinges on two outcomes - healthy communities and sustainable ecosystems (far right). To the immediate left are the direct threats to the vision namely, food insecurity, degraded ecosystems and climate change vulnerability. The indirect factors that contribute to the threats are in the chain boxes whose pathways link back to the root causes (far-left). The lines and arrows represent assumptions about the interrelationships among the factors.

To validate these assumptions, PFPI gathered data on SRHR, PHE and climate change through focus group discussions (FGD) and key informant interviews. The focus group discussions were conducted in three coastal municipalities - Baco, Puerto Galera and San Teodoro in Oriental Mindoro Province. These municipalities are located in the VIP marine key biodiversity area. These were PFPI project sites in its previous projects that utilised the integrated PHE approach- a community development model that links population, health, and environment factors and supports cross-sectoral

collaboration and coordination. FGD participants were recruited in partnership with both the provincial and local government units (LGUs).

Key informant interviews were conducted with local (municipal and provincial) policy and decision makers in Oriental Mindoro Province and national stakeholders from various agencies. All participants of the FGDs and key informant interviews were informed verbally and formally of the nature of the study, objectives of the focus group discussions or interviews, and the intended use of the information that was collected.

A total of 70 women and fishers participated in the FGDs, majority (80%) were women and 20% were men. The ages of the participants range from 22 to 62 years old. The mean age of the participants was 41 years old. Majority (82%) of the FGD participants were married. More than forty seven percent (47%) of the FGD participants achieved high school level. Fishing and selling fish were identified to be the main source of income of most of the participants. The number of household members range from 1 to 13. Most of the respondents have 4 (22%) and 5 (20%) members in a household.

A total of sixteen (16) policy and decision makers responded to the in-depth interviews. Fifty percent of the respondents have been in their current position for 1 to 3 years. Their roles in climate change agenda process range from being a formulator, implementer, planner, legislator, executive, NGO partner, etc.

UNDERSTANDING THE INTERLINKAGES

Climate Change Impact

Climate change affects the lives and health of people either directly during floods, storms and heat waves. It can also affect them via complex pathways resulting in infectious diseases, disruption of ecosystems, possible population displacement, as well as conflicts due to over-depletion of resources such as fertile land, water and fisheries (WHO, 2012). Its impact on individuals and communities depends on their vulnerability and adaptive capacity to changing weather conditions.

The Global Climate Risk Index 2014 analyses indicate that less developed countries generally face the reality of climate variability more than industrialised countries (Kreft & Eckstein, 2013). According to Population Action International (2013), countries currently experiencing high rates of population growth having either high projected declines in agricultural production, low resilience to climate change or both face widespread poverty, low levels of education, limited access to health services, food and water insecurity and gender inequality.

The Philippines with a -1.7% projected change in agricultural production, 1.7% population growth rate, and 22% unmet need for family planning is considered a “hotspot” of population and climate change (PAI). The increasing population and poverty have put additional pressures on resources (DENR, 2001). According to Kreft & Eckstein, in 2012, the Philippines along with Haiti suffered the most from extreme weather events pointing to the country’s vulnerability to climate change phenomenon as it works towards achieving economic growth and alleviating poverty (2013). In the VIP marine key biodiversity areas, the rising sea level and surface temperature, pronounced storminess and unpredictable rainfall patterns are disrupting people’s food and livelihood, water and health security as well as cultural and options values (CI, 2014b).

Effects of Climate Change on Resources, Livelihoods and Health

According to the US Environment Protection Agency, since the ocean largely regulates the climate, changes in ocean temperatures and currents are already altering the frequency, intensity and distribution of storms, floods and heat waves, and the amount and distribution of rainfall. The coastal waters have warmed during the last century, and are very likely to continue to get warmer by as much as 4 to 8°F in the 21st century. This warming may lead to significant changes in coastal ecosystems, affecting species that inhabit these areas. Warming coastal waters may cause temperature-sensitive species to migrate northward. Other species may be forced to migrate as well due to the growing competition for limited resources with the northward species. Higher sea surface temperatures and ocean acidification would likewise increase the risks of coral bleaching events that can lead to loss of critical habitat. A more acidic ocean would adversely affect the health of many marine species (2014).

Climate change will also likely bring heavier rainfall and more precipitation to some coastal areas. This could lead to increases in runoff and flooding that, in turn, would threaten the health and quality of coastal waters. Other coastal areas may experience decreases in precipitation which can affect water salinity. Droughts will reduce fresh water input into tidal rivers and bays, raising salinity in estuaries and allowing salt water to mix further upstream (USEPA, 2014).

Rising sea levels could also increase the salinity of ground water and push salt water further upstream. This salinity may make water undrinkable without desalination and harm aquatic plants

and animals that cannot tolerate increased salinity (USEPA, 2014). This exacerbates existing threats to accessibility to potable water thus affecting people's health.

Climate change exacerbates existing challenges. A study by ARROW (2014) demonstrates how climate change will not only intensify the challenging developmental contexts which form the basis for sexual and reproductive health and rights programs and services, but also how climate change continues to erode the advancement of SRHR. Access to health and SRHR services, including contraception, is seriously hampered by harmful effects of climate change, thereby limiting options for women and young people to plan their families and further impede the community's ability to respond to climate change.

The changes in climate affect marine habitats and species which impact upon the economic uses of the marine waters and coasts as well as the livelihood and health of communities (CI, 2010). Results of vulnerability assessment in VIP described that the greatest concentration of marine species in the Indo-Malay-Philippine Archipelago is threatened by climate (CI, 2010) and fishers are already experiencing these effects with declining fish catch. Even alternative livelihoods such as marine based eco-tourism in the VIP are threatened with the decline or loss of important marine habitat and species due to climate change.

Effects of Climate Change on Women and Fishers

Climate change will affect an increasing population of women and fishers who are already vulnerable, living in marginalised areas and susceptible to climate variations and extreme weather events (Bathala *et al.*, 2014). Inequities in wealth; poor access to food and resources; poor health; traditional roles; low level of education; and lack of awareness, mechanisms and support on proper disaster-preparedness measures contribute to their vulnerabilities. Climate changes also influence and exacerbate the existing social determinants of health such as poverty and illiteracy (WHO, 2012). In addition, people become more susceptible to illnesses related to rising temperatures (Bathala *et al.*, 2014).

Women suffer disproportionately from the effects of climate change. In developing countries, majority of women are reliant on climate-sensitive resources and livelihoods, and tend to have lower levels of meaningful participation in climate change adaptation processes (Engelmann, 2014). These gender inequities result from competing care, food and resources inequities, gender-based violence and lack of reproductive health care that beset women and children (Pernia, 2013). As an example of their traditional roles, women have higher levels of malnutrition due to their roles as providers who only eat after their husbands, children and family members (WECAN, 2013). In other communities, young women must walk farther to collect water and work harder to produce crops from dry soil (COP16 Policy Statement, undated). Along with their own health issues which include the possibility of unintended pregnancy, they have to care for their children (Bathala *et al.*, 2014).

In the fisheries sector in the Philippines, there remains inadequate information on the extent of women's engagement in fisheries and the roles they take in biodiversity conservation. The 1995 census of the Philippines population reports that 91.7% of those employed in fisheries are male and 8.2% are female, indicating that fishing is a male-dominated field. Various studies reveal that the participation rate of women in the fishing sector is underestimated. Women are mainly involved in near-shore activities and have little direct involvement in fish capture but nevertheless, these pre- and post-production activities are significant in terms of their economic and social value (Villacorta, 1998, Lachapelle, 1997). Existing data also describes that unlike male fishers, women in fisheries

have no credit facility primarily intended to respond to the needs of the women who sell fish or process the catch (Siason, undated). Moreover, the same study by Siason reveals that technical assistance, training and extension have been designed to target only the male fisher, not mindful of the real situation in the sector where women are just as active in many spheres of fish production. Women do not learn new technology nor are they consulted on technical problems they may encounter in their productive activities. Usually their source of knowledge on such things is through their fisher husbands, who learn directly from the fisheries technicians.

Gender inequities appear to be more pronounced during severe disasters and where women have relatively lower socioeconomic status than that of men (WHO, 2012). According to Hsiang and Anttila-Hughes (2013), their study shows that female infant mortality is highest where infant daughters face competition from other children over resources, particularly if those siblings are male suggesting that female infant deaths following typhoons result from economic losses and household decisions made while coping with post-disaster economic conditions.

Responses to Climate Change

Some significant milestones have been achieved which present the urgency of climate change as a global and domestic issue. Globally, the concern on climate change is manifested by the participation of 195 Parties to international treaties such as the United Nations Framework Convention on Climate Change (UNFCCC) and the 192 countries in the Kyoto Protocol cooperating to reduce greenhouse gases emissions. These represent huge progress since the first World Climate Conference (WCC) in 1979. An Intergovernmental Panel on Climate Change (IPCC) was also set up in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts. The five reports of IPCC to date have underlined the importance of climate change as a challenge requiring international cooperation and to pay greater attention to the integration of climate change with sustainable development policies and relationships between mitigation and adaptation (IPCC, 1990; IPCC, 2013).

To support related country initiatives, the national adaptation programme of action (NAPA) was established that takes into account existing coping strategies at the grassroots level, and builds upon that to identify priority activities, rather than on scenario-based modelling to assess future vulnerability and long-term policy at state level. The Green Climate Fund was also instituted at the sixteenth session of the Conference of the Parties (COP) to the UNFCCC in 2010, “to promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change”.¹ To date the fund reached capitalisation level of USD 10.14 billion following additional pledges at COP20 in Lima (GCF, 2014).

The Philippines, as a state party to the UNFCCC enacted the Climate Change Act of 2009 to protect the right of the people to a balanced and healthful ecology. It created the Climate Change Commission, adopted the National Strategic Framework on Climate Change and the National Climate Change Action Plan, and created the People’s Survival Fund (PSF) to support adaptation activities of local governments and communities. PSF prioritizes initiatives based on the level of risk and vulnerability to climate change; participation from the affected communities; potential to reduce poverty; cost-effectiveness, responsiveness to gender-differentiated vulnerabilities, etc. among others².

¹ 2015. Green Climate Fund. <http://www.gcfund.org/about/the-fund.html>

² <http://climate.gov.ph/index.php>

Women's and Fishers' Perspectives on Climate Change

"We catch lesser and lesser fish. The fish must be going somewhere else, maybe because the ocean is getting warmer, the waves are stronger and bigger and its direction changing." (Fisher FGD 2014)

The scoping study respondents all agree that climate change is happening. Climate change has no local equivalent terminology, but rather all respondents describe it as per their experience, i.e. alteration in the weather patterns, and the warmer climate they have experienced in the last 5-10 years. The fisher respondents also describe the waves in the ocean to be stronger and bigger (compared to previous times) and the direction of the wind and waves are more unpredictable. Almost all of the respondents claim that natural disasters are more frequent with climate change.

The respondents also share that climate change primarily affects their livelihoods, i.e. it is more difficult to catch fish and captured fish are fewer due to stronger waves and warmer sea waters. In the Municipality of Baco, almost every respondent attributes the changes to the 1994 tsunami/earthquake that struck them and killed many residents. In one village, respondents also describe that they now have smaller land area to build their houses due to increasing population and because their land is sinking (sea level is rising). They also recognise that having more children than they desire make them less resilient to climate change.

Other related observations identified by the respondents include depleting sources of drinking water, increased vulnerability to diseases due to drastic changes in temperature, and more residents migrating away from the coasts in search of work.

The Burden of Climate Change

The women and fishers in the VIP express uncertainty about the future of their children. About a third of FGD respondents believe that the next generation will be affected the most by climatic changes as aptly described by one female participant: "if we are affected now how much more our children because problems come one after the other" (*kung ngayon ay naapektuhan na kami, mga anak pa namin ang lalong maaapektuhan dahil sunud-sunod ang problema*). Another third (31%) claim that families with many children are most vulnerable. This is further described by a respondent adding that it is also more difficult to adapt to the effects of climate change if the family has many children because they can barely meet the needs of the family presently (*mahirap po pag madaming anak, kapos po para matugunan ang mga pangangailangan ng pamilya*). Another third of the community respondents believe that it is families with no or low income whose heads have no job or no steady source of income that will be most affected by the impacts of climate change.

The FGD respondents also cite lack of livelihoods, loss of household income and food shortage with climate change. To feed their families, women engage in multiple jobs to supplement family income in-between taking care of the household. Majority of the women claim they have to work harder for smaller return by peddling/selling food, making souvenirs, providing massage services, making nipa mats, etc. Less than one half of the women expressed that these challenges brought about by the effects of climate change lead to strained family relationships, early marriages and poor nutrition. A number of the women also share that they used to have some time for themselves such as putting on make-up, grooming, etc., which they have given up in order to attend to the needs of the family.

SRHR, Population, Health, Environment and Climate Change Dynamics

The scoping study refers to individual and societal consequences related to population, SRHR, health and natural resource consumption dynamics that are exacerbated by climate change in the coastal communities. The women and fishers who live in poor rural and remote communities face these consequences. They all share these challenges as it intimately relates with their responsibilities in their own families. The warmer climate, extreme weather patterns and stronger and altered direction of the ocean waves threaten their wellbeing, food security and home stability. The lesser fish catch compromises their livelihood and income security. Such shifts their priorities and affects their capacity to access basic goods and services including health and SRHR. While SRHR per se does not have a local equivalent terminology, the FGD respondents describe it as services relating to family planning, reproductive health and responsible parenthood. This description does not fully describe the embodiment of SRHR adapted by ARROW as defined by UN, WHO, ICPD³.

Information shared by the community indicates that declining fish catch and limited livelihoods resulting from climatic changes are driving residents to migrate to places away from the coast. Communities also feel more vulnerable to diseases with the drastic weather changes. In addition, the depleted water source reduces their access to potable water leading to poor health.

Interestingly, a number of the women claim that with fewer livelihood opportunities available in the area, idleness sometimes contributes to having more children because they have nothing to do (*Walang trabaho at walang magawa kaya dumadami ang anak*).

The Woman at the SRHR, Population, Health, Environment and Climate Change Nexus

The scoping study gathered information on coastal respondents' perceptions of climatic changes ongoing in their areas. It also validates the population-health-environment conceptual linkages, and further examined the ecological and human socio-economic impacts of climate change in the coastal areas particularly among women and fishers in the survey sites. The study likewise highlights the interlinkages among population, health, environment, livelihood and climate change dynamics that further exacerbates the burden of women as shown in Figure 2.

The schematic diagram below describes the main threats and factors related to PHE and climate change (far left column) and their implications and effects on people, nature and resources (second-to-left column). These pressures contribute to inequities in wealth, status and access to ecosystem services which exacerbate the burden on women. Opportunities for remediation to achieve resiliency to climate change are likewise presented (right column). These include provision of an integrated package that addresses lack of stable livelihood opportunities; lack of health and SRHR seeking behaviours and services; and lack of women participation in conservation management, governance, etc. Addressing these women's concerns in an integrated fashion can lighten their burden, improve and highlight recognition of their role in helping the community achieve the desired outcome of climate change resiliency (far right column).

³ ARROW. 2014. Sexual and Reproductive Health and Rights in the Post-2015 Agenda: Taking Their Rightful Place. Retrieved from <http://www.arrow.org.my/download/Advocacy%20Brief%20Food%20Security%20-%20website%2018072014.pdf>

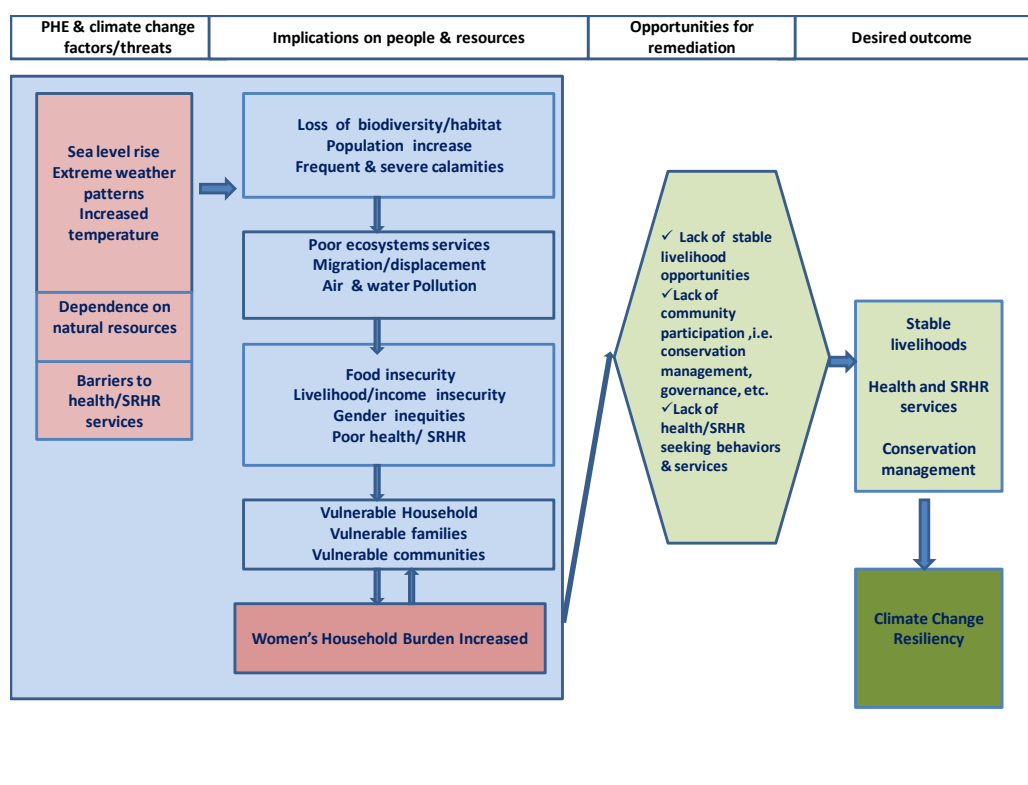


Figure 2: Population, Health, Environment and Climate Change Nexus. PFPI 2015

Understanding and recognising the “burden on the woman” at the core of the population, health, environment and climate change nexus requires holistic actions to address the gaps in knowledge, services and skills to empower and engage women actively towards climate change resiliency. Such result necessitates women’s participation, appreciation and recognition of her role in addressing social, economic and environmental goals simultaneously.

The scoping study highlights the role of the woman to achieve climate change resiliency.

Majority of the respondents recognise that climate change cannot be stopped and they need to act and be part of the solution despite the challenges they face in the coastal area. Nearly all of the women express that taking care of the environment, health, family planning and

The Story of Jovita Ramo

Jovita rocks crying Jonel on her 7-month pregnant belly. She’s 37 years old and mother to 8 children. She never had prenatal checkups. Tried pills, but stopped.

She married Nelson at 17. He fishes and does odd jobs when fishing was impossible with the unpredictable weather. One day, while doing carpentry, he was electrocuted and fell. He was bedridden, they had to move in with Nelson’s mother.

Every meal was a struggle. The community shared what they can. The eldest now works as a housemaid.

With no savings and impending delivery, for now Jovita worries most how she would deliver her 9th baby.



livelihood are key towards community resiliency. Others add education is a critical component. Specifically, more than one third of the women describe that family planning and responsible parenthood are important to adapt to climate change impacts because the family's health, the children's education and coastal resource management will be given more attention. They mention that lesser family members reduce the stress of having to worry about more people to feed and overcrowding in the home.

Almost all of the women respondents commit to taking care of their natural resources, taking care of themselves and their families, and becoming active pro-health, pro-environment advocates in their own communities. As one respondent exclaimed, *"the woman takes care of the family and the natural resources around; if the woman is healthy, the family is healthy and so is the environment"*. Another woman also added, *"we will do our part as long as it is the right thing to do, for everyone's welfare and for the youth"*. Some of the respondents specify various actions they can do to be resilient to climate change such as refraining from cutting trees and instead planting more trees/mangroves that help in preventing floods, secure fish habitat and give them clean air. A number also believe that actions that affect the ozone layer such as burning trash, especially plastic, should be stopped. Almost all of the women express commitment to contribute to climate change efforts - their time, self-discipline, following the rule of law, support for conservation, stopping illegal fishing practices, and planning their families. They offer cooperation for what is right and good for their children. (*Makikipagtulungan po kami basta ikakabuti at nararapat sa aming mga anak*).

Additionally, a quarter of the women highlight the need for collaboration and agreement between communities in action to create synergy. This is described by one respondent saying that even if she cleans her surroundings, if her neighbours do not- their garbage goes to them. (*Linis ako ng linis eh pag nagbasura sila doon, sa amin napupunta*).

Furthermore, half of the respondents ask support from leaders for better health and SRHR services to address accessibility of related services in the community and livelihood opportunities to ensure economic security and be able to send their children to school. The rest of the respondents ask for improved resource management and better governance, climate resilient structures and community dissemination about the effect of climate change and disaster preparation.

All of these findings indicate that women are capable and central to solutions for alleviating and adapting to the effects of climate change. These results also indicate that women build resiliency to climate change when there is support to help them plan their families, care for their health, manage their resources and improve their capacities to be engaged in conservation in economically productive work and disaster preparedness and response.

Policymakers' Perceptions on SRHR, Population, Health and Environment and Climate Change

Majority of the policymaker respondents in the study agree that climate change is happening. The scoping study also reveals that decision and policy makers all agree that population, health, environment, SHHR and climate change are interrelated and interdependent issues, and the interrelated dynamics result in consequences that should be dealt with holistically. The policymakers all agree that everyone bears the brunt of climate change impacts, thus everybody have an important role in addressing climate change. Additionally, almost all but one respondent

policymaker recognise that women are equal with men – as resource users, managers, decision makers, implementers and at the forefront in building communities resilient to climate change.

The policymakers identify various actions launched by the government and practical solutions to adapt and mitigate climate change at the individual and at a societal level. Majority (88%) recognise that anthropogenic activities have hastened climate change therefore, it is necessary to control/regulate our actions to address climate change and its impacts to achieve a healthy community and environment. Overexploitation of resources was identified as one of the direct pressures on biodiversity driven by the demand from a continuously growing population. It was pointed out that with scarce resources, a manageable population will help ensure sustenance in terms of food, employment, health service delivery and other basic social services.

Majority (87%) also believe that addressing sexual and reproductive health concerns and rights, such as family planning can contribute significantly to building climate change resiliency. Respondents cite that vulnerable sectors such as women and children are most affected particularly during natural calamities caused by climate change, such as the Yolanda disaster where a significant number of pregnant women gave birth under very difficult conditions, placing the lives of both the mother and child in danger. The policymakers also believe that if women are aware of their sexual and reproductive health and rights, they can make their own choices and decisions and they can access related information and services.

The relationship between population and climate change raises a number of concerns and ways of thinking. While almost all (95%) of the respondents believe population growth is one of the factors undermining climate adaptation efforts, 5% of the respondents expressed the opinion that climate change is not about numbers but the choices people make. It is about our partiality with regard to technology, lifestyle, socio-economic status and governance. Other responses say that the link between population and climate change is more about the number of people affected by climate change, and SRHR is more about the health of the mother and child. On the other hand, the majority of respondents assert that human pressures to the environment is one of the causes of climate change and exacerbates the effects of climate change, i.e. soil degradation and erosion, water scarcity, deforestation, shortages of farmland and migration. Most cited that population-health-environment-climate change dynamics potentially strain the government's capacity to keep up with the need to provide basic services, such as education, health care and jobs for its growing population. A related critical issue raised by a policymaker is that prevention of adolescent pregnancy reduces social costs to society and families and intergenerational poverty.

Majority of respondents also highlight that resilience is a collective response and outcome -- when people are healthy and empowered, they are more able to withstand the impacts of climate change including, hurricanes and crop failures. Other respondents also expressed the need to consider the results of our actions and decisions for the future generations.

Existing Policies and Plans

“We can take actions by considering the choices we make, as an individual, being mindful of using environment-friendly practices; as an agency, consider climate change adaptation strategies and social protection lens in developing policies & programs.” (Stakeholder 2014)

The policymakers who participated in the scoping study identified various policies and programs where climate change measures are anchored. Recognising the interlinkages of population, SRHR, health, environment and climate change, majority affirm the need for laws that consider the

population dimension to effectively address food insecurity, inequity, poverty and environmental destruction. They believe that mainstreaming the integrated PHE approach in development policies, plans and allocating funds are crucial actions to achieve climate resilient constituency and environment. Respondents highlight that it is essential to follow and be active in implementing mitigation and adaptation measures advanced by the government and implement practical solutions that are doable even at the individual level. One respondent exclaims *“Our lifestyle plays a major role in slowing climate change. There are actions that can start from us. How we get around, what we eat and how we live can reduce gas emissions”*. The respondent also suggested that *“we should walk whenever we can, reduce our waste by recycling, eat wisely by buying organic foods and avoid processed items, unplug gadgets or appliances when not in use, when washing clothes, hang dry when you can because dryers are energy hogs, and be informed and involved in climate change movements”*.

On whether the policymaker respondents have existing policies and plans that respond to climate change in their respective agencies, 88% affirmed that their plans have the following related components: biodiversity conservation (61%), livelihood (60%), health (50%), family planning/reproductive health (33%), and gender (44%). Others identified agrobiodiversity conservation and disaster-risk reduction as key components of their plans.

On what strategies and approaches are deemed necessary to strengthen the community’s capacity to build resiliency to climate change, the policymakers deemed necessary to increase awareness on the SRHR, population health and climate change dynamics towards achieving an informed and knowledgeable population that is prepared to face uncertainties brought about by climate change. They believe that by planning families, communities and households can have better food security. A respondent cited that Indigenous People (IPs) who usually have large families may not have to resort to slash and burn “kaingin” methods for food and livelihood if they have the services to plan their families.

While the respondents believe that plans to address climate change are in place in their respective offices, only 17% of the policymaker respondents think their plans have all the necessary components but lack financial support. Another 61% think there is a need for specific actions/programs to address climate change in their action plans.

Sixty percent of the respondents also cited presence of specific disaster-risk reduction and management plans in their agencies and offices, of which 50% have inherent climate change measures. These measures include reforestation, related information dissemination activities for the community located in risk-prone areas, and how to respond to disasters.

Some respondents expressed the need for further advocacy on climate change and disaster-risk reduction to raise awareness and deepen understanding of approaches in addressing climate change impacts. They believe these efforts can help prepare the people to adapt to the effects of climate change.

Climate Change Policy and Practice

“Climate Change is the greatest global health threat and the poorest and those who have contributed least to climate change will be the first to be affected. It is imperative to invest in integrated PHE as an approach to address climate change.” This was expressed by a policymaker in the scoping study. Furthermore, scoping data show that food security, biodiversity, health (100%), water availability (72%), population growth (83%), deforestation/biodiversity loss (89%), and energy

poverty (83%) are the key issues related to climate change that need to have concrete plans and actions. Furthermore, respondents attribute the lack of reproductive health services to high maternal deaths and the country's commitment to reduce its maternal mortality rate is unlikely to be reached with climate change unless the government prioritises investment in an integrated PHE approach.

The policymakers describe the PHE integrated approach as effective in forging collaboration (or “ugnayan” in Filipino) between and among sectors leading to better partnership towards addressing climate change. Respondents assert that if the government is to effectively address poverty, food insecurity and the challenges of climate change, it has to develop/enhance/enforce environmental management plans/programs (94%); provide universal access to SRHR (FP/RH) information and services (94%); provide alternative livelihood (89%); address emerging diseases (89%); invest heavily on Disaster-Risk Reduction and Management programs (72%); ensure community participation specially the women (83%). It is further recommended that these components of a holistic approach should be institutionalised in the national and local development and comprehensive land use plans (83%).

Moreover, majority (89%) of the policymaker respondents also believe that it is necessary for governments and donors to invest in integrated SRHR/PHE as an approach to address climate change. They consider that the approach promotes greater participation of the public and private sector and everyone in the community including the women. Respondents express that vertical programs have been the norm in the past, but integration and local community action and participation are necessary for project/program implementation.

Results of the policymaker interviews highlight that everyone has a responsibility and a role to play towards achieving resiliency. Ninety four percent (94%) of the respondents claim women have an important role in addressing climate change and 83% of interviewed respondents are aware of policies in place that refers to women. Outcome of the scoping study provides that through an integrated SRHR/PHE approach, women's participation is ensured, women are empowered and are in a position to set their life's agenda and make informed decisions, gain skills and knowledge, build self-confidence and self-reliance, and solve personal and community problems.

It should also be noted that some policymaker respondents expressed that much of SRHR/PHE focus is on women's issues and men's involvement should be highlighted as well.

Collective Action

Analysis of the results of the study affirms an enabling and holistic package of services necessary to address the unmet needs for sexual and reproductive health services contributing to growing population and large families, poor health, loss of biodiversity (environment) and climate change in order to break the vicious cycle that affects people and the ecosystem as shown in Figure 2. More importantly, to address the needs/gaps that will enable women, households and the community to adapt to climatic changes and build resilience. The package requires the following:

- Facilitating a participatory and multisectoral summit with community and women leaders to design and implement an integrated health, SRHR and biodiversity conservation plan and programs towards achieving climate change resiliency
- Institutionalizing integrated strategies and best practices into policies, plans and budgets, especially climate change adaptation, disaster risk preparedness and reduction, comprehensive land use policies and plans

- Supporting integrated package and actions that provides for stable and sustainable livelihoods, universal access to quality health care, water and SRHR services, i.e. family planning/reproductive health, adolescent sexuality and reproductive health, etc., and proper management and sustained environment conservation efforts
- Embarking in continuing community education and advocacy on the intrinsic linkages of SRHR, health, environment and livelihood factors and the benefits of addressing these interrelated dynamics in an integrated fashion
- Knowing and supporting the country's national programs and international commitments to climate change measures

CONCLUSION

The scoping study shows evidence that climate change is a reality, its effects ubiquitous that further exacerbates the situation of the poor, rural and coastal communities especially the women and fishers. Furthermore, results of the study affirm previous and current initiatives that address the plight of the vulnerable sectors especially women and fishers.

The following are the study key findings: 1) The health of women, the community and the ecosystems that they depend upon are key towards climate change resiliency. The women and the fishers have long been experiencing the effects of climate change. It is adversely affecting the coastal and environment resources which they depend for food and livelihood. They also understand SRHR as it relates to family planning, reproductive health and responsible parenthood. While this does not fully describe the embodiment of SRHR adapted as defined by UN, WHO, ICPD, the respondents expressed that SRHR services are needed to adapt to climate change impacts because the family's health, children education, coastal resource / environment conservation will be given more attention.; 2) the need to empower communities by building local capacity to design and implement integrated SRHR,/PHE and climate change programs and; 3) the need to institutionalize best practices and lessons learned in integrated responses to climate change into policies, programs and budgets, and to sustain and scale up effective actions that strengthen community resiliency to climate change impacts.

The added pressures brought about by climate change also highlight the burden on the woman as a result of the complex dynamics of factors making her vulnerable to the effects of climate change.

The study findings call for a concerted action to tackle climate change by improving women's status and building on their indigenous capacity as managers and carers of families to get them involved actively in planning and implementing solutions that build individual and community resiliency to climate change. The outcomes particularly among poor women and fishers can potentially improve parameters to show community resilience and at the same time improved food, water and energy security.

The following also presents some of the highlights of the study that are relevant for programs and advocacies:

- All agree that climate change is happening. There is warming temperature, extreme weather patterns and stronger and altered direction of the ocean waves threatening the coastal community's livelihood/income, food, home security and their access to SRHR, health and ecosystems services.
- Everyone is concerned about climate change. It cannot be stopped. The next generation and the poor with large families will be affected the most.
- While the majority of the study respondents believe population growth is one of the factors undermining climate adaptation efforts, the relationship of population and climate change raises a number of concerns and ways of thinking.
- The integrated population, health and environment approach is holistic and is recognised by the study respondents as relevant and facilitates cross-sectoral collaboration to ensure food security, address wellbeing of people and nature, and achieve resilient communities.
- Majority of the community and the policymaker respondents believe that with sexual and reproductive health and rights, families and communities are healthier. This contributes to building climate change resiliency, and allows more time and resources for conservation and community initiatives. All of which increase resilience to climate change and slow population trends that exacerbate poverty and climate change impacts.

RECOMMENDATIONS & ADVOCACY

Confronted with the realities of climate change and dynamics between population, SRHR, health, environment, biodiversity and climate change the scoping study suggests that there is a role for everyone to address climate change including the poor and vulnerable individuals and sectors. This section serves as a challenge for everyone from all walks of life to commit towards a climate-resilient people and environment towards a better future for the next generations. The study likewise brings forth the call of the community to all leaders (President and local leaders) of the country for better governance and support to prepare the communities to adapt to climate change.

Firstly, leaders should honour their commitments to build resiliency to climate change to their constituencies and to international agreements as part of a comprehensive response to climate change. Ensure that National Adaptation Program of Action for climate change (NAPA) and future climate change measures are aligned with long-term sustainable development planning principles, implemented and monitored. Projects should incorporate a multisectoral approach to better reflect how people live. This includes creating and implementing laws that consider the population dynamics and sexual and reproductive health and rights in climate change adaptation policies and programs to effectively address food insecurity, inequity, poverty and reduce environmental destruction.

Secondly, governments and donors should heed calls to promote, invest and institutionalise a holistic and integrated approach, such as PHE, because it forges collaboration, coalitions (or “ugnayan”) between and among sectors leading to better partnership towards synergy in action and results in addressing climate change. The study results recommend the following key actions:

- Mainstream integrated SRHR, PHE dynamics into policies, programs and plans, especially climate change, disaster risk reduction, comprehensive land use policies and plans
- Institute measures that provide multisectoral services as part of equity-focused programs and to build climate change resiliency. It is indicated that the comprehensive package have the following components:
 - provision of stable and sustainable livelihoods that provide steady income for the family
 - universal access to quality health services including SRHR and water services
 - conservation management and sustained actions with community involvement
 - community education and advocacy on the SRHR, health, environment, climate change linkages and the benefits of integration

Thirdly, the following study findings ask for a collective effort that the community, the government and donors together can do to build climate change resilience:

- Raise awareness on the SRHR, population, health and climate change dynamics towards achieving an informed and knowledgeable population prepared to face uncertainties.
- Participate and collaborate (communities, implementers and policymakers) to create synergy in actions and results
- Take care of the environment, be responsible managers of families and the environment, and engage in productive livelihoods that are mindful of the environment. Commit time, have discipline, follow the rule of law, support pro- health, pro-SRHR and pro-conservation efforts. These are key to building a climate-resilient community.

As for PATH Foundation Philippines, Inc., it must continue to promote and advance the integrated SRHR/ Population, health and environment approach as a core strategy to achieve its mission.

STUDY LIMITATIONS

There were challenges encountered during the scoping study that may have affected the outcomes of the results. These include the limited availability of key policymakers to participate in interviews and the dearth of literature available on integrated SRHR, PHE and climate change and resources focusing on women and fishers. The methodology used also limited the statistical analysis of results to support findings of the study.

LIST OF REFERENCES

1. Asian-Pacific Resource & Research Centre for Women (ARROW). (31 July 2014). Scoping Study on the Interlinkages between Climate Change and SRHR. Available at <<http://arrow.org.my/download/Scoping%20Study%20-%20Climate%20Change%20and%20SRHR.pdf>>.
2. Anttila-Hughes, Jesse Keith and Hsiang, Solomon M., Destruction, Disinvestment, and Death: Economic and Human Losses Following Environmental Disaster (February 18, 2013). Available at SSRN:<http://ssrn.com/abstract=2220501> or <http://dx.doi.org/10.2139/ssrn.2220501>
3. Bathala, S., Brenner, J., Hardee, K., and Mutunga, C. (Event Speakers). (October 27, 2014). Bridging the Gap: A Conversation about Family Planning and Climate Change. Worldwatch Institute. [Webcast]. Washington, D.C.: Wilson Center. Retrieved from <<http://www.wilsoncenter.org/event/bridging-the-gap-conversation-about-family-planning-and-climate-change>>.
4. Boquiren, R., Di Carlo, G., and Quibilan, M.C. (Eds). (2010). *Climate Change Vulnerability Assessment of the Verde Island Passage, Philippines*. Technical report. Conservation International, Arlington, Virginia, USA.
5. Conservation International. (2014a). Priority Sites for Conservation: Marine and Terrestrial Key Biodiversity Areas. Retrieved from <http://www.conservation.org/global/philippines/publications/Documents/Philippines_KBAs_integrated.pdf>.
6. Conservation International. (2014b). The Ocean. Retrieved from <<http://www.conservation.org/what/pages/oceans.aspx>>.
7. COP16 Policy Statement. (n.d.). Available at <http://advocatesforyouth.org/storage/advfy/cop16_english.pdf>.
8. D'Agnes L., D'Agnes H., Schwartz J.B., et al. (2010). Integrated management of coastal resources and human health yields added value: a comparative study in Palawan (Philippines). *Environmental Conservation* 2010; 37(4):398-409.
9. Davenport, Coral. (8 December 2014). Philippines Pushes Developing Countries to Cut Their Emissions. New York City, USA: New York Times p. A8.
10. Engelman, Robert. (4 August 2014). Family Planning and Environmental Sustainability Assessment Aims to Shed Light on Pop-Environment Link. New Security Beat. Wilson Center. Retrieved from <<http://www.newsecuritybeat.org/2014/08/family-planning-environmental-sustainability-assessment-aims-shed-light-population-environment-link/>>
11. Green Climate Fund (GCF). (2014). Green Climate Fund hits USD 10 billion threshold. Retrieved from <http://news.gcfund.org/wp-content/uploads/2014/12/release_GCF_2014_12_05_australia_belgium_pledge.pdf>.
12. Hsiang, Solomon, and Jesse Anttila-Hughes. 2013. "Baby Girls at Increased Risk of Death Following Typhoons," University of California, Berkeley and University of San Francisco.

13. Intergovernmental Panel on Climate Change (IPCC). (1990). First Assessment Report.
14. Intergovernmental Panel on Climate Change (IPCC). (2013). Fifth Assessment Report.
15. Klugman, Jeni. (2011). Sustainability and Equity: A Better Future for All. UNDP-HDRO Human Development Reports 2011. Available at SSRN: <http://ssrn.com/abstract=2294671>.
16. Kreft, S. and Eckstein, D. (2013). Global Climate Risk Index 2014. Germanwatch e.V. Retrieved from <https://germanwatch.org/en/download/8551.pdf>.
17. Moser, S.C. and Boykoff, M.T. (Eds). (2013). *Successful Adaptation to Climate Change: Linking Science and Policy in a Rapidly Changing World*. [Ebook]. London, UK: Routledge, p.43. Available at <https://books.google.com.ph/books?isbn=1135071306>.
18. National Statistics Office MIMAROPA. (2012). Men and Women in Oriental Mindoro (Results from 2007 Census of Population). Retrieved from http://web0.psa.gov.ph/old/data/sectordata/factsheets/Pub_2012005_Ormin.pdf.
19. PATH Foundation Philippines Inc. (PFPI). (2001). Integrated Coastal Resource Management Project Baseline Survey.
20. Pengra, Bruce. (June 2012). One Planet, How Many People? A Review of Earth's Carrying Capacity. UNEP. Retrieved from http://na.unep.net/geas/archive/pdfs/GEAS_Jun_12_Carrying_Capacity.pdf.
21. Pernia, Ernesto. (7 March 2013). Population Trends in the Philippines: Implications for Development. Report on The National Consultation on Population Dynamics in the Post-2015 Development Agenda. Quezon City, Philippines.
22. Philippines. Congress. Republic Act No. 9729: Climate Change Act of 2009. The Official Gazette. Approved October 23, 2009. Available at <http://www.gov.ph/2009/10/23/republic-act-no-9729/>.
23. Philippine National Statistics Office (NSO). (2010). Census of Population and Housing Highlights. Retrieved from <http://census.gov.ph/statistics/census/population-and-housing>.
24. Philippine Statistics Authority (PSA). (2012). Mindoro, Marinduque, Romblon and Palawan (MIMAROPA) Regional Profile. Retrieved from <http://countrystat.bas.gov.ph/?cont=16&r=17>.
25. Population Action International (PAI). 2013. Mapping Population and Climate Change Hotspots . <http://populationaction.org/climatemap/>
26. Population and Sustainability Network (PSN). (2012). Population dynamics and sexual and reproductive health and rights: Critical cross-cutting issues for the post-2015 development agenda. Retrieved from <http://www.medicusmundi.org/en/topics/pnfp-sector-and-global-health-initiatives/thematic-guide-health-in-the-post-2015-un-development-agenda/inbox-health-beyond-2015/population-srhr-post-2015-psn.pdf>.

27. Samaniego, Badi R. (2014). Verde Island Passage Profile. Conservation International Philippines. Retrieved from <<http://www.conservation.org/global/philippines/where/sulu-sulawesi/vip/pages/default.aspx>>.
28. Siason, I.M., et. al., Women in Fisheries in Asia. pubs.iclarm.net/Pubs/Wif/wifglobal/wifg_asia.pdf
29. Stachowicz, J. J., Terwin, J. R., Whitlatch, R. B., & Osman, R. W. (2002). Linking climate change and biological invasions: ocean warming facilitates non-indigenous species invasions. *Proceedings of the National Academy of Sciences*, 99(24), 15497-15500.
30. United States Environmental Protection Agency. (2014). Climate Change. Retrieved from <<http://www.epa.gov/climatechange/basics/>>.
31. United States Global Change Research Program. (n.d.). Emerging Consensus Shows Climate Change Already Having Major Effects on Ecosystems and Species. Retrieved from <<http://www.globalchange.gov/news/emerging-consensus-shows-climate-change-already-having-major-effects-ecosystems-and-species>>.
32. Women's Earth and Climate Action Network (WECAN). (2013). A Declaration: Women of the World Call for Urgent Action on Climate Change & Sustainability Solutions. New York City, USA. Available at < <http://wecaninternational.org/declaration>>.
33. World Health Organization (WHO). (2012). Mainstreaming Gender in Health Adaptation to Climate Change Programmes. Retrieved from <http://www.who.int/globalchange/publications/Mainstreaming_Gender_Climate.pdf>.
34. World Wildlife Fund (WWF). (n.d.). Climate Change in the Philippines. Retrieved from <<http://wwf.org.ph/wwf3/climate/phils>>.

APPENDICES

Focus Group Discussion Questionnaire

Objective: To establish the interlinkages of FP/ SRHR, biodiversity conservation and climate change among vulnerable groups (fishers, women) in coastal ecosystems and identify the critical factors and actions for climate change resiliency

Target: Women ages 15 years old and above, fishers

Location: Province of Oriental Mindoro in Verde Island Passage

Guide questions:

- Have you noticed any changes in the climate? If so, what are they ?
May napansin ba kayo na pagbabago sa klima? Ano ano ang mga iyon?
- How long ago did you notice these changes? In what ways did these changes affect the people? The community? The environment?
Kelan pa ninyo napansin ang mga pagbabago? Papaano nabago ng klima ang pamumuhay ng mga tao? Ang kumunidad? Ang kalikasan?
- Who do you think would be most affected by climate changes? Why?
Sino sa palagay niyo ang maapektuhan ng todo sa pagbabago ng klima? Bakit sila?
- How do you think women will be affected by climate change?
Papaano maapektuhan ang mga kababaihan ng pagbabago sa klima?
- Do you think we can control/stop with climate change? What specific actions should be done? As a fisher? As a women? man? youth?
Sa palagay ninyo mapipigilan natin ang mga pagbabago ng klima? Ano anu ang mga dapat gawin? Pag ikaw ay mangigisda? Ang mga kababaihan? Mga kabataan?
 - Do you think taking care of the environment can stop /control climate change? Why?
Sa palagay ninyo ang pangangalaga ng kalikasan ay makakapigil sa pagbabago sa klima? Bakit?
 - Do you think family planning and responsible parenthood is important to stop with climate change? Why?
Sa palagay ninyo ang pagpapalano ng pamilya ay makakapigil sa pagbabago sa klima? Bakit?
 - What other important actions/issues should we do to stop climate change? Why?
Ano pa ang importanteng pagtuunan natin para mapigilan ang pagbabago sa klima? Bakit?
- Among what we discussed what are the top three important that actions that are linked that we should so we can cope with climate changes in the future? Why?

Sa lahat n gating binanggit (mention FP/SRH, environmental conservation, livelihood, etc. mentioned)- ano ang tatlong dikit dikit na dapat gawin para kaya natin maka cope sa pagbabago ng klima?

- If you were to talk to the President about SRHR, environment and climate change what will you ask the president to do to help stop climate change? Why?
Pag may pagkakataon makausap mo ang presidente, ano ang hihingin mo na gawin niya para mapigilan ang pagbabago ng klima? Bakit?
- If there was one thing you can commit to do now to contribute to stop climate change what will it be? Why?
At kayo ano naman ang may maipapangako na pwedeng gawin para mapigilan ang pagbabago ng klima, ano iyon? Bakit

In-depth Interview Questionnaire for Stakeholders and Policy/ Decision Makers In National and Local Level

Name of Interviewee: _____

Position: _____

Agency: _____

Location: _____

Level of responsibility:

☐

National

☐

Local

☐

Others, please specify _____

Position: _____

Number of Years in Position: _____

Role in climate change agenda and processes: _____

1. (please check only the answer/s that you agree with)

Climate Change, SRHR/ Population, and Environment Knowledge /Perceptions

2. Climate Change is happening, we can do something about it.

☐

Yes

☐

No

☐

Don't know

Please explain why and how.

3. Sexual and reproductive health (FP/RH) simply means limiting the number of children. It does not have any significant contribution to building climate change resiliency.

☐

Yes

☐

No

☐

Don't know

Please explain why and how.

4. Population, health, environment, food security, poverty alleviation and climate change are issues that are interrelated; thus, should be dealt with holistically.

☐

Yes

☐

No

☐

Don't know

Please explain

Plans and Policies

5. Does your office/agency have a plan/s that has measures */actions to address climate change?*

☐

Yes

☐

None

☐

Don't know

If yes, what is name of the plan: _____

What components does the plan have?

☐

Biodiversity conservation

- ☐ Sexual and Reproductive Health Rights (FP/RH)
☐ Health
☐ Livelihood
☐ Gender
☐ Women participation
☐ Others, please specify _____

Do you think that your plan is complete?

- ☐ Yes
☐ No
☐ Don't know

If none, is there a plan to have specific actions (programs) to address climate change?

- ☐ Yes
☐ No
☐ Don't know

If yes, please answer.

6. Does your office/agency have **disaster risk reduction/mitigation plan**?

- ☐ Yes
☐ None
☐ Don't know

If yes, are there climate change measures in the disaster risk reduction/mitigation plan?

- ☐ Yes
☐ No
☐ Don't know

Please explain answer.

If none, is there a plan to have specific actions (programs) to address climate change?

- ☐ Yes
☐ No
☐ Don't know

If yes, please answer.

7. What **strategies** and approaches do you think are needed to strengthen the **community's capacity** to build resiliency to the effects of climate change?

- ☐ Integrated SRHR / population health environment approach
☐ Sectoral approach
☐ None
☐ Others, _____

Sexual and Reproductive health rights and Integrated PHE Approach

8. Please rate the following potential benefits of integrated population health and environment actions to climate change

Potential benefit	Large benefit	Some benefit	No benefit
Improved food security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resiliency to climate changes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Women empowerment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensure a better future for the youth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase community participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multisectoral collaboration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please describe _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Should governments (and donors) invest in integrated SRHR and PHE as an approach to address Climate Change

☐ Yes

☐ No

☐ I Don't Know

Please explain.

Women

10. Women have an important role in addressing climate change.

☐ Yes

☐ No

☐ Don't know

Please explain.

11. SRHR/PHE approach increases women's participation in climate change.

☐ Yes

☐ No

☐ Don't know

Please explain.

12. Are you aware of policies in place that refer to women?

☐ Yes

☐ No

☐ Don't know

Please explain.

Actions and Responsibilities

13. If the government were to address poverty, food security and Climate Change challenges, these are the things it has to do.

☐ Develop/enhance/enforce environmental management plans/programs

☐ Provide alternative livelihood

☐ Invest heavily on Disaster-Risk Reduction program

☐ Ensure women's participation

☐ Emerging Diseases

☐ Provide universal access to SRHR (FP/RH) information & services

☐ Integrate SRHR / PHE approach into local development and comprehensive land use plans

☐ Integrate population/health/environment approach into national plans

☐ Others _____

14. What do you think are the **effects** of climate changes that **need to have concrete plans and actions?**

- ☐ Water availability
- ☐ Food security
- ☐ Health
- ☐ Population growth
- ☐ Deforestation
- ☐ Energy
- ☐ Biodiversity loss
- ☐ Others, _____

This research is an initiative of a regional partnership that are working together on building the interlinkages of climate change and SRHR. The 8 partners are from Bangladesh, Indonesia, Lao PDR, Malaysia, Maldives, Nepal, Pakistan, and the Philippines. The regional partnership generates evidence on the linkages of the issues and advocates for the integration of SRHR in climate change frameworks to advance sustainable development.

PATH Foundation Philippines Inc. (PFPI) is a private, non-stock, non-profit corporation with a mission to alleviate poverty, improve health, and promote environmentally sustainable development, particularly in under-served areas of the Philippines. For more than twenty years, PFPI designed, implemented and monitored pioneering and cutting edge projects including preventing HIV/AIDS and sexually transmitted infections (STI) and integrating population, health and environment (PHE) initiatives. Best practices and lessons learned were transferred to other developing countries in Asia and Africa.

ARROW is a regional non-profit women's NGO based in Kuala Lumpur, Malaysia, and has consultative status with the Economic and Social Council of the United Nations. Since it was established in 1993, it has been working to advance women's health, affirmative sexuality and rights, and to empower women through information and knowledge, evidence generation, advocacy, capacity building, partnership building and organisational development.

PATH Foundation Philippines Inc. (PFPI)

10/F Unit 1008 Tower II
Cityland Condominium 10
154 H.V. dela Costa Street, Salcedo Village
Makati City 1226, Philippines

Telephone (632) 817-5049
Fax (632) 893-5360
E-mail info@pfpi.org
Web www.pfpi.org

Asian-Pacific Resource and Research Centre for Women (ARROW)

1 & 2 Jalan Scott, Brickfields 50470, Kuala Lumpur, Malaysia

Telephone (603) 2273 9913/9914/9915
Fax (603) 2273 9916
E-mail arrow@arrow.org.my
Web www.arrow.org.my
Facebook The Asian-Pacific Resource & Research Centre for Women (ARROW)
Twitter @ARROW_Women
Youtube youtube.com/user/ARROWomen
Pinterest [arrowomen](https://pinterest.com/arrowomen)



PATH Foundation Philippines, Inc.

ALLEVIATING POVERTY * IMPROVING HEALTH * PROMOTING ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

