

USAID Mekong Adaptation and Resilience to Climate Change (USAID Mekong ARCC)

Integrating Gender Considerations into Community-based Adaptation in Agrarian Communities in the Lower Mekong Basin



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Lessons Learned from Cambodia, Lao PDR, Thailand and Vietnam

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ABBREVIATIONS

AMDI Asian Management and Development Institute

CBA Community-based Adaptation

CEDAW United Nations Convention on the Elimination of Discrimination

against Women

IUCN International Union for Conservation of Nature

Lao PDR Lao People's Democratic Republic

LMB Lower Mekong Basin

M&E Monitoring and Evaluation

NAP National Adaptation Plan

NTFPs Non-timber Forest Products

SOP Standard Operating Procedures

UNDP United Nations Development Programme

USAID United States Agency for International Development

USAID Mekong ARCC USAID Mekong Adaptation and Resilience to Climate Change

Project

UXOs Unexploded Ordnances

VCA Vulnerability and Capacity Assessment

WFP World Food Programme

KEY TERMS

1/			
Key	/ [(eri	ms

Term	Definition	Source
Term	Delinition	Source
Gender	A range of "socially constructed" roles, behaviors, attributes, aptitudes and relative power associated with being female or male in a given society at a particular point in time. "Socially constructed" means that these are not "givens" or "natural" but are constructed or produced by society and as such can be modified or changed.	Skinner, 2011
Gender Analysis	The process of identifying, understanding and describing gender differences and the impact of gender inequalities on a sector or program at the country or project level.	USAID Gender Integration Matrix
Gender Equality	When men and women have equal opportunity to benefit from and contribute to economic, social, cultural, and political development; enjoy socially valued resources and rewards; and realize their human rights.	USAID Gender Integration Matrix
Gender Integration	The process of identifying and addressing gender inequalities during program and project design, implementation, and monitoring and evaluation. Since the roles and relations of power between men and women affect how an activity is implemented, it is essential that project and activity planners address these issues on an ongoing basis.	USAID Gender Integration Matrix

Lao women in Khammouan Province take part in building a new water storage tank which will strengthen the community's access to water, especially during the dry season. Credit: lenkate Saenghkaew



I. INTRODUCTION

Women in developing countries are widely considered to be among those most vulnerable to the negative impacts of climate change, alongside the very poor, persons with disabilities, and other marginalized groups. As such, there has been a recent push to integrate gender considerations into climate change responses. Donor or climate fund proposal requirements now generally contain a gender component and several resources have cropped up for practitioners on how to integrate gender into climate change mitigation and adaptation activities. Despite this, big questions remain: How exactly are men and women in a given community uniquely vulnerable to negative impacts of climate change? How can we find out? In what ways can we ensure that climate change responses serve equitably – not just among men and women, but also among privileged and marginalized, able-bodied and disabled, and young and old? These questions underpin this paper in an effort to help find the answers.

This paper explores the gender dimensions of vulnerability to climate change in agrarian communities of the Lower Mekong Basin (LMB). The objective of this paper is to highlight insights, opportunities and challenges that may help policymakers and practitioners carry out more

MAIN RESEARCH QUESTIONS

- What are the main gender dimensions of climate change vulnerability and community-based adaptation in agrarian communities in the Lower Mekong Basin?
- Why should governments, donors and development practitioners support gender-responsive climate change adaptation?
- **How** can governments, donors, practitioners and researchers support the design and delivery of impactful gender-responsive climate change responses in the region?

METHODOLOGY

- Consultation with project staff, local partners, and climate change and gender specialist
- Review and analysis of secondary data available from target community vulnerability assessments and USAID
 Mekong ARCC Climate Change Impact and Adaptation Study for the Lower Mekong Basin
- Review of existing literature on gender, climate change and adaptation

In the text that follows, information that is not specifically cited is sourced from interviews with USAID Mekong ARCC project staff and partners: the International Union for Conservation of Nature (IUCN) Thailand and the Asian Management and Development Institute (AMDI).

inclusive, gender-responsive adaptation planning for rural communities. It also contributes toward expanding our understanding of gender and community-based adaptation (CBA) based on field-tested adaptation planning and implementation in the Lower Mekong Basin.

Drawing on key insights from available literature and the USAID Mekong Adaptation and Resilience to Climate Change (USAID Mekong ARCC) project's experience, this paper presents the gender dimensions of climate change vulnerability and community-based adaptation, particularly those relevant for rural communities in the Lower Mekong Basin. The paper highlights key lessons learned and provides recommendations on how to integrate gender considerations into CBA in order to account for differentiated vulnerabilities to climate change impacts.

This paper draws heavily on USAID Mekong ARCC's experience planning and implementing CBA activities with rural communities across Cambodia (Kampong Thom Province), Lao People's Democratic Republic (Khammouan Province), Thailand (Chiang Rai and Sakon Nakhon Provinces) and Vietnam (Kien Giang Province). These communities are located in "hotspot" areas of the Lower Mekong Basin which are projected to experience the greatest changes in temperature and rainfall based on global climate models. Their vulnerability and adaptive capacity to climate change impacts is shaped by their relatively poor economic status, though there is significant variation between the sites. Climate-related shocks and stresses - such as increased temperatures, extreme weather events and irregular rainfall - are projected to place pressure on their predominantly agrarian livelihoods (see Table I).

For over two years, USAID Mekong ARCC worked with local partners in each country to pilot community-led adaptation activities and raise awareness about climate change to strengthen local livelihood and ecosystem resilience to projected climate change impacts. During this time, the project and its partners gained valuable insight from implementing CBA in rural communities of the Lower Mekong. What follows is a perspective of the gender dimensions of CBA informed by these insights, which will hopefully enrich the discussion of gender and climate change broadly, as well as the ongoing work of those involved in climate change adaptation in the region.

Table I: Climate Threats in USAID Mekong ARCC Project Sites

	Rising Temperature & Heat Stress	Droughts	Precipitation & Flooding	Sea Level Rise & Salinity
Sakon Nakhon Province, Thailand	×	Х	×	
Chiang Rai Province, Thailand	×		×	
Nakai District, Khammouan Province, Lao PDR		×	Х	
Thuan Hoa Commune, Kien Giang Province, Vietnam	X			х
Chey Commune, Kampong Thom, Cambodia	×	×		



This map shows the sites where USAID Mekong ARCC and its partners worked with local communities in Cambodia, Lao PDR, Thailand and Vietnam to pilot adaptation activities over two years.

UNITY-BASED ADAPTATION IN AGRARIAN COMMUNITIES



Men and women in agrarian communities, such as the one pictured above in Kampong Thom, Cambodia, often have different roles and responsibilities but they may also share certain tasks – particularly ones that are time-sensitive or intensive such as planting rice. Credit: Shannon Dugan

2. GENDER, CLIMATE CHANGE AND ADAPTATION

"Vulnerability to shocks and stresses is not purely a physical attribute, but is in fact to a large extent socially determined" – Valerie Nelson

It is widely recognized that while climate change affects everyone, it does not affect everyone equally. Climate change impacts different groups of people within a given community based on a complex interplay of various social, political and economic factors. That said, those with the least resources are considered to be the most vulnerable to the negative impacts of climate change. I

As the social dimensions of climate change have increasingly been the focus of discussion and scholarship as often as the scientific dimensions, more attention has been given to the issue of gender equality and climate change. Globally, activists, academics and advocacy organizations have

¹ IPCC, 2007.

raised the profile of the matter - not only highlighting the risks of a gender-neutral approach to understanding climate change vulnerability and building adaptive capacity, but also arguing that gender equality and human rights are *fundamental* to effective climate change responses. In 2007, the Bali Action Plan became the first international instrument to specifically refer to gender and the need to adopt gender-sensitive adaptation plans.² Importantly, in 2014, the UNFCCC advanced the Lima work programme on gender which "invites Parties to advance gender balance, promote gender sensitivity in developing and implementing climate policy, and achieve gender-responsive climate policy in all relevant activities under the Convention."³

Today, the gender dimensions of climate change are often mentioned and gender mainstreaming in climate change mitigation and adaptation work widely encouraged. Several organizations have produced publicly-available resources specifically on gender and responses to climate change, including adaptation (see **Annex I** for a list of resources). Yet there remain considerable knowledge and practice gaps among policymakers and practitioners with regard to: (i) understanding the gender dimensions of climate change; (ii) integrating these dimensions effectively into policies and processes intended to respond to climate change; and (iii) translating these policies and processes into practice to effectively reduce vulnerability within local communities.⁴

The common narrative driving the focus on women's human rights and gender equality is that women in developing countries are among the most vulnerable to the negative impacts of climate change, but are simultaneously "change agents" for their communities and environmental conservation. This narrative, which is reinforced through the media, public figures, and other messaging, simplifies a complex reality of gender roles and relations in developing areas that is highly contextual and seriously under-researched. It contributes to the homogenization of women as "vulnerable" or "virtuous" in relation to the environment, as well as the collapse of "gender" as women⁵, when gender is a social construct relevant to the roles, relationships and rights of an entire population. Well-intended mitigation and adaptation policies and programs influenced by this simplified narrative therefore run the risk of contextually-inappropriate, ineffective and potentially detrimental approaches to gender integration.

The rationale for taking a gender-aware or gender-responsive approach to climate change adaptation relates to a few fundamental points. Access, control, use and knowledge of resources are gendered, meaning that women and men are likely to have different priorities and perceptions about socioecological changes. One of the main issues is that the way that community members and their knowledge are engaged may not fully reflect this in adaptation strategies. The guiding principle of a gender-responsive approach to climate change adaptation is social inclusivity. In addition to gender, other overlapping social dimensions influence the adaptive capacity of an individual, a family, and even an entire community, including age, ethnicity, citizenship status or

² Atapattu, 2016.

³ UNFCCC, 2015.

⁴ For example, former UN human rights chief Mary Robinson argued that the COP21 in Paris demonstrated that men and male priorities continue to dominate discussions of climate change. See further: https://www.theguardian.com/environment/2015/dec/08/cop21-is-too-male-dominated-and-has-male-priorities-says-un-special-envoy

⁵ Sultana, 2014.

⁶ Ibid.

disability. Using an approach geared toward social inclusivity and participation may then also support the engagement and contribution of marginalized sections of a community in adaptation planning.

Currently, available literature on the gender dimensions of climate change vulnerability and adaptation agrees that in-depth analysis in this area is limited. Not only is there a need to better understand how gender influences climate change vulnerability within different settings, but also how climate change mitigation and adaptation policies and programs have an impact on gender and other social relations. Part of the issue is the lack of downscaled data to understand climate change impacts at the local level as well as the complex dynamics affecting social change processes. Another challenge is pinpointing how climate and gender dynamics interact. In many smallholder farming systems, farmers are already adapting to ongoing shocks and stresses, including climate variability. Furthermore, changes and decisions made at national, regional and global levels can have direct and indirect effects on community-level social dynamics and environmental vulnerability. For example, relationships between and within communities and ecosystems in the Lower Mekong Basin are also being affected by population and economic growth, environmental degradation and development projects, such as hydropower dams, in addition to climate change. Both climate change and social phenomena such as gender are complex to study independently, and certainly the linkages between them even more so.

The following sections hope to contribute toward building a fuller, more complex picture of the gender dimensions of climate change and community-based adaptation within the context of agrarian communities in the Lower Mekong Basin. The USAID Mekong ARCC adaptation approach in these communities was community-led, informed by downscaled climate data and community vulnerability and capacity assessments (VCAs). The primary mandate of the project was to strengthen the resilience of local livelihoods and ecosystems, and gender considerations and women's engagement were important components of that. Furthermore, the selection of adaptation options piloted in the community sites was such that benefits could be distributed as equally as possible within communities. That said, there were several key lessons learned throughout the project that can inform possible improvements and recommendations to support gender-responsive climate adaptation policies, planning and programs in the future. These critical perspectives from the field are shared in the following sections.

⁷ Nelson, 2011.

⁸ Ibid.



Like in many rural communities, women and girls in Khammouan, Lao PDR are primarily responsible for collecting water on a daily basis for everyday household uses such as consumption, cooking and cleaning. Credit: AE Consultants

3. GENDER AND CBA IN RURAL COMMUNITIES IN THE LOWER MEKONG BASIN

This section explores a few key areas where gender, climate change and adaptation intersect for under-resourced communities, informed by USAID Mekong ARCC's experience working in rural Cambodia, Lao PDR, Thailand and Vietnam. The community sites have diverse historical, political, social and economic contexts. While Lao PDR is one of the region's poorest countries, still heavily reliant on subsistence agriculture, Thailand and Vietnam have developed rapidly over the last few decades. Cambodia, Lao PDR and Vietnam are still confronting different legacies of conflict and war. While there are some similarities among them with respect to gender roles and issues, the differences underscore the importance of conducting further context-specific studies.

The sub-sections below provide some background context in addition to quantitative and qualitative data collected over the course of USAID Mekong ARCC's project implementation related to four main aspects: gender equality and women's human rights; livelihoods; health; and education (including awareness of climate change).

3.1 Gender Equality and Women's Human Rights

Cambodia, Lao PDR, Thailand and Vietnam have all committed to the advancement of gender equality and women's human rights in their national policy and legislative frameworks. All four have acceded or ratified the UN Convention on the Elimination of Discrimination against Women (CEDAW). Gender-sensitive land reforms in Lao PDR, Thailand and Vietnam provide for *de jure* equal access to land and ownership between men and women. The Government of Cambodia recently committed to achieving 25 – 30 percent representation of women in decision-making positions within its civil service by 2018. In addition to having specialist laws on gender equality and domestic violence, gender equality is a guiding principle in Vietnam's National Target Program to Respond to Climate Change. In practice, however, ability to access land and economic resources, and participate in community and household decision-making remains uneven between men and women.

Within the communities in Chiang Rai, a highly tribal and ethnically diverse province of Thailand, sociocultural norms regarding gender differed across ethnic groups. Gender roles and responsibilities were rigid and traditional in some villages, and looser in others. But generally, opportunities and constraints related to individuals' mobility and ability to access education, healthcare, economic opportunities and assets such as land were not as divided by gender as by ethnicity or Thai citizenship. In contrast, the community in Sakon Nakhon, Thailand that the project worked with had notably high levels of gender and income equality. Women and men were almost equally represented in community leadership and community meetings had as active participation from women as men.

BY THE NUMBERS

Out of 188 countries, in 2014, Thailand was ranked #76 by the UNDP Gender Inequality Index, Vietnam was ranked #60, Cambodia is ranked #104 and Lao PDR was not ranked. According to the International Union for Conservation of Nature (IUCN) Environment and Gender Index findings, published in 2013, Thailand and Vietnam were ranked as moderate performers with regard to advancing gender equality and women's empowerment in the environmental sector, while Lao PDR was ranked among the weakest performers (Cambodia was not assessed).

Sources: UNDP Gender Inequality Index. Available from: http://hdr.undp.org/en/composite/GII; IUCN Gender and Environment Index 2013. Available from: https://portals.iucn.org/union/sites/union/files/doc/results of the environment and gender index 0.pdf.

⁹ Harbitz, 2015.

In Kampong Thom, Cambodia, seasonal migration patterns mean there are intermittent periods of several *de facto* female-headed households in the villages. Women continue to manage domestic and agricultural tasks, although men will return occasionally to help during more laborintensive periods. As such, women appear to have more control over resources and household financial decisions than men on a regular basis.¹⁰ At the commune-level, one woman sits on the commune council. During community meetings, women and men were equally vocal about their needs and views on their community vulnerability – although it was noted that ultimately, men dominated overall decision making.

In Thuan Hoa Commune in Vietnam's Kien Giang, equal access to political participation and community decision-making was an issue. Women only accounted for 25 percent of the commune government and none were in positions of leadership, except for the local chapter of the Women's Union. When the representative of the Women's Union joined USAID Mekong ARCC workshops, women appeared more encouraged to participate and share their opinions. In the village with no local Women's Union, women were less likely to leave their home and actively participate in the workshops. While gender equality in literacy and school enrollment is a major national priority for Vietnam, the situation in rural areas is different. While girls may complete secondary school, cultural norms encourage them to find a job, get married and start a family, whereas boys are allowed to move outside the village for work or perhaps further schooling. Additionally, as discussed further in the next sub-section, certain livelihoods are considered less appropriate for women.

Traditional gender stereotypes and norms hold fast in many rural areas of Lao PDR, especially within certain ethnic groups. A vast majority of the population in Lao PDR live in rural areas governed by a village chief and council. A little over one percent of village chiefs are women.¹² The situation in the target community in Khammouan reflected this, as no women held leadership roles. Sociocultural norms defined the roles and responsibilities of women and men in the community. Early marriage (below the age of 18) is common within rural communities¹³, and domestic violence is a concern¹⁴, despite the existence of preventative laws. In Khammouan, women did not appear to have prior experience participating in community politics or decision-making – certainly not alongside male community members and leaders. Typically the male member attends as the household representative. The USAID Mekong ARCC workshops were the first women attended and it was a challenge to encourage their active participation.

3.2 Livelihoods

While specific livelihoods and roles of men and women differed across the community sites, there were some similarities among them. Women were predominantly responsible for tasks such as

¹⁰ Given the migratory patterns of men, women attended the majority of the workshops in Chey, therefore they had more control over the decisions made on the adaptation activities. As noted, men may have more overall authority, though in absence, women de facto households maintain daily decision making over resources.

¹¹ USAID Mekong ARCC, 2014a.

¹² UN Human Rights Council, 2010.

¹³ See Social Institutions and Gender Index, available from: http://www.genderindex.org/country/lao-pdr.

¹⁴ Domestic violence was not something that USAID Mekong ARCC or its partners surveyed within the community, given the sensitivity of the issue. However, the Lao Social Indicator Survey in 2011 revealed that 75 percent of women in Khammouan agreed domestic violence is agreeable in certain situations such as arguing, going out without telling their husband, or burning food.

collecting water, gathering NTFPs for consumption or sale, and caregiving. They also may have specific tasks related to rice cultivation and animal husbandry. Outside of the household, some women earned income running a small business or selling handicrafts, or working on plantations as casual laborers, in beauty salons, garment factories or construction. In several communities, it was more likely for men to migrate to a neighboring province or country for work than women. As such, there were some *de facto* female-headed households (e.g. husband migrates for work or is elderly or disabled), in addition to a few *de jure* female-headed households (e.g. single, separated or widowed women). These households typically carry a "double day burden", meaning the heads must handle domestic work and the role of breadwinner. ¹⁵ Men in the communities generated income from agriculture or aquaculture, or professions such as teaching.

Climate change already does, and will continue to, impact local livelihoods and gender roles in these areas. Generally speaking, in settings where women's opportunities are more constrained than men's and their responsibilities are closely tied to natural resources, their livelihoods are more likely to be negatively affected by climate and non-climate-related changes in their environment. For example, water shortage during the dry season requires women and girls in Lao PDR's Nakai District to walk several kilometers and wait in long lines every day to collect water for household use. Women responsible for collecting NTFPs such as mushrooms, bamboo



Women in coastal communities in Vietnam's Kien Giang province typically handle the marketing of fresh fish and other seafood products. Credit: Donald Basson

¹⁵ Klasen et al., 2013.

shoots or ant eggs face a similar situation.¹⁶ These prolonged chores take time and energy away from their several other daily responsibilities.

Outward migration for work opportunities in neighboring provinces or countries may increase, particularly among younger generations, shifting social structures in the community. Remittances may help prevent households from falling into poverty. A few households in Chiang Rai, Khammouan and Kien Giang cited remittances as their primary source of income – more commonly by women than men respondents. In places where women's access to assets, credit, labor markets or insurance markets is restricted; where there is a gender-based wage differential; and where social capital is determined by marital status, *de jure* female-headed households may be more vulnerable to poverty compared to *de facto* female-headed households and male-headed households.

IN FOCUS: KIEN GIANG, VIETNAM

During the early 2000s in Vietnam, the government initiated a rice-shrimp rotation system in the Delta under their land use planning policy. The rice-shrimp system did not demand as much labor as the previous rice intensive farming, which required both women's and men's involvement. Men continued the rice-shrimp rotation system while women were able to spend more time on other household tasks. Shrimp farming is considered to be more physically and culturally appropriate for men, and as such, men dominate this livelihood. While women's opportunities to earn income through laboring in rice fields decreased, the rice-shrimp system brings in more household income so generally, this shift appeared to be perceived positively for both men and women in Thuan Hoa Commune.

Source: USAID Mekong ARCC Kien Giang Vulnerability Assessment, 2014.

3.3 Health

Climate change can directly and indirectly impact human health. Increasing average temperatures, particularly during the dry season, heighten the risk of heat-related illness such as heat stroke and exhaustion. The elderly, children, pregnant women and open-air workers (such as construction workers or farmers) are especially at risk.²⁰ Vector-borne and zoonotic diseases are another concern as changing climatic conditions may lead to the appearance of new pathogens, the resurgence of existing diseases (e.g. malaria, dengue fever, etc.), and public health systems that lack the capacity to effectively prevent or respond to such health issues.²¹ At least 20 percent of community members across all project sites (and up to 50 percent in Kampong Thom,

¹⁶ USAID Mekong ARCC, 2014c.

¹⁷ Klasen et al., 2013.

¹⁸ Interestingly none of the respondents in Kampong Thom cited remittances as the primary source of income, despite how widespread seasonal migration is within the communities.

¹⁹ Klasen et al., 2013.

²⁰ Talbert, J. and Reytnar, K. 2015.

²¹ Wilcox, 2016.

Cambodia) noted increased incidence of illness, including stress and mental health, as one of the main impacts of changing weather and climate patterns. Since women consume more water than men for hygiene, cooking and drinking purposes, their health may be at greater risk of impacts from turbid or saline water. And for rural communities that produce most of the food they consume, climate change and environmental degradation that negatively affects crop productivity, livestock health, and access to NTFPs and wild animals are major food security concerns. Where household food hierarchies exist, food scarcity may mean that women forego or reduce their portion so their spouse or children may have more.

Climate change impacts on key livelihood resources can also cause indirect health consequences. For example, if women are predominantly responsible for taking care of livestock when the livestock is unhealthy - which is reportedly the case in community sites in Kampong Thom, Cambodia - this may put them at disproportionate risk of exposure to zoonotic diseases. Another consideration is the additional burden that climate-related illnesses of relatives may place on women, who are often primary caregivers for children, elderly and the sick. In the Chiang Rai and Sakon Nakhon communities, men were predominantly responsible for handling pesticides, herbicides and fertilizer. This may put them at risk of the various health conditions associated with agrichemical exposure. Changing climatic conditions may influence agrichemical use as farmers face added pressure on their livelihood productivity. A 2011 study focused on the Mekong Delta suggests that pesticide use will increase due to the impacts of climate change, including inundation and soil salinization. It emphasized pursuing organic, climate-smart techniques to better protect public and ecosystem health.²² As such, in both Kampong Thom and Chiang Rai, communities adopted organic pest control techniques and fertilizer made from waste products of their integrated farming systems.

Quality of and access to healthcare varied across the sites, but there appeared to be at least one basic option located in each community. Health access and food security are relatively high for communities in Kien Giang, though there are discrepancies between income groups.²³ In the communities in Chiang Rai and Sakon Nakhon, a robust health infrastructure with volunteers increased accessibility to quality healthcare for both men and women. However, access may be limited depending on possession of a Thai I.D. card. Comparatively, the communities in Khammouan appeared to have a great need for more accessible, quality healthcare.

Maternal and child health and water-borne illness are major health concerns in Khammouan's Nakai District. Khammouan has one of the highest child mortality rates in Lao PDR, with 138 deaths per 1,000 live births. ²⁴ A recent study reported that in half of all districts in Khammouan, women reported having lost at least one child under the age of five. ²⁵ Anecdotal evidence appears to support how devastatingly often child illness and death occurred in these communities. As the USAID Mekong ARCC field coordinator, explained, "We were told that sometimes, someone's child would become very sick in the night. By the time the doctor could come the next morning, the child was already gone." There is a local health clinic with medical personnel and basic equipment but the nearest hospital is virtually inaccessible for the average villager. Whether by

²² Sebesvari, Le and Renaud, 2011.

²³ USAID Mekong ARCC, 2014a.

²⁴ Lao Social Indicator Survey 2011 – 12 Multiple Indicator Cluster Survey/Demographic and Health Survey. Accessed from: http://dhsprogram.com/pubs/pdf/FR268/FR268.pdf

²⁵ USAID Mekong ARCC, 2013

culture or by necessity, pregnant women commonly give birth in their own homes without the assistance of a skilled birth attendant or other health professional. Treating water for drinking purposes is not widely practiced, leading to higher prevalence of water-borne illness. In the project communities in Nakai District, 30 percent of children were considered underweight. Additionally, there is a reluctance to vaccinate children for childhood illnesses and no apparent efforts to raise awareness about vaccinations. Increased risk of heat stress and vector- and water-borne illness due to rising temperatures and other climate change impacts will likely exacerbate existing maternal and child health issues, and place further pressure on under-resourced healthcare facilities.²⁶

IN FOCUS: KHAMMOUAN, LAO PDR

With water shortages during the dry season, women — who are primarily responsible for collecting water — must travel further to find water, leaving less time for their other duties. If women must travel further afield to collect water or NTFPs, they may potentially be at higher risk of encountering unexploded ordnances (UXOs) left from the Indochina Wars. Some districts in Khammouan have a very high density of UXOs, and climate change may potentially increase people's risk as they push into new areas of land as land suitability changes.

Source: Lao PDR Vulnerability Assessment, Lao PDR Draft National Disaster Management Plan 2012-2015.

3.4 Education and Climate Change Awareness

Men's and women's access to education and information, including about climate change, varied across the sites. Across all the sites, women were nearly twice as likely than men to lack formal schooling. A majority of the women however did complete at least primary school. While men were more likely to have completed secondary schooling, the numbers of men and women who completed tertiary-level schooling were both low. More women than men reported not knowing where to access information about the weather or not having/seeking access. The difference between men and women was notable in the Cambodia, Lao PDR and Vietnam sites.

In Lao PDR, the quality of, and access to, education diminishes notably in rural areas of the country. This was certainly the case for community members of Nakai District in Khammouan, where secondary schooling was located outside the village. Although overall education levels were not high, there was a disparity between men and women. It is common for girls to complete primary school and then focus on helping their mothers or other female relatives with household tasks. Generally community members were not familiar with climate change or adaptation strategies. USAID Mekong ARCC facilitated initial and refresher trainings on climate change and projected impacts on their community, using visual methods due to low literacy levels.

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²⁶ Lao PDR Vulnerability Assessment.

Generally, across the four countries, higher education levels correlated with concern about climate change. Furthermore, men in the communities were more knowledgeable about climate change prior to project implementation. Among the respondents who reported hearing about climate change in Kien Giang, Kampong Thom and Khammouan, men far outnumbered women – although generally, awareness among both men and women was low. Over 80 percent of women surveyed in Thuan Hoa Commune had not heard of climate change though they reported noticing changes in weather patterns. Following the pilot adaptation activities and awareness raising workshops in the communities, knowledge of climate change and adaptation strategies increased overall, with a balanced distribution across men and women. For example, climate change awareness increased over 60 percent in Kampong Thom.

To conclude, this section presented some key areas of concern where gender, climate change impacts and adaptation overlap – gender equality and women's human rights; livelihoods; health; and education and climate change awareness. USAID Mekong ARCC partners encountered many of the key dimensions highlighted in the existing literature while working in the field, and were able to gather some qualitative and quantitative data on. The perspectives from the communities present a picture of the relationship between gender and climate change vulnerability that is complex and encouraging; hopefully also contributing to a richer understanding of women and men in relation to each other as well as their social and natural environments. These insights help identify several opportunities for addressing current gender-based gaps and needs. They also emphasize the value of a participatory, bottom-up approach where communities are encouraged to define their own priorities. The final section that follows presents the main lessons learned and recommendations for advancing gender-responsive adaptation policies, processes and programs.



In addition to agricultural livelihood activities and domestic responsibilities, women's livelihoods may involve making and selling traditional handicrafts. Credit: Saowalak Jingjungvisut



Varied needs and interactions with the environment mean that both women and men have valuable knowledge and experiences to contribute to community discussions regarding natural resources management and climate change adaptation. Not only is it necessary to draw on this local knowledge, but also to broaden understanding about the impacts of climate change for mutual learning and more informed decision-making. Credit: Pakprim Oranop-na-Ayutthaya

4. ADVANCING GENDER-RESPONSIVE CBA

Lessons Learned and Recommendations

"Any understanding of climate change needs to start with the human dimensions and any solutions need to recognise ordinary people as participants and contributors." — Emmeline Skinner

This final section presents lessons learned and recommendations informed by USAID Mekong ARCC's experience implementing CBA in rural communities of Cambodia, Lao PDR, Thailand and Vietnam. While intended to support more gender-responsive and gender-aware approaches, these points are generally useful to consider for participatory approaches; the underlying

understanding being that different social experiences entail different knowledge and perspectives that are important to reflect and address in adaptation decision-making processes and program design.²⁷ Otherwise, they may serve to perpetuate or exacerbate existing inequalities.

4.1 Lessons Learned

Early Planning

The project's approach to be gender-aware from the outset had a notable influence on the planning and implementation phases of the community adaptation pilots. Recommended by many studies and resources on gender-responsive climate change adaptation processes, the project's monitoring and evaluation (M&E) framework integrated gender-based outcomes from the very beginning. Sex-disaggregated data was collected from community members. Among the metrics used to evaluate potential adaptation options was whether the activity would benefit women and other groups that may be marginalized. When gender-related concerns are integrated into policies or processes as an afterthought, they are rarely implemented in a meaningful way.

Participatory Approach

Due to USAID Mekong ARCC's participatory approach to adaptation planning, women's representation in local decision-making was a priority. Project partners conducted vulnerability and capacity assessments (VCA) using participatory methods and tools in each target community. Participatory tools used to capture the vulnerability of major livelihoods, natural resources and land use to climate and non-climate hazards included: a seasonal calendar, historical timeline, village mapping and a community vulnerability matrix. A series of community workshops and focus group discussions were dedicated toward these activities, with facilitators consciously making an effort to encourage inclusivity and gender balance in the sessions. Skilled facilitators were critical to the success of these sessions and encouraged equal participation among community members.

The diversity of participatory tools brought to light some of the similarities and differences in the needs and priorities voiced by men and women in the communities. Engaging women in community workshops – though sometimes challenging – generally enriched the discussion as they contributed their knowledge and experiences. In Sakon Nakhon, for example, women led the project partners on transect walks through their community as part of the village mapping process. In Kampong Thom, women highlighted important connections between health and their responsibilities caring for livestock. Not only do participatory methods help address gender imbalances in decision-making, but a diversity of perspectives draws on the full community potential to support the development of more informed, effective and targeted activities.²⁹ For example, in Kien Giang, USAID Mekong ARCC helped install a loudspeaker early warning system after women in the community highlighted the need for improved communications infrastructure in order to stay aware of weather-related events that may impact their safety or livelihoods. And in Khammouan, many of the women helped sustain the momentum to complete improvements

²⁷ Nelson, 2011.

²⁸ See Skinner, 2011; Kratzner and Le Masson, 2016; USAID ADAPT Asia-Pacific Gender Sourcebook.

²⁹ CARE et al., 2015.



to the water supply system, volunteering their own labor - even when complications threatened to delay - because they understood they would benefit directly from the work.

Local Partners

Local government, organizations, civic groups and leaders are critical to engage as early as possible in the adaptation planning process. Not only may they be valuable resources for local community knowledge, but also for engaging hard-to-reach or marginalized sections of the community. Local women's groups — such as the Women's Union in Lao PDR and Vietnam — can be powerful partners in promoting women's engagement, empowerment, and human rights. In Vietnam, for example, representatives of the local Women's Union chapter were given specific training and invited to participate in community workshops, which appeared to help encourage women's engagement. Beyond that, building the capacity of local partners to play a role in adaptation decision-making, implementation and M&E can help strengthen overall adaptive capacity of the community.

One of the participants in the USAID Mekong ARCC pilot adaptation activity in an ethnic hilltribe community in Chiang Rai, Thailand shows the blossoming plum trees she planted as part of her crop diversification strategy to strengthen her livelihood resilience to climate change. Credit: lenkate Saenghkaew

³⁰ Chaudaury, 2016.

4.2 Challenges and Opportunities

Timing

Both men and women in rural communities, such as the ones USAID Mekong ARCC worked with, all have several daily tasks and responsibilities. Their participation in project workshops and training, or water or forest management committees, may be an additional burden on their time.³¹ Timing is a key consideration in order to support an inclusive process.

USAID Mekong ARCC partners tried to convene community members at convenient times of the day and season. Women's work schedules are often more flexible, allowing them to adjust their tasks around community workshops. In some communities, such as in Cambodia's Kampong Thom Province, seasonal migration patterns made it a challenge to collect data and engage the same household members over time. During the harvesting or planting seasons, workshop facilitators conducted sessions with community members in the evenings. In the community sites in Thailand, it was noted that the community workshops were often held at hours when youth were in school. Furthermore, many young adults work in urban areas or other provinces, meaning that generation of the community may be underrepresented in decision-making processes.

Gender Roles and Relations

As previously mentioned, in some communities, it was challenging to equally engage male and female members of the community in the adaptation decision-making process and activity implementation. Men are typically considered the household head and may take on decision-making on behalf of the household. At the project sites in Thailand's Sakon Nakhon Province, both women and men are commonly involved in community governance processes, making it less of a challenge. By contrast, extra effort was made to engage women in target communities in Lao PDR where women are typically not involved in community decision-making. Similarly, in Kien Giang, where men comprised a majority of local government, women participants seemed less actively engaged in the community meetings when men were present. It may be beneficial to first convene men and women community members separately, and then have a combined follow-up meeting to review key concerns, priorities or information altogether.

Women and men voiced common and divergent needs, priorities and concerns, but through the selection process, chose adaptation activities that would mutually benefit the community. For example, both men and women community members in Nakai District in Khammouan prioritized improving their water supply system. While the whole community stood to benefit from improved access to water year-round, women and children will also benefit from having their water collection burden significantly relieved. Additionally, it was not uncommon for both men and women in the communities across the sites to highlight women's livelihood development as a specific need.

Gender is a complex, and sensitive, issue to explore in any setting, and it may be a challenge to convince stakeholders of its relevance to climate change – especially if climate change is an unfamiliar concept.³² Exploring gender roles and relations while building a relationship with local

³¹ Chaudaury, 2016.

³² Kratzner and Le Masson, 2016.

communities can be difficult, requiring tact and sensitivity. It is typically easier to gather information on different roles of community members, rather than relations between them. For this reason, it is worth considering a local women's group or organization as a partner in planning and conducting gender analysis both before and after project implementation.

Organizational Priorities and Limitations

When working with several partners simultaneously, it can be a challenge to coordinate across each partners' organizational processes, priorities, capabilities and limitations. At the same time, however, a diversity of partners offers real opportunity for exchange of ideas and practices, including with regard to gender-responsive approaches. It also allows for more learning opportunities based on the different perspectives and experiences of the partners.



One of the participants in the USAID Mekong ARCC pilot adaptation activity in Kampong Thom, Cambodia has been very successful with the home garden she started, including these gourds which can be eaten or turned into pots for growing other vegetables or herbs. Credit: Shannon Dugan

4.3 Recommendations

As mentioned in Part 1, the target audience for this paper comprises development practitioners, donors and policymakers who are involved in formulating, implementing and evaluating climate

change adaptation in the region. The following recommendations are sectioned according to target audience, and also include suggested areas for further research.

4.3.1 Practitioners

"While existing policies promoting gender equality are necessary to create a legal framework, changes seem to be best influenced by projects when working through participatory approaches at the grassroots level."

"Bottom-up and participatory approaches give women and men a chance to bring out their diverse needs, priorities and the range of skills through which each can contribute to climate compatible development"

- Simon Kratzner and Virginie Le Masson

Below are some considerations for development practitioners for planning and implementing gender-aware and -responsive community-based adaptation in the field. These recommendations are backed by key lessons learned from USAID Mekong ARCC's experience carrying out participatory, community-led adaptation approaches to climate change in rural Lower Mekong communities between 2014 and 2016.

Commit Resources

Time and resources are important components to realizing gender-responsive CBA. The USAID ADAPT Asia-Pacific's Online Sourcebook for integrating gender into climate change adaptation proposals recommends committing a budget line specifically for the project's gender component or activities. Itemizing specific gender-related activities with the project team helps prevent them from being sidelined.

This includes engaging the right staff – potentially a full or part-time gender specialist - to conduct gender analysis; support the integration of gender in the design and implementation; and generally be a focal point committed to gender issues and inclusivity. Having a gender specialist who is familiar with the local context and language could be especially beneficial, as they can navigate cultural norms and sensitivities regarding gender relations. Having a technical expert approach adaptation planning and programming from a social inclusion or gender background may help broaden the perspective of rural resiliency beyond climate-smart agriculture and other ecosystem-based solutions when considering gender-differentiated impacts of climate change on livelihoods. Currently it seems common that environment and climate change specialists are having to get up to speed on integrating gender considerations. It may be useful to also consider engaging gender specialists who can bring their knowledge to bear within the context of climate change impacts on agrarian communities.

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³³ Kratzner and Le Masson, 2016.



Community members in Khammouan, Lao PDR work together to prepare the site for the installation of a water storage tank and a distribution platform. Credit: lenkate Saenghkaew

Forge Connections

Though they may share an interest, women may not have the same social networks as men to draw on for information, guidance or resources related to climate change and adaptation strategies. Practitioners should consider local partnership and networking opportunities for men and women in the community, especially since financing options for members of rural communities are likely to come from local government. Existing community groups may be a possible vehicle to support networking within or between villages to share information, knowledge and resources. One way to support this is through engaging both women and men in identifying key stakeholders for project engagement.

Additionally, in USAID Mekong ARCC's experience, facilitating cross-sectoral exchange across technical experts and local partners from different sites yielded valuable insight on community adaptation plans and implementation. Furthermore, involving participants who can also contribute from a social inclusion and gender perspective could enrich these exchanges and bring new perspectives to community-based adaptation.

Consider the Context

A gender-responsive approach to climate change adaptation may not necessarily entail drastic or "transformative" measures to address gender imbalances. Gender as a concept is socially

constructed and has different meanings across cultures and geographies. A context-specific gender analysis can help build a grounded understanding of what "gender" means within a specific context so that processes and programs can be designed appropriately. Many resources and guidelines exist on gender mainstreaming and gender-responsive adaptation, but putting these into practice across diverse contexts is the real challenge. In some settings, such as Sakon Nakhon, there was very little gender imbalance in community decision-making. A different approach was needed in Nakai District in Khammouan, where USAID Mekong ARCC workshops were the first opportunity that male and female household members were both invited to participate. Across all the settings, it was advantageous to have both female and male project and partner staff to engage with community members in both formal and informal situations. It is also worth considering national-level commitments, policies, initiatives and organizations related to gender equality and women's human rights that can guide or inform approaches on gender.

Build Knowledge

Where possible, aim to build knowledge across and among all stakeholders with an eye toward creating equal learning opportunities for men and women.

In the communities, USAID Mekong ARCC provided training on climate change, adaptation strategies and agricultural techniques. Not only does this build capacity among the community, but it also helps create buy-in for adaptation activities.³⁴ Training materials were created with local conditions in mind and a little creativity often went a long way. "Edu-tainment" and visual aids were especially helpful in communicating projected climate change impacts on communities, particularly in communities where language or literacy posed challenges for some sections of the community. In some cases, it was more effective to hold awareness raising sessions separately for women. Special consideration must be given to ensure learning opportunities for women as well as men. For example, in Kien Giang, a major adaptation activity involved technical training to modify the rice-shrimp system, which is dominated by male farmers. However, AMDI specifically targeted women and female-headed households in livelihood diversification through eco-friendly animal husbandry. Although this activity was less extensive than the rice-shrimp activity - a major source of community and household income - and could have benefitted from more technical training, many participants were positive about the learning opportunity and some took their own initiative to replicate the activity replacing the pigs for chickens. In this way, community members can not only build their own household adaptive capacity, but also serve as examples and resources for other community members.

There remains a real lack of reliable data on the daily lives of women and girls, particularly when household surveys are constructed with a bias toward formal sector employment.³⁵ In order to support gender-responsive/aware adaptation, gender-disaggregation must be integrated into the design of data collection tools and approaches from the beginning and at all levels. For example, it may be common to collect data on adaptation strategies already being used by households, but often this information is not gender-disaggregated. Typically, household-level data is gathered with minimal attention on how resources are controlled and allocated within the household.³⁶ Innovative methods, such as training women or children to use cameras can help capture their

³⁴ Chaudaury, 2016.

³⁵ McDonald, 2016.

³⁶ Skinner, 2011.

perspectives.³⁷ Furthermore, creative methods, such as gathering life stories, can be effective monitoring and advocacy tools.³⁸ It is also important to present data collected from the community back to community members, which can build common understanding and vision. In addition to field-level monitoring, it is also essential to build in gender-specific indicators at the project and donor levels. Qualitative data collected from USAID Mekong ARCC suggests that having specific gender-related indicators – which flowed down from USAID requirements - did make a real difference in ensuring project partners integrated gender into the planning, design, implementation and monitoring of field-level adaptation activities.

4.3.2 Donors

Donor agencies also play a key role in promoting gender-aware/responsive approaches among climate change adaptation programs. Firstly, donors can encourage early attention by development partners to gender dimensions of climate change adaptation by highlighting them directly in the programs' scopes of work. Requiring partners to integrate standard gender-sensitive indicators into their M&E framework also helps ensure that gender is considered early on and throughout implementation. Donors may also want to consider linking an in-house gender specialist with partners in the development and monitoring of a project-level gender integration strategy. Such collaboration can supplement and strengthen partners' capacity to plan and implement more gender-responsive approaches to community-based adaptation, particularly for smaller projects that may have more limited resources. Donors are also in a unique position to create opportunities for expanding capacity and knowledge regarding gender and climate change adaptation across their partners, and may wish to explore hosting events or other forums for cross-project learning and collaboration. Such events or forums could be an opportunity to also provide training and awareness-raising and generally advance the discussion around gender balance and climate change.

4.3.3 LMB Governments

A major factor that can help or hinder the impact of gender-responsive CBA is the overarching policy environment – whether it creates a strong basis for advancing gender equality and women's human rights or not.³⁹ In these Lower Mekong Basin countries, the policy environment for addressing root causes of gender inequality is relatively supportive but the issue is putting these policies into practice as part of the climate change adaptation framework. The recommendations provided below take this into consideration, but many are generally applicable beyond the Lower Mekong Basin.

Policymaking

• Integrate the principles and processes for advancing gender equality into National Action Plans regarding climate change mitigation and adaptation. These principles and processes may come from an existing national policy, including international commitments (such as under CEDAW), on gender equality and women's human rights.

³⁷ Skinner, 2011.

³⁸ Kratzner and Le Masson, 2016.

³⁹ Kratzner and Le Masson, 2016.

- Support policies and processes that engage women as equal partners in decision-making on climate change responses.
- Expand opportunities for community engagement and women's participation at all levels
 of government. Community-based issues and vulnerabilities are at risk of being
 overshadowed by national-level priorities and needs. Adaptation policies must reflect the
 needs of both women and men, especially those whose livelihoods are most likely to be
 negatively affected by climate change.⁴⁰
- Set targets or targeted activities for addressing gender issues and marginalized populations' vulnerability to climate change and natural disasters, particularly at the community level.
- Continue building capacity and systems to ensure that national-level commitments, strategies and processes regarding gender-responsive climate change adaptation flow down to local levels of government.

Capacity Building and Awareness Raising

- Support climate change institutions to examine own structures, processes and policies to identify the extent to which they engage with gender equality and women's human rights and ways in which they can advance their approaches.⁴¹
- Help build an evidence base by supporting the collection of gender-disaggregated data.
 Consider adapting existing gender indicators for environment, agriculture, energy and social programs for climate change mitigation and adaptation programs.⁴²

CARE INTERNATIONAL: KEY RECOMMENDATIONS FOR TRANSFORMATIVE APPROACHES TO ADAPTATION

- 1. Base adaptation policy on comprehensive, participatory and gender-sensitive analysis of vulnerability to climate change
- 2. Recognize differential vulnerability within countries, communities and households in order to target adaptation strategies accordingly
- 3. Build on existing knowledge and capacities of men, women, girls and boys
- 4. Empower vulnerable women and girls to build their own adaptive capacity
- 5. Plan and implement adaptation strategies with participation of both women and men, including the most vulnerability within the community
- 6. Promote policies and programs at local, national and international levels that meet the specific needs of poor women and men
- 7. Support women and men to access the resources, rights and opportunities they need to adapt
- 8. Promote gender equality as a long-term goal.

Source: CARE International 2010 (Skinner. 2011)

⁴¹ Skinner, 2011.

⁴⁰ Skinner, 2011.

⁴² Skinner, 2011.

- Build internal capacity to conduct gender analysis and integrate gender considerations in the design of climate change and development policies and strategies.⁴³ Additionally, build the capacity and skills of female government officials, including agricultural extension officers for example, involved in planning and implementation of climate change adaptation from the national to local levels.
- Raise awareness of national policies and tools, and related international commitments, related to climate change, gender equality and women's human rights among all levels of government – among both men and women.

4.3.4 Researchers/Academia

There is great need to continue building the evidence base on the social and gender dimensions of climate change vulnerability as well as mitigation and adaptation processes and programs. As with practitioners, researchers also run the risk of collapsing "gender" as women. Women's and girl's experiences are still under-researched, but studying gender and other social dimensions as they relate to climate change require an understanding and analysis of the roles, relations and



Better understanding of the links between gender and other social distinctions, resource use and climate change impacts is critical for adaptation planning so that actions taken today can equitably benefit this generation and future generations. Credit: lenkate Saenghkaew

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⁴³ Kraztner and Le Masson, 2016.

experiences of all genders. For the reasons stated in Part I, there are unique challenges in studying gender and climate change – two dynamic variables – but further research will support a more complex understanding of their relationship and therefore better informed policies and programs.

Further research is needed in the following areas:

- Urban areas: Much of the existing literature is focused on climate change, vulnerability and gender in rural settings. More research and evidence is needed from urban settings, especially the urban poor, as well as exploration of the linkages between climate change, rural-to-urban migration, and gender.
- Special groups: Further research is needed on how climate change vulnerability and decision-making intersects with certain populations within communities, such as ethnic or religious minorities, persons with disabilities, *de jure* and *de facto* female-headed households, children and the elderly (as well as the gender dimensions within these groups). They have their own perspectives on and contributions to community and household resilience that could be engaged through creative means.
- Impacts of policies and programs on gender roles and relations: To further broaden knowledge of the gender dimensions of climate change impacts, more research is needed on the impacts of climate change mitigation and adaptation policies, processes and programs on gender roles and relations within a given context. Although they may have developed to be gender-responsive, follow up evaluation of impact can help inform an understanding of what is and is not effective.

Conclusion

In recent years, there has been far more recognition of the importance of understanding the linkages between social relations and climate change. One social dimension in particular – gender – has been given significant consideration: How do gender roles and relations, and gender equality, relate to the ways in which men and women might experience climate change impacts differently? Alternatively, how might climate change impacts affect gender roles and relations within a given community? And what is the appropriate way for climate change responses to understand and account for this?

This paper, drawing on the experiences of the USAID Mekong ARCC project and its partners, hopefully advances our collective ability to answer these questions, particularly within the context of CBA in rural communities of the Lower Mekong Basin. While limited in scope, the intention of the paper is to share a diversity of local experiences and valuable lessons learned. And beyond this, to inspire continued discussion and frank reflection on how and how well we — as practitioners, donors and governments — are working to ensure that benefits and protections of climate change responses are distributed equitably across all communities — from the local to the global.

REFERENCES

Atapattu, S. 2016. Women, Climate Change and Inequality. *Human Rights Approaches to Climate Change: Challenges and Opportunities*. Oxon: Routledge.

Chaudhury, M. 2016. Lessons from Implementing Adaption Plans in the Lower Mekong Basin. Available from: http://mekongarcc.net/resource/report-lessons-implementing-adaptation-plans-lower-mekong-basin.

Harbitz, M. B. 2015. Cambodia Takes Steps to Ensure Gender Equality in Decision-Making. Available from: http://asiapacific.unwomen.org/en/news-and-events/stories/2015/07/cambodia-takes-steps-to-ensure-gender-equality-in-decision-making.

Klasen, S., T. Lecthenfeld and F. Povel. 2013. A Feminization of Vulnerability? Female Headship, Poverty, and Vulnerability in Thailand. World Development 71, 36-53.

Kratzner, S. and V. Le Masson. 2016. 10 Things to Know: Gender Equality and Achieving Climate Goals. Climate & Development Knowledge Network.

McDonald, C. 2016. Is There a Sexist Data Crisis? *BBC News Magazine*. Available from: http://www.bbc.com/news/magazine-36314061.

Nelson, V., K. Meadows, T. Cannon, J. Morton and A. Martin. 2002. Uncertain Predictions, Invisible Impacts, and the Need to Mainstream Gender in Climate Change Adaptation. *Gender & Development* 10:2, 51-59.

Nelson, V. 2011. Gender, Generations, Social Protection and Climate Change: A Thematic Review. London: Overseas Development Institute.

OECD Social Institutes and Gender Index. Available from: http://www.genderindex.org.

Sebesvari, Z., H. Le, and F.G. Renaud. 2011. Climate Change Adaptation and Agrichemicals in the Mekong Delta, Vietnam. Available from:

 $https://www.researchgate.net/publication/225986847_Climate_Change_Adaptation_and_Agrichemicals_in_the_Mekong_Delta_Vietnam$

Skinner, E. 2011. Gender and Climate Change Overview Report. Institute of Development Studies.

Sultana, F. 2014. Gendering Climate Change: Geographical Insights. *The Professional Geographer* 66:3, 372-381.

Talbert, J. and K. Reytnar. 2015. Climate Change in the Lower Mekong Basin: An Analysis of Economic Values at Risk. Available from:

http://mekongarcc.net/sites/default/files/usaid_marcc_values_at_risk_report_with_exesum-revised.pdf

UN Framework Convention on Climate Change. 2015. Report on the Conference of the Parties on its twentieth session, held in Lima from 1 to 14 December 2014 Addendum Part two: Action taken by the Conference of the Parties at its twentieth session. FCCC/CP/2014/10/Add. 3. Available from: http://unfccc.int/resource/docs/2014/cop20/eng/10a03.pdf.

UN Human Rights Council. 2010. Compilation prepared by the Office of the High Commissioner for Human Rights in accordance with paragraph 15 (b) of the annex to Human Rights Council resolution 5/1: Lao People's Democratic Republic. A/HRC/WG.6/8/LAO/2. Available from: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G10/107/53/PDF/G1010753.pdf?OpenElement

UN Women. Thailand Country Profile. Available from: http://asiapacific.unwomen.org/en/countries/thailand.

USAID. 2011. USAID Gender Integration Matrix: Additional Help for ADS Chapter 201. Available from: https://www.usaid.gov/sites/default/files/documents/1865/201sac.pdf.

USAID Mekong ARCC. 2013. USAID Mekong ARCC Climate Change Impact and Adaptation Study for the Lower Mekong Basin. .

USAID Mekong ARCC 2014a. Vulnerability Assessment Report: Thuan Hoa commune, An Minh district, Kien Giang Province. Available from: http://mekongarcc.net/sites/default/files/2014-06-30 thuan hoa va report final.pdf. . 2014b. Sakon Nakhon and Chiang Rai Vulnerability Assessment Report. Available from: http://mekongarcc.net/sites/default/files/vca report iucn thailand 30jun14.pdf. . 2014c. Khammouan Province Vulnerability Assessment Report. Available from: http://mekongarcc.net/sites/default/files/iucnlaosva_final-usaid_format.pdf. . 2014d. Community Adaptation Plan: Huai Kang Pla Village, Hae Ko Village, and Loh Yo Village, Chiang Rai Province, Thailand. Available from: http://mekongarcc.net/sites/default/files/141201 iucn-t cr huaikangpla haeko lohyo adaptplanusaid format-press.pdf. . 2014e. Thuan Hoa Commune Adaptation Plan: An Minh district, Kien Giang Province, Vietnam. Available from: http://mekongarcc.net/sites/default/files/15-05-07 amdi thuan hoa livelihoods adaptation plan-usaid format final.pdf. . 2015a. Village Adaptation Plan (1): Khouam Ban Xong, Incorporating Sub-Villages Ban Yang and Ban Donekeo, Nakai District, Khammouan Province, Lao PDR. Available from: http://mekongarcc.net/sites/default/files/marcc khammouan villages adaptation plan I.pdf. . 2015b. Village Adaptation Plan (2): Ban Khounsam, Ban Vanghin and Ban Khuan, Nakai District, Khammouan Province, Lao PDR. Available from:

Wilcox, B. 2016. Some Elements of Transdisciplinary Framing: WHO TDR – ASEAN NDI Collaboration for Environment and Public Health [not publicly available]

http://mekongarcc.net/sites/default/files/marcc khammouan villages adaptation plan 2.pdf.

ANNEX I: RESOURCES LIST

This list contains general resources that may be useful for policymakers and practitioners in creating gender-responsive adaptation policies and programs.

Resource	Developer(s)	Link
UNFCCC Gender and Climate Change Resources	UNFCCC	http://unfccc.int/gender_and_climate_change/items/9437.php
Making It Count: Integrating Gender into Climate Change and Disaster Risk Reduction: A Practical How-to Guide	CARE; GIZ; UN Women Vietnam	http://careclimatechange.o rg/tool-kits/making-it- count-integrating-gender/
CARE Gender Toolkit	CARE	http://gendertoolkit.care.o rg/default.aspx
An Online Sourcebook: Integrating Gender in Climate Change Adaptation Proposals	USAID Climate Change Adaptation Project Preparation Facility for Asia and the Pacific (USAID ADAPT Asia-Pacific)	http://www.apan- gan.net/gender- sourcebook/
Practice Brief: A Gender-responsive approach to Climate-Smart Agriculture	Global Alliance for Climate- Smart Agriculture	https://cgspace.cgiar.org/bi tstream/handle/10568/730 49/CSA%20Practice%20Bri ef%20Gender.pdf?sequenc e=1&isAllowed=y
Training Manual on Gender and Climate Change	IUCN; UNDP; Global Gender and Climate Alliance	https://cmsdata.iucn.org/do wnloads/eng_version_web _final_l.pdf