

Platform
for Agricultural
Risk Management

Managing risks
to improve farmers'
livelihoods

Knowledge management



Gender in agricultural risk management

Analytical framework
and operational guidelines

Publication
May 2019





PARM
PLATFORM FOR
AGRICULTURAL RISK
MANAGEMENT

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Study on gender in Agricultural Risk Management

Analytical framework and operational guidelines

May 2019

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About the Platform for Agricultural Risk Management (PARM)

The Platform for Agricultural Risk Management is an outcome initiative of the G8 and G20 discussions on food security and agricultural growth. PARM is a four-year multi-donor partnership between the European Commission (EC), the French Development Agency (AFD), the Directorate General for Development Cooperation of the Italian Ministry of Foreign Affairs (DGCS), the German Federal Ministry for Economic Cooperation and Development (BMZ/KfW) and IFAD, in strategic partnership with NEPAD and other development partners, to make risk management an integral part of policy planning and implementation in the agricultural sector.

PARM has as its overall mandate to contribute to sustainable agricultural growth, boost rural investment, reduce food insecurity, and improve resilience to climate and market shocks on the part of rural households, through improved management of risks. PARM plays the role of knowledge broker and facilitator, aimed at: enabling the integration of agricultural risk management (ARM) into policy planning and investment in the agricultural sector; enhancing national stakeholders' awareness and capacities for management of agricultural risks; improving generation, access and sharing of knowledge; strengthening synergies with partners on ARM-related issues; developing methodologies for risk analysis; and adoption of holistic risk management strategies.



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List of acronyms

AFD	French Development Agency
ARA	Agricultural Risk Assessment
ARM	Agricultural Risk Management
ARC	African Risk Capacity
ASP	Adaptive Social Protection
ASRA	Agricultural Sector Risk Assessment
CAADP	Comprehensive Africa Agriculture Development Programme
CD	Capacity Development
CEDEAO	Communauté Economique des Etats de l'Afrique de l'Ouest
CEO	Chief Executive Officer
CIAT	International Center for Tropical Agriculture
CSA	Climate-Smart Agriculture
CVA	Capacity and Vulnerability Analysis
DFID	Department for International Development (of the United Kingdom)
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ENVAC	Enhanced Nutrition and Value Chains
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
IFAD	International Fund for Agricultural Development
KII	Key Informant Interview
M&E	Monitoring and Evaluation
OECD	Organisation for Economic Co-operation and Development
PARM	Platform for Agricultural Risk Management
RAS	Risk Assessment Study
SADD	Sex and age disaggregated data
SDG	Sustainable Development Goal
TOR	Terms of Reference
UN	United Nations
WEAI	Women's Empowerment in Markets Index
WFP	World Food Programme



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Executive summary

Objective and scope of study

Effective agricultural risk management (ARM) involves mitigating risk through actions at the individual and farm level, as well as at the level of supply chains, institutions and a broader enabling environment. The Platform for Agricultural Risk Management (PARM) seeks, from its second Phase (Horizon 2) onwards, to improve the efficiency, effectiveness and quality of ARM by bringing the gender dimension into focus. To date, the importance of gender for ARM has not been sufficiently recognized and there is very limited information available on how gender can be mainstreamed into ARM processes.

This study aims to make a contribution to filling this gap by examining how gender can be integrated into PARM's holistic process. The methodological guidance is complementary to PARM current agriculture risk assessment methodology and processes, not a substitute. Its intention is therefore to advance an approach on how to assess agriculture risk and design agricultural risk management tools with a gender lens. Interventions need to take gender issues into account, as gender based constraints impact and restrict smallholder farmers' ability to manage risk, participate in decision-making processes and access services.

From methodological foundations to practical application, the study identifies, establishes and deepens links between gender analysis and ARM. The in-depth discussion of a possible unit of analysis has shown the need to develop context-specific, tailored solutions that look at where gender-based constraints originate and at which levels they operate and/or have the most impact. Rather than encouraging actors to set up gender-responsive programs that are focused on women producers, the emphasis is on ensuring that men and women can benefit equally from opportunities for effective ARM and for building their resilience. Such an approach has the potential to deliver significant benefits for women without requiring major investments in new women-specific projects or programs. Successful integration of gender into ARM requires a change in the way the process is carried out, as practitioners need to shift their thinking to not only be context-specific, but also, people-specific, questioning their own assumptions and embarking on the uncomfortable process of in-depth analysis of the social element in agriculture.

How to use this study

This study can be used by all practitioners who seek to:

1. understand the relation between ARM and gender: by reading the background information in chapter 1, studying the analytical framework in chapter 3 (plus the matrix in Annex A.1.) as well as the literature list in Bibliography;
2. get a quick overview of basic concepts and minimum good practices to apply (by consulting the basic steps in chapter 4 (guidelines) and the checklist (tool A) in Annex A.3.;
3. obtain in depth guidance for every stage of the ARM cycle (by consulting the whole of chapter 4 and the checklist (tool A) in Annex A.3.
4. use a toolkit - both the tools in Annex A.3. and the tools recommended in chapter 4 can be explored and used. The tools mentioned in this report are illustrative and need to be *chosen by the risk assessment team in a practical way depending on the specific context in which they are applied to, and adapted to the circumstances and scope of the tasks under consideration.*

Analytical framework

The analytical framework builds on documented research and experiences by IFAD, FAO, the World Bank and other organizations on how to integrate gender into agricultural development, and applies this to ARM. This includes a discussion of which unit of analysis would be most appropriate for integrating gender into ARM, with the conclusion that a flexible, multi-level approach that focuses on the gender-based constraints that ARM can tackle, is most appropriate.

The study understands gender as a cross cutting theme: examining gender in isolation ignores the ways in which men and women interact, and it overlooks the reality of gender norms and expectations that exist and persist regardless of the topic under scrutiny.

Despite the diversity of contexts and approaches to managing risks, four key pillars emerge in the analysis of the PARM process. They are: (i) risk assessment and prioritization (ii); tools identification and prioritization; (iii) trainings, knowledge management, partnerships and policy integration; (iv) monitoring and evaluation. The study points to the need to integrate gender at every stage of the cycle, taking into account gender-based constraints.

Operational guidelines and recommendations

The guidelines section provides brief definitions for each gender-responsive element of the PARM process as well as the rationale for integrating gender. It outlines practical, operational and actionable steps for gender integration into each stage of the process, split up into basic steps (what is the minimum “standard” at this stage) and in-depth integration of gender (what would be needed for a fully gender-responsive process). It maps out good practices and tools for each stage:

i. Risk Assessment Stage

- **Agricultural risk assessment:** Take into account the social, gendered realities, and especially gender-based constraints of men and women smallholder farmers.
- **National stakeholder workshop:** Use assessment results to encourage gender-informed prioritization of agricultural risks.

ii. Tool Identification Stage

- **Tool identification and prioritization:** Explore gender-based constraints to risk mitigation; risk transfer; and risk coping. Examine which tools can be made more gender informed and/or which tools need to be specifically tailored to the most vulnerable groups.
- **High-level ARM policy dissemination workshop:** Seek to influence policy design and public investment towards an integration of explicit gender equality goals.

iii. Trainings, Knowledge Management, Partnerships and Policy Integration

- **Knowledge Management:** Combine systematic approaches to timely help gender-relevant information and knowledge flow to and between the right people so they can act more efficiently and effectively on integrating gender into ARM.
- **Capacity Development, Gender-responsive Dialogue and Advocacy:** Actively engage with stakeholders and use capacity development activities as a cross-cutting tool in planning for and implementing gender-responsive and gender-transformative ARM agenda/strategy.
- **Partnerships and Synergies:** Leverage the partnerships and synergies that are facilitated by PARM's holistic approach to share knowledge and resources and achieve effective gender mainstreaming in ARM. Identify countries that prioritize gender in their development priorities and champion “win-win” synergies between gender and ARM (synchronize ARM proposals with government budgeting and planning).



iv. Monitoring and Evaluation

- Routinely survey tools for gender results and impacts, looking at immediate and longer-term impacts, to determine whether the intervention has succeeded in strengthening the ARM capacities of farmers in a strategic and inclusionary manner.

PARM can take action immediately on the following points:

- *ENSURE* dissemination of the study results among stakeholders and practitioners.
- *USE* the tools highlighted and proposed in this study to pilot gender mainstreaming at selected stages of the PARM cycle.
- *DEVELOP* additional tools.
- *TRAIN* partners on how to apply the tools.
- *INTEGRATE* key learnings to *CREATE* a unified gender mainstreaming approach.

Conclusions

Rather than prescribing a blue print on how to integrate gender in ARM this document advances an approach that can be applied in specific contexts. This is because both gender analysis and ARM are highly complex and context-specific, therefore requiring tailored made solutions that identify and incorporate gender differences into all the risk management cycle and strategic initiatives of risk management. Rather than encouraging actors to set up women-focused programs, it needs to be ensured that men and women smallholder farmers can equally benefit from opportunities for effective ARM and for building their resilience. To ensure this, practical, concrete steps are needed to mainstream gender at every stage of the ARM cycle. Therefore, the study maps out best practices and tools for each stage. The last chapter of the paper provides tables containing a set of practical guidelines that can be transformed into cards, with the guidelines on one page and the basic tools, such as checklists, on the other side, to facilitate dissemination and use.





Publication

Study on gender in Agricultural Risk Management

1. Introduction

1.1. Gender and Agricultural Risk Management

ARM is the process of identifying and mitigating risk associated with uncertain events, which cause losses and other damaging impacts in the agricultural sector. Such risks can be related to production (climate, pests and diseases etc.), markets (price and exchange rate volatility) and the enabling environment (political instability or insecurity, global economic shocks, logistics failure, etc.). Managing risks in agriculture is particularly challenging, as many risks are highly correlated, resulting in whole communities being affected. Effective agricultural risk management involves mitigating, transferring, and coping with risk through actions at the individual and farm level, as well as at the level of institutions, supply chains, and the broader enabling environment.

There is as of yet no consolidated understanding of the links between ARM and gender differences, or how to introduce gender into the operational ARM cycle (from risk assessment to monitoring and evaluation). This study aims to make a contribution to filling this gap by examining how gender can be integrated into the Platform for Agricultural Risk Management's (PARM) process.

The study takes a cross-cutting perspective of gender. This means that the specific roles, responsibilities, needs and constraints of smallholder men and women are taken into account at every stage of the process to adequately reflect the distinct needs and roles of men, women, boys and girls. Men and women farmers are the primary categories of analysis, and, considering the important, yet often under-recognized role women play in agriculture worldwide, the study frequently highlights women-specific differentials. At the same time, the study takes an intersectional approach that also considers other social categorizations such as age, handicap or minority status. Social exclusion limits the range of perspectives and experiences that contribute to addressing shocks and building resilience (KII with FAO Gender Focal Point). This study looks at how social inclusion and participation can be guiding principles of all stages of the ARM cycle in order to adequately reflect the distinct needs and roles of men, women, boys and girls.

In many developing countries, women make important contributions to agricultural production (FAO, 2015). Women's distinct contributions to producing, processing, distributing and marketing food products receive increasing recognition, as well as their input into food-related policies and legislative processes; their capacity to innovate in food supply chains; and their role in protecting ecosystems (World Bank et al., 2009; Gnisci, 2015).

1.1.1. Why do we need to integrate gender into ARM?

As women are more likely than men to invest in the wellbeing of their families, including more nutritious foods, school fees for children and health care (FAO, 2013), they play a key role in strengthening the resilience of rural livelihoods. However, they are often marginalized and socially excluded, and therefore, face distinct vulnerabilities to shocks. Gender-based discrimination negatively influence the capabilities of women, girls and vulnerable groups to prepare for, cope with, and recover from, shocks. Essentially, gender-differentiated vulnerability to risks stems from the following key constraints:

- Inequality between men and women in the asset base, including land ownership, and especially access to fertile and arable land, also according to land tenure systems, as well as issues with collateral registries and identification documents. Rural women in many low-income countries are less likely than men to own land or livestock (CIMMYT, 2017) – which can determine their ability to adopt new technologies, to get access to credit or other financial services, to be proactive, innovative and take risks.
- Access to credit and financial services (in part due to limited or lack of capital but also to financial institutions limited knowledge on adequate services in rural areas) – this in turns creates inequality in access to agricultural inputs (protection against pests for example) – yields for women farmers are 20-30 percent lower than for men. This is because women have less access to improved seeds, fertilisers and equipment.



- Access to labour, storage facilities and marketing as well as transportation infrastructure, which tends to be more limited with less mobility for women farmers.
- Inequalities in skills and knowledge in agro-technology and access to extension services, general lack or limited access to crucial information (weather, early warning, markets, climate), education and training often due to language and cultural issues. As stated by Brock et al. (1997), there are nine groups of factors potentially affecting female participation in education: geographical, sociocultural, health, economic, religious, legal, political/administrative, educational and initiatives. Several factors, including health effects of poverty and malnutrition, proved to affect female participation in education and trainings much more than male participation. The near-universal cultural bias in favour of males and economic factors proved to be the biggest obstacles to female participation in education in developing countries. Religious and legal factors had only indirect effects.
- Exclusion and lack of participation particularly for ethnic minorities, younger generations, or poor, uneducated women lacking voice, or influence, in decision-making e.g. around the use of resources (KIT et al., 2014).
- Differentiated exposure and sensitivity to hazards depending on the types of crops farmed, livelihoods activities and how gendered such activities are.
- Social change including transitions in and out of livelihoods, changes in labour division, and erosion of community safety nets - traditional social safety nets in rural areas of developing countries tend to disintegrate during the process of integrating into the global economy (Garcia, 2006).
- Women farmers might face additional gender-specific barriers, mostly linked to women's disproportionate responsibility for unpaid domestic and care work. In the absence of day-care centres for the elderly and universal access to health services, the burden of care work rests on women. This increases pressure on women to balance care work with productive activities. For a rural woman, this can mean that she is at risk of being overburdened by trying to balance agricultural production with household responsibilities, jeopardizing her capacity to build resilience and effectively manage agricultural risk.
- High risk of domestic and other forms of gender-based violence for women and girls, and generally unequal power relations with men in the farming-household unit and community.

The majority of agriculture-related literature consulted for this study stresses the need for sex and age disaggregated data and gender-informed research and analysis (e.g. Larson, 2016). While the body of research and literature linking gender, agriculture, resilience and risk-related issues is growing, there is still very limited information available on how gender can be mainstreamed into ARM processes. This omission persists despite the fact that gender differences in the impacts of climate change have highlighted for well over a decade (e.g. Nelson, 2002; Rubin, 2012; Nyasimi and Huyer, 2017; Pratiwi et al., 2016).

A pioneering study in ARM carried out by the World Bank (2017) has convincingly laid out the argument that all types of agricultural risks have differentiated impacts on women and men, and that gender inequalities also affect the way that individual men and women working in agriculture can manage risk (see also Villamor, 2014). Interestingly, the constraints that limit women's access to productive assets and resources also limit their opportunities for empowerment. Therefore, persistent gender inequalities can jeopardize the sustainability and effectiveness of agricultural risk management strategies. Ignoring the impact of gender inequality and social exclusion on resilience would make any program or policy less effective in the community regardless of the shocks or events faced (as shown by Chanamoto and Hall, 2015; Nijbroek et al., 2008; Peterman et al., 2011), but this is even more apparent when seeking to manage agricultural risk.

For example, access to long-term affordable financing is a key barrier for resilience for women farmers, both in terms of their ability to invest in agricultural inputs and technologies to increase productivity and to participate in higher added- supply chains and markets. Women farmers' access to financial services is constrained by a number of factors, including lack of land tenure security and lower financial literacy. Even when their land rights are secured and they have the financial literacy and agricultural information to develop a bankable project, women's plots tend to be insufficient in size and quality to qualify as collateral for a loan or credit. In addition, discriminatory legislation, social norms and lack of appropriate financial products might constrain their ability to access financing. Few women in low-income countries hold bank accounts in rural areas and commercial banks tend to work only with large farmers who are already well positioned in global supply chains (FAO 2013; 2016a).

As stated by the OECD, interventions need to take gender issues into account, as greater equality in land and asset ownership and financial access has positive impacts on family nutrition, education, food security, agricultural productivity and risk management, as well as women's wellbeing. Conversely, low rates of female ownership and decision-making power over land and assets have been correlated with an increased vulnerability to shocks (Bouchama et al., 2018). When women farmers are given security of tenure this has been shown to correlate with increased sustainable land management. Where women have confidence that the land they till 'belongs' to them, they will invest the time, energy and knowledge needed to keep that land sustainably productive throughout their lifetimes (Samandari, 2017).

1.1.2. Gender in supply chain management

By managing risk on the level of the supply chain we gain insight of the potential threats to all actors involved in the chain as well as to the interruptions of the supply chain itself. Therefore, a focus on agricultural supply chains also offers a useful conceptual outlook for integrating gender into ARM. An understanding of the participation of men, women, boys and girls in supply chains is essential for analysing and predicting the impact of any significant change and their resilience therein, including positive change such as programme interventions or policy changes, as well as weather, market or political shocks – on household-farming systems.

In Ghana, women traditionally produce and trade agricultural commodities while men participate in supply chains which require more capital and resources, and where profit margins are higher (Pepper, 2016). When it comes to small-scale production, transformation and trade. The informal food markets in legumes (soybean, cowpea) and cereals (millet) are dominated by women while men dominate the wholesale trade.¹ Even for the commodities traded mostly by women, male supply chain actors tend to enjoy greater profits than their female counterparts. Women can often only play a greater role in formal markets and supply chains through participation in farm-based organizations (such as rotating savings and credit associations). This allows them to pool investments, secure more favourable marketing conditions, reduce risks, increase agency and social capital, strengthen participation in decision-making processes and heighten acceptance for advocacy and social organizing (Zwanck and Renk, 2018).

Women and men smallholder farmers generally face similar challenges and constraints in the agricultural supply chains, though constraints tend to be more exacerbated for women and youth than for adult men, and there are additional constraints that affect women and girls specifically, due to gender inequality.² The research carried out by the World Food Programme's "Gender and Markets Initiative" has highlighted key gender and age differences, showing that these differences are *context specific and demand tailored approaches and solutions*, not a one-size-fits-all approach. Both gender analysis and ARM are highly complex and context-specific, therefore requiring tailored made solutions that identify and incorporate gender differences into the entire risk management cycle and strategic initiatives of risk management.

Making agricultural supply chains more resilient represents a crucial aspect of applying a gender lens to ARM, considering the ultimate aim of food security in a systemic, coherent and inclusive manner. By reducing volatility of agricultural outputs, prices and income, PARM also directly contributes to resilience, poverty reduction and equality. As a consequence, it is useful to consider how to make agricultural supply chains more resilient. This requires explicitly examining gender issues and proactively integrating differentiated gender-based solutions into supply chain risk analysis, management and development strategies (USAID, 2010). Supply chain-focused interventions, when designed with gender equitable principles, can foster both competitiveness and gender equity goals to enhance ARM impacts (Chan, 2010)³. Strategies that support women's involvement in the full agricultural supply chain from production to processing to marketing are gaining ground (e.g. Mehra et al., 2008 and the "The Chain Empowerment" approach proposed in KIT et al., 2014, p. 28-34). The ARM processes at country, regional, and/or supply chain levels offer a useful framework for incorporating capacity and ownership of gender issues.

1 This does not signify that these are "male" or "female" crops, as few crops can be defined as men's crops and none are clearly women's crops (Doss, 2002).

2 <https://resources.vam.wfp.org/node/103>

3 The study found that women smallholders often deliver better-quality product than their male counterparts, which indicates that increasing the number of women smallholders in a supply chain can help improve or at least maintain product quality. Reasons given by company representatives and other respondents for the superior quality of women's crops included women's greater diligence and attention to quality control, and their greater willingness to invest in the longer-term interests of their families and communities.



1.1.3. Gender-smart tools in the agricultural sector

Climate-smart agriculture (CSA) offers concrete ideas for gender-responsive risk management. FAO promotes CSA as a risk-mitigation strategy to support countries in securing the necessary policies, as well as the technical and financial conditions to sustainably increase agricultural productivity and incomes; build both the resilience and the capacity of agricultural and food systems to adapt to climate change, and seek opportunities to reduce and remove greenhouse gases.

Existing structural barriers affect women farmers' investment incentives, posing gender-differentiated constraints in climate-smart agriculture.⁴ Gender-informed analysis of constraints and risks can inform initiatives to create a policy environment that reduces weather-related investment risks. In a study from Uganda, Ghana and Bangladesh, participatory tools were used for a socio-economic and gender analysis of three topics: climate-smart agriculture (CSA), climate analogue approaches, and access to information about climate and weather forecasting. Policy and programme relevant results were obtained, showing that smallholders are changing agricultural practices due to observations of climatic and environmental change and that women appear to be less adaptive because of financial or resource constraints, because of male domination in receiving information and extension services and because available adaptation strategies tend to create higher labour loads for women (Jost et al., 2017).

It is expected that increases in complex and covariate shocks resulting from climate change will increasingly necessitate hybrid models and innovative institutional arrangements to provide financing and insurance. As formalized insurance systems are non-existent or inaccessible to smallholder farmers, several innovative models for managing risk, including weather and disaster index-based insurance, have been developed, piloted and put to scale (Greatrex et al., 2015). These indexed insurance schemes compensate farmers on the basis of pre-determined indicators (e.g. rainfall level) for loss of assets and investments resulting from extreme weather events and disasters (KII with FAO gender Focal Point). Experimental models are attempting to link the provision of insurance with the provision of credit. In the future, it seems likely that such hybrid models can be adapted to deliver the necessary financing and insurance products that can cater to the specific needs of women smallholder farmers (IFAD, 2009).

Another central area of convergence between gender and ARM are social protection mechanisms and service provision. There is evidence that social protection interventions can contribute to a decline in the incidence of chronic poverty, reduce inequality, assist in the accumulation of assets, increase productivity and enhance resilience (Nelson, 2015). Social protection is an important solution for a more inclusive approach towards ARM. Social protection measures are important means of moving beyond short-term disaster relief. In this context, it is particularly necessary to focus on social protection against sudden shock rather than social protection for chronic poverty. Adaptive Social Protection (ASP) proves indeed to be a crucial tool to assist vulnerable households to cope with shocks (Béné, 2016). Since the early 2000s, under the impetus of a number of African-wide declarations, action plans, and the African Union's policy framework, concerted national efforts have been made to improve ASP. These generally i) place social protection within a risk management framework for both idiosyncratic and covariate shocks; ii) identify the need to strengthen the collection and analysis of data on poverty and vulnerability, including through early warning and targeting systems; iii) highlight food and nutrition security as a focus; iv) identify social transfers as an instrument of choice to reach the poorest and most vulnerable; and v) underscore the importance of multisectoral action and a move towards integrated and coherent social protection systems. These frameworks thus appear conducive to the development of shock-responsive social protection (Colin et al., 2017). Evidence increasingly shows that social protection systems and programs are effective tools to protect individuals and communities from shocks and equip them to improve their livelihoods (World Bank, 2017). However, many rural and agriculture-dependent communities lack access to ASP, particularly women (Doss et al., 2015).

4 For a detailed discussion on gender differentiated risk in CSA <https://www.researchgate.net/publication/312923234/download>

In most developing countries, support systems are informal and ASP is provided by family members, social groups and the community as a whole. Social assistance to the ones most in need in the wake of shocks, thereby serves as a form of social insurance. One of the most common informal social arrangements is the pooling of resources through associations and other community-based associations. While these can have a potential to improve social protection, they are also affected by gender differentials, with women's networks generally having less capital to pool.

Countries are increasingly investing in efforts to adjust and scale-up their national social protection systems as part of their strategies to respond to shocks and minimize their negative impacts (KII, FAO Gender Focal Point). Many of these programs take a women-centred approach to respond to women's unique responsibilities and vulnerabilities at household-farming system level.

From the initial discussion, it becomes clear that both gender analysis and agricultural risks are highly complex and context-specific, necessitating the guided approach on how to incorporate the gender lens into the ARM processes that are defined by diverse social, economic, and environmental settings. Gender differences can serve as a barrier, but also as a prioritization driver, to the understanding and adoption of ARM practices aiming at strengthening resilience of farming systems.

1.2 Objective and scope of the study

There is no practical framework and guidelines on how to assess agricultural risk with a gender lens. Therefore, this study aims to offer an approach towards gender smart risk management with practical and operational strategies and tools.

While the previous section has outlined the thematic focus of this study, the main question is not why, but how we can analyse gender in ARM in the most practical way. The objective of this paper is to advance an analytical framework and devise practical guidelines for integrating the gender dimension into agricultural risk management (ARM). It does not seek to examine the gender dimension for specific contexts or types of risk. Rather, it focuses on identifying approaches that can be applied to the great variety and complexity of ARM processes, increase overall resilience and improve the efficacy of its practices, as well as delivering actionable recommendations for strengthening gender-informed policy approaches and interventions.

The overall objective is therefore to identify the conceptual and operational links to integrate gender differences into existing ARM processes that can serve as the methodological foundation for mainstreaming a gender lens into PARM activities, with concrete and practical guidelines to ensure such integration.

There is further need to address the conceptual and operational gap that currently exists between ARM methodologies and programmes and the consideration of gender differences in the agricultural sector. This study will therefore develop a framework of reference to develop a roadmap on the topic.

Acknowledging that there is no accepted definition or comprehensive guidelines for integrating gender into ARM country processes, this study therefore seeks to, at least in part, fill the gap.

Key areas of enquiry are:

- How to identify the best and most transformative, and feasible way, to make farming systems under study more resilient vis à vis an unforeseen negative event through ARM by introducing a gender-based approach?
- Is looking at gender differences & ARM across the ARM Cycle the most appropriate way to better understand those impacts? If not, what is the alternative?
- Looking at long-term goals of resilience and food security and poverty reduction, what is the conceptual framework and operational approach that PARM should be taking to address agricultural risk through a gender lens? (In terms of advocacy, methodology, results etc.)?



The key assumptions underlying the study are that ARM processes that disregard the gendered dimension lean on incomplete or even misleading background information. This can in turn diminish the desired results of strengthening the resilience of smallholder farming systems and consequently rural livelihoods.

The study will be global in scope, although by necessity it will look at a limited set of experiences at country level, as a means to draw out common lessons. The present report is intended for practitioners and stakeholders in agricultural risk management and related areas.

Noted in the TOR and frequently in inception discussions, this study has a 'formative' nature. As there is not a consolidated understanding of the links between ARM and gender differences, this is the chance to advance one, for PARM, and for the global community of practice, and for partners that PARM works with at different levels.

1.3 Methodological approach

A review of existing literature (reports, articles, guidelines, policies, strategies, etc.) has served as a stocktaking exercise to explore the gender issues in ARM, but more importantly, for creating a framework and practical guidelines for how to approach gender differentiations in ARM good practices. The relevant literature reviewed can be found in the Bibliography to this study.

An analysis matrix was used to guide the review process according to different stages of the PARM process (see annex A.1.). Country case studies and good practice examples with a gender or agricultural focus were closely examined to evaluate their transferability into ARM. PARM materials were reviewed to determine their level of gender integration and gender responsiveness.

A semi-structured questionnaire for key informant interviews has been developed for the study (see annex A.2.). Twenty key informants included PARM country focal points, PARM team members and consultants, governmental, academic, UN and NGO actors. The results of the interviews were analysed and central ideas were integrated with the overall argument.

2. The Platform for Agricultural Risk Management

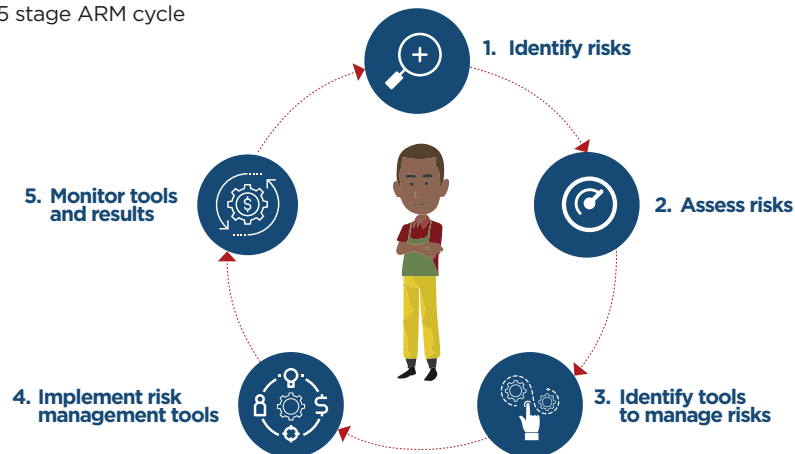
2.1 Mandate and vision

PARM has the global mandate to contribute to sustainable agricultural growth through a better management of risks that will boost rural investment, reduce food insecurity, and improve resilience to climate and market shocks of smallholder farming systems. PARM plays the key role as global knowledge broker and country policy engagement facilitator on ARM through global, regional and local partnerships and processes that involve decision makers and multi-layer stakeholders, including governments, donors, technical organizations, private companies and farmer organizations.

PARM's vision on ARM integration in developing countries relies on (i) providing technical assistance in understanding/implementing a holistic approach to ARM, (ii) supporting the design and implementation of demonstrative ARM projects, and (iii) transferring capacity. These combined actions will eventually allow policy makers and agricultural stakeholders to institutionalize ARM practices, therefore owning the process and affecting change. A holistic approach to agricultural risks means to consider a broad range of risk and a broad range of solutions, and that no risk is considered in isolation. PARM has identified elements/pillars of an ARM projects that will be examined from a gender lens later on in the paper.

The PARM process essentially consists of conducting an agricultural risk assessment study (a country risk profile) and validating the findings through a workshop that reunites the key stakeholders, followed by a feasibility study on proposed tools to manage the previously identified priority risks. Results are then validated and disseminated through a high-level workshop that ensures the integration of ARM into the national policies and budget. In addition, learning, knowledge management and capacity building as well as continuous monitoring and evaluation are ensured. This study examines the appropriate entry points along this cycle for integrating gender into the process (box 1).

Figure 1: The 5 stage ARM cycle



Since 2013, PARM and its partners have worked to kick start the process to assess agricultural risk and the management capacities of eight sub-Saharan Africa countries: Cameroon, Cabo Verde, Ethiopia, Liberia, Senegal, Niger, Uganda and Zambia. The projected future operational vision of PARM (PARM Horizon 2 – 2019-2024) is based on the experience and lessons learned from Horizon 1 (2014-2019), and focused on consolidating the lead in the regional/global agenda related to ARM reinforcing the multiplier effect to stimulate investments in ARM through capacity development, demonstrative activities, and shared experiences. The introduction of the gender dimension in various facets (analytical, operational, project/programmes design, capacity transfer, etc.) is one of the main additions to Horizon 2 and the justification for this research.



PARM is aligned with the global agenda embedded in the Sustainable Development Goals (SDGs) as pursued by government policies in development economies, and supported by the United Nations. In the longer term, PARM aims to contribute to the overall SDGs 1, 2, 5, and 13, particularly by contributing to sustainable food production systems, boosting rural investment, achieving gender equality, and implementing resilient agricultural practices and whole systems resilience strategies.

2.2 Gender-informed work within PARM

As hinted in Chapter 1, gender is not yet integrated into ARM research and practice. For example, the totality of presentations and discussion papers from an OECD workshop⁵ on ARM carried out in 2010 did not reflect any sex disaggregated data and lacked any reference to gender issues. A publication entitled “Producer Incentives in Livestock Disease Management”⁶ from 2017 contained a chapter that used insights from behavioural economics to understand farmer livestock disease management while taking a deeply sociological approach, which would be a direct entry point for gender analysis. Nonetheless, the publication made no mention of possible gender differentials in the values and norms driving farmers' behaviour.

The below set of criteria was used to examine whether PARM materials and outputs take gender into account, and to what degree. The examined resources were: country-level risk assessments, risk assessment reports, strategy papers, guidance on tools and capacity development materials. The criteria included whether:

1. The authoring team of the resource (study, report etc.) is geographically and gender balanced;
2. The resource uses gender-informed language throughout, including male and female forms for terms describing key actors, avoidance of gender-blind terminology (e.g. “farmers”);
3. The authoring team's expertise on gender issues can be confirmed;
4. Data collection tools are gender-informed and the resource points out gaps in gender disaggregated data and gender-informed data (gender-specific indicators and gender statistics);
5. The resource takes into account information and literature on gender issues, as well as relevant instruments or policies, listing them in the resources section;
6. Expectations on gender integration in the design and implementation are stated explicitly;
7. There is a specific section on gender differences that summarizes or highlights the gender-informed analysis, findings, results, factors, conclusions and recommendations;
8. Gender differences are reflected in every section (context analysis, design, operational plan, recommendations, etc.);
9. The stakeholder analysis takes into account gender-specific vulnerabilities;
10. The data collection and fact-finding process has been carried out in an inclusive, balanced and participatory manner;
11. The resource reflects on how the findings contained therein can be shared with men and women;
12. The resource does not reinforce or reproduce gender stereotypes, for example by depicting men or women in gender normative roles or stating - and failing to reflect on - gender-biased assumptions;
13. The reports concerning programmes and training activities prove to be gender balanced, applying a gender lens on the activities' outcomes and achievements.

The resources examined against these criteria show that the PARM process has not yet integrated gender in a coherent manner. For many criteria, it is difficult to determine whether they actually apply, as it is not explicitly stated whether stakeholder analyses carried out at the onset of assessments sought a gender balance. Literature on gender appears in the sources section, but is not discussed within the text. Sex and age disaggregated data (SADD) is virtually absent from the resources, and there are no explicit sections on gender, nor efforts towards transversal integration.

5 <http://www.oecd.org/tad/agricultural-policies/workshoponriskmanagementinagriculture22-23november2010.htm>
6 <http://www.oecd.org/tad/producer-incentives-in-livestock-disease-management-9789264279483-en.htm>

The most comprehensive gender-informed PARM product so far is a Presentation on Gender and Agricultural Risk Management (PARM, 2018). It states why and how to integrate gender in the Platform for Agriculture risk management. It highlights that ARM is not gender neutral, as farmers are not a homogenous group. Women are faced with more constraints, and often more severely, than men. It argues that these genders based constraints impact and restrict women's ability to manage, participate and access services in the same way than men do. The presentation concludes that gender needs to be integrated at each step of the ARM cycle: when identifying risk; assessing risks; identifying tools to manage risks; implementing risk management tools; monitoring tools and results. It can be useful to plan for similar presentations at the onset of every country process to ensure better integration of gender.

The following resources equally have a gender component that can be further developed:

Capacity development (CD)

- Some training material (i.e. Module 1, CD2) includes a section on the unique position of women in ARM, and exposes the specific status or constraints they face, and thus some key considerations to keep in mind.
- The pilot ARM training course (CD2) developed and organized by Makerere University/CAES that was delivered in March 2017 in Kampala, as well as the one held in Hawassa in 2018 included a Gender presentation and tackled gender issues linked to agriculture and agriculture risk management.
- In a CD workshop in Liberia, some participants from women's organizations were included.
- 21% of female attending training (i.e. CD1 Zambia)⁷.

Feasibility studies

- A feasibility study for Senegal that focuses on remittances as an ARM tool contains SADD and references to several gender-specific policies. It further lists women's community-based associations among the partnerships to be developed. It does not contain an analysis or further recommendations of how the tool of remittances can be made more gender-informed, but it constitutes a solid good practice example for initial entry points through which to introduce gender.
- The TOR for the Niger feasibility study on information systems proposes to take gender into account at tool identification level but no further analysis has been proposed.

A PARM (2017) working Paper on PARM's holistic approach⁸ highlights some central good practices with regards to gender.

A central challenge to the integration of gender can be that SADD as well as gender-specific statistics (the differences are explained in the table below) are often not available at country level. A feasibility study from Uganda (PARM, 2015) that examined a broad range of government-provided data related to information systems-related contained no sex and age disaggregated data or gender-specific statistics. The same applies to a working paper that consolidates data on information management systems from different countries (PARM, 2016a). The reason for this is likely an overall lack of SADD at country level. Key informants for the study have pointed towards lack of SADD in governmental assessments, policies and strategies. Studies from Uganda (Acosta et al. 2016) and Brazzaville (Mouandza, 2012) that have examined agricultural sector documentation have found that a very small percentage presents SADD. However, if no SADD can be produced or found in any given context, the risk assessment with a gender lens can still be conducted through qualitative methods (i.e. focal groups discussions, specialists' interviews, etc.) and the resource can still be made more gender-responsive by explicitly highlighting such gaps, and making recommendations accordingly.

⁷ <http://p4arm.org/document/zambia-capacity-development-cd-1-seminar/>

⁸ Proceedings of 2nd International Workshop on Modelling of Physical, Economic and Social Systems for Resilience Assessment" (Volume II), 14-16 December 2017, European Commission (EC) Joint Research Center (JRC), Ispra. <http://p4arm.org/document/the-2nd-international-workshop-on-modelling-of-physical-economic-and-social-systems-for-resilience-assessment/>.

The question then is, how can PARM, while not carrying out surveys, obtain the necessary data to identify gender-based constraints to managing risk, and well-adapted solutions? This paper seeks to provide practical orientation for how to strengthen integration of gender into the PARM process, starting from the data analysis stage. These orientations will be discussed in more detail in sections 3 and 4 of this study.

While these examples show that as of yet, there is no cross-cutting integration or rigorous gender analysis carried out within PARM, they constitute valuable initial experiences that can be further built upon and learned from. It is therefore necessary to point out the differences between SADD, to be considered as a first step toward a gender focused approach, and gender statistics, which effectively allow to apply a gender lens to ARM. The paper argues for a need of gender statistics in addition to SADD, seeking, firstly, to analyse and underline the role of gender bias in ARM, and secondly, to develop a set of practical guidelines to reduce it, ensuring an overall reduction of volatility of agricultural outputs, prices and incomes.

Once the difference between SADD and gender statistics becomes clear, an additional question on “what data” and “what research methods” needs to be respectively collected and applied, to spell out the differences on how risk impact men and women (useful for the risk assessment) and how differently men and women respond to risk (useful for identifying the gender-based constraints to manage risk).

Table 1: Differences between SADD and gender statistics

SADD	Gender Statistics
Uses standard tools to record and tabulate data for both sexes and for different age groups	Uses data collection methods that take into account stereotypes and social and cultural factors that can induce gender biases)
Reflects overall demographic, social or economic characteristics split up by sex and age	Reflects gender issues (concepts and definitions that adequately reflect relevant aspects of women's and men's lives)
Is collected and reflected as a primary classification	Is collected and presented by sex as a primary and overall classification

3. An analytical framework for gender-informed ARM

A gender approach ensures that policies and interventions are based on evidence rather than on gender stereotypes of men and women's roles, or the assumption that men and women's experiences are homogenous across time and space. Better understanding of context-specific gender dynamics and how gender roles enhance or reduce vulnerability to agricultural risk for both men and women requires gender-sensitive risk and vulnerability mapping that takes into account the sources of social and economic variables that drive gender differences (ownership/access to assets, social and family roles and responsibilities, education & information, etc.).

This analytical framework on Gender and ARM maps out the links between gender differences and ARM that can help to have a systematic understanding of the gender dimension in ARM, and that serves to identify the technical basis for operational activities. As the topic is relatively new and not often dealt with directly, it is important to identify how the dynamics of gender relations in farming systems and agricultural supply chains can be analysed and understood, as well as to derive its importance and role as part of the overall ARM framework and how to translate these into guidelines and operational terms.

The framework draws from existing work done by IFAD, FAO, the World Bank and other organizations on how to integrate gender into agricultural development at all stages of ARM's processes.

3.1. Unit of analysis

This section discusses the pitfalls of using the household as a unit of gender analysis before moving on to question which unit of analysis would be most appropriate for integrating gender into ARM.

Most gender-focused literature on rural livelihoods, resilience, shocks etc. uses *the household* as the unit of analysis, whereas agricultural analysis usually uses *farms, farming systems or agricultural supply chains*, which are usually done with limited available research on gender in ARM. Disaggregation of data is usually limited to the sex of the household head (e.g. Holzmann et al., 2008). There are several issues with this approach, as it does not allow for reflection on intra-household dynamics and does not render different levels of vulnerability visible within the household (Le Masson et al., 2015).

Identification of the household head in itself poses a challenge in most contexts, economic criteria defining the household head as the person with the highest income do not always correlate with social and cultural norms that ascribe this position based on sex, age, and/or marital status (Twyman et al., 2015). Very frequently in households where there is a husband and wife, the man is stated as household head and questions regarding household assets, distribution of labour and income, spending patterns, food production, food consumption etc. are typically directed towards him, when in reality, these are areas in which the wife is more active and knowledgeable. This can lead to incorrect, biased data.

Moreover, asset ownership and access to assets cannot be correctly reflected if it is simply disaggregated by the sex of the household, as women's ownership and access can differ greatly from that of men. For example, Kumar and Quisumbing (2012) find that female-headed households in Ethiopia are more vulnerable to food price crises than male-headed households, in part because they are more resource poor. As Cheryl (2002) suggests, it can be more helpful to correlate different variables, such as the gender of the household head, the gender of the plot holder, and the person who keeps the revenue from the plot.

Although some shocks can be experienced by all household members, they can also be experienced differently by each individual (El Rhomri, 2015). Moreover, individuals can have different coping strategies, including different social networks and insurance mechanisms. Considering these only at the household level as reported by a household head can miss crucial individual dimensions (Doss et al., 2015). The assumption that household members pool their risk is equally flawed, as it is difficult to unpack the complexity of intra-household decision-making processes (as discussed in CIAT, 2018a).





These methodological issues with household level analysis are also relevant for the unit of analysis in agricultural research, which is the “farm” or “farming systems” rather than “rural households”, an approach that has its own limitations because smallholder farming systems are mingled with the household. FAO have defined an approach of farming-household systems that seems appropriate for many rural contexts, but it is highly complex, taking into account 10 different defining criteria⁹, that can be useful to understand technical and social interactions, resource allocation etc. between the systems - all of which are gendered.

Any analytical approach that seeks to examine household-farming systems also needs to take a broader view at a scale that connects the farm to the landscape, connecting the farm with the markets, the farmers and other rural stakeholders, livelihoods and territories.

FAO¹⁰ points out that in many contexts, the farming unit can be replaced by village-level farming systems, where the village replaces the farm-household in whole or in part as the focal entity for agricultural production. In addition, a focus on farming units alone doesn't take into account for the fact that many farmers organize, pool resources, and risks in village-level associations. These types of community-based organizations are also frequently involved in ARM processes, targeted to contribute their inputs and expertise in assessment and planning processes (and this framework proposes that this should be more frequently the case) and acting as recipients of training, microcredit programs, insurance etc. In fact, a relational approach such as social network analysis can be more helpful here as it maps the interactions between people and entities and renders the internal dynamics visible (recent innovation in developing this tool is summarized in Walther, 2015 and OECD, 2017).

The picture gets even more complex when taking into account, as Jaffee et al. (2008) show in table 2 that, that risk management behaviour cannot be the same at farm-household level (where risk mitigation and/or transfer as well as coping are a priority) and at community level (where risks are dealt with through sharing practices). In the capacity development material by PARM, ARM tools by phase (ex ante and post) linked to the layers of responsibility are developed in detail.

Table 2: Informal Risk Management Strategies.

	 Farm Household-level (mitigating risk)	 Community level (sharing risk)
Ex-ante	<ul style="list-style-type: none"> - Savings - Buffer Stocks - Enterprise diversification - Low risk, low return cropping patterns - Production techniques 	<ul style="list-style-type: none"> - Food crop sharing - Common property resource management - Social reciprocity - Rotating savings/credit
Ex-post	<ul style="list-style-type: none"> - Sale of assets - Reallocation of labor - Reduced consumption - Borrowing from relatives 	<ul style="list-style-type: none"> - Sale of assets - Transfers from mutual support networks

Source: (Jaffee et al., 2008).

This study cannot sufficiently deconstruct the complexity of different layers of analysis. Its outlook is mainly preoccupied with the practical integration of gender, and providing easy-to-use guidance for practitioners. The question we can ask is, at which level are ARM strategies and tools able to intervene? This is context specific: in some cases, the community smallholder association can be a better unit of analysis than the farming system, and in other contexts, it can be more helpful to look at the individual.

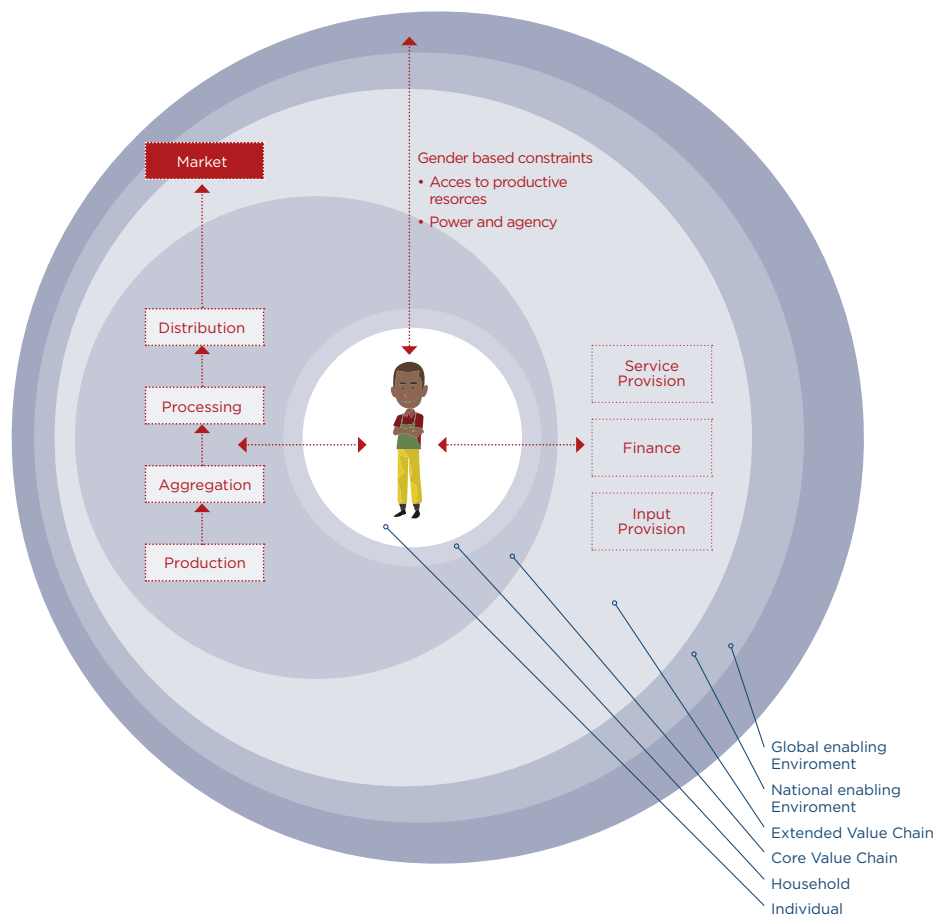
9 <http://www.fao.org/docrep/w7365e/w7365e04.htm#1.4%20structural%20elements%20of%20the%20farm%20household%20system>
 10 <http://www.fao.org/docrep/w7365e/w7365e04.htm#1.3.2%20village%20level%20farming%20systems>

Practitioners can consider stepping away from the unit of analysis and *looking at the unit of action*, instead – where is action directed, how are the actors addressing ARM broken down to village level? The goal, as was stated above, should be to remove gender-based constraints to ARM. These clearly act upon the individual, but they operate at a broad number of levels that go beyond even the village level and also include the structural environment (national and global). For example, if the reason for choosing the farming system as a unit is that at this level, capacities and knowledge are transmitted, then we need to look at gender-based constraints to absorbing the services provided especially at this level – while keeping in mind that constraints at other levels, such as laws and regulations, can equally have an impact.

Against this background, FAO's gender-sensitive value chain framework (2016a) in the figure 2 below offers a helpful conceptualization of levels for gender analysis that can be adapted for ARM. The framework as shown in figure 2 indicates a multi-level approach that identifies gender-based constraints at several relevant levels in ARM. These levels are individual, house-hold-farming system, community - and possibly, supply chain - taking into account also the enabling environment at national and global levels. In the case of PARM, data could be drawn from existing analysis, assessment and research reports, indexes, country strategy, policy documents etc.

Once this mapping of gender-based constraints is finalized, their relevance for ARM needs to be examined, followed by an analysis of which ARM measures such as access to assets, access to information and technology, multi-index insurance or integration into supply chains can impact these to affect different areas of agricultural risk mitigation and/or transfer as well as coping measures. Priority areas can be defined as those that have a clear overlap of key gender-based constraints, high-impact agricultural risks and highest likely impact of ARM measures. This would mean that no prefabricated blueprint can be made available to define a unit of analysis, demanding multilevel and action-oriented thinking.

Figure 2: Gender-sensitive value chain framework.



Source: FAO, 2016



3.2 Guiding principles

ARM is primarily concerned with risk defined by incidents and uncertain developments that are temporary in nature. Their occurrence cannot be predicted with certainty. ARM does not address constraints or trends that can also have a negative impact on agricultural production but that are known to be part of the context, continuous or predictably recurring, such as trends.

The 2018 FAO guidance note on **gender-sensitive vulnerability assessments in agriculture**¹¹ seeks to support development and humanitarian practitioners in exploring the main constraints that male and female farmers face in the agriculture sector (with a focus on climate change). It also provides an overview of available sources, quantitative and qualitative methodologies to collect and analyse sex-disaggregated data. This kind of guidance is helpful in orienting practitioners towards an understanding of *how to best reduce gender-based constraints and thereby, remove barriers and bottlenecks to effective ARM*.

For example, as IFPRI and ILR (2013) point out, increasing women's access to assets does not automatically strengthen or increase their control or ownership over those assets; transferring assets to the household does not automatically confer ownership rights equally to men and women; just as increasing women's income does not automatically strengthen or increase their ability to accumulate assets. This means that ARM strategies need to not just protect against risks but also protect assets and asset gains, and in addition, take into account the gender based constraints to these gains. There is a wealth of guidance on gender already available in the field of Disaster Risk Reduction (DRR) and Disaster Risk Management (UNEP, 2005; UNISDR et al., 2009; UN Women, 2012; UNISDR, 2015; FAO, 2016b) that helps focus attention on the distinct gender-specific capacities and vulnerabilities to prepare, confront, and recover from disasters. However, **this study has found that while there are some commonalities between DRR and ARM**, such as the need for multi-stakeholder coordination, intensive research and design of risk mitigation and transfer tools (as well as coping mechanisms), there are also important differences. DRR has a focus far beyond the agricultural sector but focuses mainly on catastrophic events while ARM has a narrower sectoral focus but takes a holistic, systemic approach that covers all types of risks.

It seems therefore more appropriate to adopt **resilience as a principle** from which to draw conceptual guidance on integrating gender. Resilience is the counterweight to vulnerability and includes the promotion of concerted emergency, development and investment approaches and interventions, which underlines the complementarity between short-term actions addressing immediate needs and long-term programs that target structural causes and reinforce capacities (for an in-depth discussion and good practice examples on the resilience-empowerment nexus, see Action Aid and DFID, 2012).

Resilience incorporates the whole spectrum of environmental, socioeconomic and political factors that affect the ability of actors and institutions to respond to adversities in a proactive dynamic way. Building resilience means reducing vulnerability to shocks, targeting people's livelihood strategies and asset bases on the one hand and targeting the capacities of structures and institutions to provide necessary governance frameworks, services and support on the other (Gnisci, 2015).

According to PARM (2018c), "there is a clear two-way relation between ARM and resilience: ARM practices aim to mitigate negative shocks and boost resilience. At the same time, the understanding of single component of resilience can help to better target ARM strategies in a virtuous circle (...) ARM can be seen as one of the key building blocks of resilience, looking specifically at risks related to agriculture, and identifying and implementing risk management strategies for agricultural stakeholders and government to better plan for and face a variety of shocks."

Policies and interventions can strengthen the resilience of smallholder farmers and their farming systems to environmental and economic shocks and stresses. What is needed are inclusive approaches that integrate continually engaging farmers and the local community and placing them at the centre of the learning process – for example, through continuous feedback loops (Mottram et al., 2017).

11 <http://www.fao.org/3/i7654EN/i7654en.pdf>

The question that subsequent chapters addresses is how to translate those approaches into specific and practical policies, measures, investments and interventions for smallholder farmers that will be gender smart. The wealth of case studies and reports on the topic, many of which are cited in this study, can be useful in harnessing good practices and understanding the intricacies of a gender approach (e.g. La Masson, 2015). As PARM has pointed out, data analysis can help in identifying context specific interventions to improve ARM impacts on resilience, but just as is the case with gender guidance, there are no one-size-fits-all solutions.

3.3 Integrating gender into the PARM framework

Despite the diversity of contexts and approaches to managing risks, four key pillars are typically applied in an ARM holistic approach when designing or implementing an initiative that includes an ARM component, to ensure sustained management of agricultural risks. They are:

- I. Risk assessment and prioritization.
- II. Tools identification and prioritization.
- III. Trainings, Knowledge Management, Partnerships and Policy Integration
- IV. Monitoring and evaluation.

The gender lens should be applied throughout the 5-stage ARM cycle (refer to p 13), to ensure effective ARM.

3.3.1. The risk assessment and prioritization stage

Risk assessment

As the study has pointed out, systemic agricultural shocks do not have homogenous effects on farming women and men. Gender matters in explaining differential effects and how they vary across countries and stages of development. Integration of gender analysis into agricultural risk assessment and prioritization will therefore lead to *gender responsive ARM strategies* (given that gender is also integrated at other stages of the cycle).

To make an ASRA inclusive, participatory and respectful of all stakeholders, it is essential to integrate, from the beginning, context-specific mapping of gender-based constraints and gender-specific impacts of risks, diversifying and using available data, reports, models, frameworks, guidelines etc. This study aims to support practitioners with guidance on how to analyse this gender information and how to then draw conclusions and draft recommendations for programme and policy design and other action based on the analysis. As such when identifying and assessing risk, in steps 1 and 2 of the ARM cycle, there are some considerations to keep in mind when applying to the methods of ASRA to make them more gender sensitive.

The majority of the key informants from the broader PARM network interviewed for this study have cited sex and age disaggregated data availability as a key challenge to gender-responsive ARM. For instance, *lack of gender-informed data leads to the design of gender-blind, and therefore less effective policies*. **ASRAs provide an opportunity to collect, analyse and use sex and age disaggregated data to identify contextual constraints and solution in relation to smallholder's inclusion in risk management and gender equality in access and use of ARM resources and tools.**

Beyond the design of data collection tools and actual quantitative or qualitative data collection, ASRA can use the literature and databases¹² available on gender issues. A good practice example from Malawi (Giertz et al., 2015) used the Malawi Millennium Development Goal Report, Population and Housing Census Report and Poverty and Vulnerability Assessment Report to provide information of gender issues, and to justify the central proposition that "preferably, any work will include gender disaggregated assessments and proposals".

¹² E.g. FAOSTAT: <http://faostat3.fao.org/home/E>; Rural Livelihoods Information System; Gender and Land Rights Database: <http://www.fao.org/gender-landrights-database/en/>; AQUASTAT: <http://www.fao.org/nr/water/aquastat/data/query/index.html?lang=en>



Meaningful participation of all stakeholders is essential to ensure ownership and usability for all actors. To achieve this, the principle of inclusiveness can be used to shape existing ARM processes. ASRA contains an element that gathers information on capabilities to cope with and address vulnerabilities and changes. The assessment usually done in an ASRA on the “Capacity to Manage Risk” of stakeholders could be adapted to offer information on the different capacities of men and women.¹³ Section 4 presents guidance on designing an ASRA that can help identify key common drivers, opportunities and key entry-points to prioritize gender-based risks and gender smart risk solutions (tools).

A gender-informed agricultural risk assessment, then, would identify and prioritize the key risks that drive agricultural volatility and food insecurity, while simultaneously examining how gender-based constraints affect the capacity to manage these risks and which are the groups most affected. Gender informed and responsive risk assessment allows to gather gender sensitive data and fill prioritization matrices that are an accurate reflection of the needs and risks impacts on different populations (men, women, vulnerable populations etc.), as men and women will have different priorities. Priorities are a reflection of the severity of the impact and frequency of risks, which will differ depending on who is impacted and on their capacity to manage risk. This will thus influence risk assessment and prioritization exercises and results.

A report by the ONE Campaign and the World Bank (2014) provides a robust assessment of the gender gaps in agricultural productivity across six African countries, using data collected by national statistics offices with assistance from the Living Standards Measurement Study. While this study is not ARM-specific, it can offer a useful approach to identifying gender-specific risk factors. Within the country profiles and the summary of key drivers, the report identifies the precise factors responsible for the gender gap in each of these six countries through the use of decomposition analysis, a statistical method that is normally used in labour economics. The paper sets out several concrete policy proposals to address the main constraints that women farmers face, as identified across the country profiles.

To summarize, a gender-informed risk assessment will identify the gender differences, which may exacerbate the impact of risks and their frequency, as well as hinder farmers' effective risk management in a given context. A gender informed assessment of the impact or severity of risk, using a holistic approach, will thus not only help identify the priority risks for a nation or farmers, but their differentiated capacities to manage those risks, but it will also inform the design and/or the design of gender smart tools, in agriculture, such as equal access to optimal technologies that reduce output volatility and enhance the labour productivity of rural women and men production of crops and livestock, such as or gender-inclusive extension service delivery.

National stakeholder workshop

As information and perspective on gender in ARM may be very limited, the dissemination and validation workshop for ASRA results can serve as an opportunity to create a context-specific precedent by bringing actors together that have information and/or perspective on gender issues in agriculture. The workshop offers an opportunity for making the process inclusive of a broad range of actors that can offer valuable data, information and perspective to the assessment process and aid in prioritization of risks for the local context. This can be actualized by bringing smallholder farmers (men, women and youth) to the table, and use appropriate facilitation techniques to ensure their full participation; by including ministries responsible for youth, gender equality and related topics and by including researchers who work on the nexus between agriculture and gender.

3.3.2. The tools identification and prioritization stage

Once the risks have been identified, assessed, and prioritized (stage 1 and 2 of the ARM cycle) in a more gender responsive manner, it is time to identify ARM tools, as stage 3 of the ARM Cycle. *ARM tools, just as they need to be context-specific, also need to be gender-specific, taking into account issues of social exclusion to understand how people cope with risk in different ways – having different capacities to manage risk, for example, or being economically active or not.* The prioritization of tools and their design, apart from the already applied prioritization filters (i.e. replicability, cost-effectiveness, up scalability, affordability, etc.) usually applied in an ASRA, can

¹³ FAO guidance on vulnerability assessments <http://www.fao.org/3/i7654en/i7654en.pdf>.

also take into consideration (a) vulnerabilities and needs of poor and marginalized groups, and (b) measures to reduce inequality, strengthen resilience and reduce vulnerability to shocks (as well as to reduce impacts that would result from risk-induced poverty). Gender analysis carried out at the risk assessment stage can also serve to identify tools for ARM strategies that are inclusive, gender-differentiated, relevant, and effective.

To exemplify, FAO has, through its fieldwork and engagement with partners, identified effective risk management and investments in community-based risk reduction processes as crucial measures as they harness capacities and assets that can best absorb shock and stress. It was observed that improved collective social capital leads women to make confident and sustainable decisions (KII with FAO Gender FP).

Key informants interviewed for this study gave several examples for tools and how to adapt them, for example that giving cash grants to women to buy livestock can help them cope with shocks by selling livestock. Risk transfer tools, such as weather index insurance, can be made more gender-informed, and adaptive social protection tools can be used to enhance farmer's coping mechanisms (which are often gendered in nature). Gender-informed ARM can serve to amplify rural women's voices and help overcome their exclusion from the processes of planning for risk preparedness and response.

Some examples for gendering agricultural risk management tools include:

- Provision of modern agricultural technology: As Hart and Aliber (2010) state, there is a need to reconceptualise 'technology transfer and development' so that appropriate technologies and support are developed, which are responsive to the differing scales of farming, to the engendered access to resources of women and men, and to the differing abilities of women to use technology. The research also highlights that women experience differences in their ability to use technologies. Such support should enable those women who wish to scale up their agricultural activities to do so at their chosen pace. Therefore, support should begin with enhancing existing practices.
- Water policies and practices: (irrigation, water governance). Cap-Net (2014) present evidence that there are numerous benefits in considering gender from the design stage through to implementation, including improved economic sustainability, economic efficiency, social equity and better water governance.
- Infrastructure development: transport, irrigation, warehousing etc. (Martinez Sola et al., 2018).

While these examples are encouraging, there is a lack of evidence and practical examples of gender integration into certain tools that are more typically used or suggested at national level, and suggested by the current PARM processes, such as warehousing and information systems. *The participatory nature of the tool identification process, the feasibility studies, assessments and final discussion/dissemination represent an entry point for action planning.* A good practice example from Zambia (Braimoh, 2018 and CAADP, 2016) lays out how evidence based planning and inclusive processes were applied to stimulate private sector driven and equitable agriculture growth. Even though gender is not yet explicitly addressed in the report, it can be useful for strengthening social inclusion and thereby, sustainability of planning efforts.

The focus of gender analysis at this stage in the process might be on identifying and prioritizing gender-specific tools overall¹⁴. For example, by mapping key informants (actors that can offer information and/or perspective on gender issues related to the proposed tools) and carry out KII and focus groups, fostering research by commissioning context- and gender-specific studies on certain tools and defining necessary investments in the development of gender-differentiated risk management tools. This can be operationalized using a template on gender considerations that can contribute to transversally integrating gender, such as a list of basic bullet points to include in each terms of reference.

¹⁴ A note about gender-sensitivity and the do no harm principle at tool design level: We have learned from projects with empowerment objectives that introduction of assets such as livestock can increase incidences of intra-household competition and gender-based discord, and, even, violence. It is also recognised that the establishment of formal agricultural and environmental programmes can reinforce existing power structures and create new interest groups as a result of newly available resources (Chanamuto and Stephen, 2015). A sound assessment of local context is important, so that power dynamics can be understood and gender-informed tools do not create unintended side effects of consolidating or creating inequalities.



Sexsmith et al. (2017) offer a good practice example for how to shape such guidance. They review guidelines that monitor how investment projects are addressing gender inequalities using voluntary sustainability standards and responsible investment frameworks. They examine five different areas of gender in agriculture: Land Rights, Productive Resources, Household Labour, Employment and Decision Making. For each area, they determine to which degree gender has been taken into account and how relevant it is for alleviating gender-based constraints. While this resource is focused on how women can better benefit from agricultural commodity trade and foreign investment, the concept can easily be translated into identifying, analysing and prioritizing ARM tools. Again, coming back to the central question: **How can we ensure that the most vulnerable smallholder farmers are actively engaged in, and benefit from, ARM?** Box 1 presents an example of how WFP developed and implemented a gender-informed resilience tool - the R4 Rural Resilience Initiative - to assist farmers to manage various forms of risk for improved agricultural productivity.

Finally, IFAD (2009) provides extensive guidance on how to analyse and integrate gender responsiveness into tools for poverty-focused microfinance, including an examination of remittances. The present study will use this resource in the design of more generalized guidance on tool design (beyond microfinance), as it is comprehensive and flexible to adaptation based on contextual needs. (see Chapter 4; ii; Tools identification stage and feasibility studies prioritization; Best practice examples p32).

Box 1: A gender-informed tool portfolio: The R4 Rural Resilience Initiative

The R4 Rural Resilience Initiative in Ethiopia and Senegal has shown that it is possible to apply a gender approach in a comprehensive risk management portfolio (Madajewicz, 2017; WFP and Oxfam 2016). R4 has expanded to reach over 28,000 smallholder farmers in Ethiopia and Senegal. Women are proportionally represented with men in the R4 project overall. The program integrates four risk management strategies: improved management of natural resources and diversification of livelihoods (risk reduction), weather index insurance (risk transfer), microcredit (prudent risk taking), and savings (risk reserves). The four components of R4 work together to improve agricultural productivity. The risk reduction activities rehabilitate the degraded soil and help to manage water retention.

The critical innovation in Ethiopia is a partnership between weather index insurance and national safety nets, the Productive Safety Net Program (PSNP) which allows farmers to pay for the insurance premium with labor on village-level projects that are part of the risk reduction component of R4. The innovation enables cash-poor farmers to purchase insurance, which is especially interesting to women as they typically have lower capital than men. Index insurance gives farmers the peace of mind that they will have an insurance payout if there is a drought and therefore the confidence to invest in production in good seasons. The payout can also obviate the need to sell productive assets to cope with drought, and it may facilitate access to credit by providing cash for repayment in bad seasons. Savings and credit provide additional resources that can be invested in production.

However, evaluations have pointed towards difficulties in making unsubsidized, unbundled index insurance sustainable, as farmers' payments tend to decrease over time. More research is needed to adapt cash requirements, but so far, the experience suggests that the investments into financial literacy training, especially for women, need to be strengthened in order to increase farmers' ownership of the insurance system.

One of the biggest strengths of the program, from a gender and social inclusion perspective, is the Participatory Vulnerability and Capacity Assessment (PVCA). The R4 team together with district agricultural experts, extension agents and community representatives constitute a design team in each community to identify risk reduction activities in the initial project design and consecutively on a yearly basis. The design teams, which are responsible for designing, implementing, monitoring, and evaluating risk reduction activities, include female-headed households. This is an excellent example for gender-informed monitoring and evaluation.

High-level policy dissemination and validation workshops

The purpose of the validation workshop and high level policy disseminations workshop is to ensure a participative process with the national stakeholders and government agencies of the tools proposed and developed in coordination with them, and in sharing the results and suggestions in the feasibility studies in order to create national ownership and buy-in for their eventual implementation.

Gender mainstreaming necessitates a top-down element: accountability for gender issues is created at the level of institutional leadership. Influencing policies is ARM's main impact. However, high-level actors often lack awareness of, knowledge about, and accountability for: gender based constraints, non-women-centred approaches that promote broader social inclusion, relevance of gender in agriculture, and especially in risk management, actionable solutions. Among other issues, this leads to a lack of dedicated funds, fluctuations in funding for increasing gender-based constraints to resilience and risk management

PARM, having relatively strong influence on policy, can seize the opportunity of the workshop to raise awareness and create interest in the topic of gender equality. This can be the place to present salient arguments, facts, statistics about challenges and solutions and make a convincing business case to gain government buy-in. Due to the operational aspect of the validation workshop, this can yield concrete results.

3.3.3. Trainings, knowledge management, partnership and policy integration

The 3rd key stage, and pillar of ARM, is focused more on cross cutting activities that are implemented at the global, national, and meso-level to strengthen the PARM process, and any ARM related activities at every step of the ARM cycle.

Learning and knowledge management

Through learning and knowledge management, ARM can be continuously improved. The integration of crosscutting themes like gender depends on dedicated efforts at this level to identify and harness existing knowledge (such as lessons learned from pilot projects). As this study has previously discussed, the knowledge base on gender-responsive ARM is still non-existent, or invisible to the degree that there are no case studies or guidelines that explicitly deal with the topic. Therefore, the global learning and knowledge management efforts during Horizon 2 should emphasize on the creation of knowledge and a continuous learning process, with the aim to create the evidence and to foster the operational translation of gender evidence into concerted, well-targeted differentiated action.

Beyond this study, PARM can contribute to increase knowledge about actions and best practices about the links between gender and ARM. It can, in the first place, support research institutions to study the costs, benefits and efficiency of gender-sensitive ARM. It can also champion the value of women's knowledge, and generally, of the often under-valued and overlooked indigenous knowledge of farmers, for ARM. It would be useful for PARM's learning and knowledge management to further tap into existing policy and scientific platforms to continuously distil best practices, support dialogue and advocacy for the mainstreaming of risk management, resilience and gender-sensitive approaches in the agriculture sector, as well as to promote innovation. A continuous research on the issue will indeed result in improved operational guidelines which efficiently answer the need to deal with gender constraints in ARM, reducing volatility of agricultural outputs, prices and incomes.

While it is useful to take into account the broad literature and research base on agriculture and resilience, it can be challenging to filter out the learning that is pertinent to ARM, and to transpose it to different contexts. Standards, strategies and principles do not by themselves determine gender outcomes on the ground. Given the strong influence of social norms on gender inequalities, it is rather the way ARM tools are implemented, and the social contexts that they encounter, that determine whether they can make a positive difference in addressing gender inequality and social exclusion (Sexsmith et al., 2017).



PARM can choose to respond to these conceptual challenges by taking a **continuous learning approach through its collaborative partnerships**. This can include sharing experiences on gender and agricultural risk at the global level, with its network of partners through FARM-D, now managed by PARM, to develop approaches that are more effective and generating information for strengthening evidence-based risk assessments, advocacy and policy dialogues. Generalizations about gender and agriculture are misleading. Detailed, comparative studies are needed to understand important contextual differences not only among world regions but also, as demonstrated by Larson (2016), within countries, among different cultures. At the macro/national level, it can further involve supporting governments in capitalizing on their experiences related to responsible investment in agriculture, ARM etc. and continuing efforts to support them in determining which models are the most useful to them. In addition, at the meso level, this synergetic approach can centre on harnessing and transmitting knowledge through community-based associations and NGOs (more detailed guidance on what this can look like can be found in Chapter 4). This approach, to be targeted at every level, should trickle down to the micro level to eventually reach farmers and small holders, which are those who will ultimately benefit from gender responsive ARM methodologies.

For example, in a context where weather-index insurance is prioritized as a tool, PARM, and other actors, can emphasize on cooperating with these partners to enhance learning around financial literacy. This can manifest as helping women and vulnerable groups to understand whether insurance is the right tool to manage the risks they are facing, taking into account gender aspects in financial education and access to information: women generally have higher illiteracy rates, drop out of school earlier, and therefore have less understanding of and access to financial education to begin with, but they are also more excluded from access to information due to often being restricted to the private/village level sphere, having lower ownership of mobile phones, being less likely to understand only the local languages etc. Therefore, education products and delivery need to be adapted to their needs, for example by providing smartphones to women's groups on which they can receive and share information, and coupling this with face-to-face trainings that are tailored to women's needs (e.g. providing childcare on site, using "barefoot trainers" who are village women themselves that disseminate information etc.). These trainings will then provide information on how to manage expenses and debts or when to pick which tool.

In a similar vein, grassroots actors can be involved in designing, implementing and reporting on PARM assessments of tools such as information system to ensure that gender-specific concerns are also included at this level, and within the investment plans elaborated in the feasibility studies on these tools. Special considerations can be added both when studying the tools and their accessibility and applicability for different groups, as well as in the proposed investment plans for their implementation at national levels. Especially when considering these tools and studies are then validated by national governments, and presented at high level workshops with a high potential for visibility. Examples of gender integration into high-level strategic policy documents is given in the Box 2, with cases from Uganda and the Republic of Congo.

Finally, there are concrete, simple steps that PARM can begin taking as of today for more gender-integrated knowledge management. First, PARM should integrate gender data and statistics into PARM communication materials (overviews, updates, briefings). Next, it should make central resources available in several languages to heighten geographical inclusiveness. Finally, it should ensure that gender is transversally integrated into all TOR, reports, studies, etc. – ideally by creating a brief guidance note for all assessment and authoring.

Capacity development

Box 2: Gender Analysis of Policies and Strategies at Country Level – Lessons from Uganda and Congo

A study by Acosta et al. ("Towards gender responsive policy formulation and budgeting in the agricultural sector: Opportunities and challenges in Uganda") from 2016 described a gender analysis process at policy level. A similar exercise was undertaken with regard to multi-sectoral climate adaptation in The Republic of Congo (Mouandza, 2012). Both documents provide important insights into the degree of integration of gender issues into governmental policies and strategies that relate to ARM. This type of analysis of secondary data can provide important insights into gender-specific gaps, especially with regard to priority areas. (...)

(...) The example from Uganda assesses, through a grading system, the level of gender integration of 83 agri-food policies and strategies at national, district and sub-county levels. From all 83 reviewed documents, 30% did not have any gender integration (7% had gender only mentioned in the objectives or only identified among cross-cutting issues, 17% had gender referenced throughout the document but without a clear implementation plan and 23% had gender mentioned throughout the document, with an implementation strategy but lacking allocation of resources, and 23% had gender mentioned throughout the document, with an implementation strategy and allocation of resources).

Both studies draw attention to the way men and women are characterized throughout the policy documents. Results show that gender issues in policies are largely equated to “women’s issues”, with women generally portrayed as vulnerable and marginalized by society.

The Uganda study further examines gender budgeting efforts, showing that gender allocations in budgets at sub-county and district level are low, with fluctuations from year to year and with sharp differences between estimated and actual budgets, making planning and implementation of gender mainstreaming activities challenging.

We recommend *The Gender and Rural Advisory Services Assessment Tool* (Petrics et al. 2016), which was built for practitioners who seek to design and implement relevant services for rural women and close the gap between knowledge about good practice for gender-sensitive rural advisory services.

At the level of Capacity Development (CD), learning on and knowledge about gender in ARM should be cross-cutting and mainstreamed, ensuring that all training materials on tools etc. are gender-informed.

There is a need for gender based ARM’s training material which needs to be adapted to the PARM target audience, based on global discussions with key informants and communities, best practices, case studies and lessons learned. Each specific training should address the impact that gender has on ARM, according to the specific geographical and cultural context of the region. Therefore, preliminary research or discussions on gender constraints affecting ARM in the region should be carried out before developing the training materials (presentation slides, the content already adapted to the context and type of training delivered...) in collaboration with local universities and institutions, which are the primary implementers of the PARM CD trainings, and which should reflect research findings.

The audience of capacity building includes general officers in projects, but also and increasingly, leaders and directors involved in facilitation and implementation of action plans (especially in government). Here is where the upstream/downstream work is the most effective and where the biggest impact can be achieved.

For this reason, a maximum of awareness building can take place during trainings. Trainings, that include a gender component, have the potential to be transformative, especially if decision-makers participate or endorse the training and a follow-up element is ensured (Platenga, 2004).

A central issue, especially in Sub-Saharan Africa, is that most participants in trainings are men (university level and extension workers) and that there can be a cultural identity issue if the trainer is a white and/or female outsider. Therefore, it is preferable that trainers work in tandems or teams that are geographically and gender balanced. Generally, PARM can aim at enhancing integration of gender at operational training level - women and vulnerable groups (according to context) need to be properly integrated as contributors, as trainers, as participants etc. PARM can also learn lessons from the case study of gender in agricultural extension services in Box 3.

The same holds true for farmer trainings, though the challenge here is that the actual trainings will be implemented by partners at local level who, themselves, need to be supported in building their gender capacity. In planning and carrying out trainings at village level, men and women’s roles, responsibilities and decision-making power need to be taken into account and so that women can balance their many obligations and responsibilities (productive work, care work...) while obtaining training. FAO’s gender-responsive disaster risk reduction guidance (2016b)¹⁵ provides useful tools for training trainers on gender in DRR that can be adapted to ARM.

15 <http://www.fao.org/3/b-i6096e.pdf>



Box 3: Gender in agricultural extension services

Buehren et al. (2017) have analysed the effect of the World Bank's Ethiopia Rural Capacity Building Project, which aimed to promote growth by strengthening agricultural service systems in Ethiopia and making them more responsive to smallholders' – including men's and women's – needs. The project intended to increase the outreach of agricultural extension services to help farmers be aware of and adopt economically viable and environmentally sustainable technologies, methods and practices.

The study cites evidence from India and several countries in Sub-Saharan Africa that points to a gender gap in access to extension: extension agents mainly work with the primary household decision maker, who is usually male; the perception that women's contribution to farming in the household is minimal; household responsibilities and mobility limitations that hinder women's participation in training activities; cultural factors that make interaction of female farmers with male extension agents challenging; etc. As a result, women farmers receive mostly second-hand information from their husbands, and this information may not be best suited to their needs if their agricultural practices and crop choices are different from that of male farmers. Further, women often lack the financial and material resources to translate theoretical knowledge into applied practice.

The project set out to improve the effectiveness of the agricultural extension program as it scaled up, particularly with its ability to respond to the expressed needs of farmers (especially market-oriented farmers), to enhance women's participation and gender equality mainstreaming in all aspects of the extension system. It was thought that improving their access to knowledge and information on agricultural technologies may lift a gender-based constraint to their productivity, given women's high participation in agriculture and low access to extension.

Results indicated that the strengthening of extension services had a positive impact on economic participation in households, land area cultivated, and adoption of marketable crops, suggesting that access to extension helps farmers switch to more commercial, market-oriented agriculture. Further, and contrary to previous evidence from other countries, female-led households seem to have benefited equally from the project. However, the project was not able to reduce the pre-existing gender gap in agricultural outcomes.

More extensive evidence is required on specific interventions targeted at improving both access to and impact of extension for women farmers. A randomized control trial in Mozambique (Kondylis et al., 2014) suggests that female farmers were more likely to learn about agricultural techniques in communities in which there was a second, female contact farmer, in addition to a male contact farmer. Female messengers may not only improve communication to women, but also better meet their informational needs.

In the "Challenging Chains for Change" book (KIT et al. (2014) it is proposed to "overhaul extension services to make them gender-sensitive, for example by increasing the number of female extension agents, creating accessible demonstration plots within villages, establishing pro-female farmer field schools and farmer-to-farmer exchanges, and setting up gender-sensitive learning and evaluation mechanisms to improve extension services." While PARM does not have the mandate to apply this, it can emit recommendations to governmental and development partners in this regard.

The tools and perspectives offered by these country-level case studies in the agricultural sector are used in this study as an orientation for how to shape tool identification and prioritization with a gender lens. Once tools are presented at the High-Level Policy Dissemination Workshop, opportunities for partnerships, dialogue and advocacy can be seized to strengthen awareness of and commitment to gender issues.

PARM may look into ways to adapt and develop training material on gender-based ARM at various levels, promoting global discussions with the community of practices, and case studies and lessons learned. At village level, all training efforts may emphasize on rural women's (and men's) indigenous, existing knowledge (KII with University Gaston Berger). Informal gender norms are institutional barriers to recognizing women's contributions to agriculture (Twyman et al., 2015) and training efforts may contribute to making these contributions more visible.

Monitoring efforts may evaluate whether ARM strategies are successfully addressing the priorities of both women and men and impacting both positively.

Strategic partnerships and synergies

Strategic partnerships exist with all entities that PARM cooperates with and shares physical and/or intellectual resources. *The facilitation of a holistic approach to ARM materializes synergies and partnerships across different level of stakeholders, from farmers' cooperatives to international institutions* (PARM, 2018c). Just as resilience rests on the adoption of multi-stakeholder, multi-sectoral approaches that integrate individuals, groups, whole nations and international systems (Global Alliance for Resilience, 2013).

ARM needs supportive coalitions. PARM's current and potential partners include governments, donors, UN agencies, NGOs, think tanks & academia, private sector, civil society, grassroots organizations and foundations. The role of the government, particularly for the integration of ARM into policies and interventions, is essential to consolidate partnerships, and create the framework to ensure ARM strategies' sustainability and an enabling environment for investments. The FAO stands out due to its intensive work on agriculture and resilience. An additional guiding question in all partnership-related activities should be: "how can we shape this partnership so that it contributes to reducing gender-based constraints?"

Governments are increasingly looking to design and implement new, differentiated policies for segments of producers to address the needs of marginalized, and especially female, farmers and to boost agricultural productivity and increase resilience (World Bank and ONE Campaign, 2014). Whilst underlying laws and policies governing gender equality practices, women's land rights and women's representation are critical in determining gender outcomes of ARM, the specific regulatory framework governing agricultural investments can also influence these outcomes (Chan and Mbogoh, 2010). PARM can leverage partnerships with governments to encourage these investments. A central challenge identified by key informants is how best to involve ministries that are not "traditionally" associated with agriculture (such as those responsible for gender and youth issues, finance, health etc.) in the PARM process, as they do not always work closely with other ministries. The creation of committees or platforms can be useful in this regard.

Synergies across sectors are essential to address some of the central issues to agriculture, such as legal access to land. For example, in Liberia, the most critical legal/policy gap in regard to women's representation is the lack of a legislative framework for governance of community land, and the lack of specific measures to ensure women's representation in such governance. This legislative vacuum effectively leaves it wide open for gender-discriminatory customary land governance institutions to prevail (KII, PARM FP Liberia).

These types of issues necessitate out-of-the-box thinking that brings a broad range of stakeholders around the table, beyond actors working on and in agriculture. This can still be out of reach for PARM in Horizon 2, as the dedicated focus to agricultural risk means that a range of gender equality concerns cannot be taken into account. However, the PARM approach to multi-stakeholder coordination could potentially create partnerships for gender equality in which PARM focuses on ARM, working in synergy with other partners that tackle, for example, issues in land ownership or financial access. In countries where gender is a dedicated development priority, gender-sensitive ARM processes can be "sold" as being in line with, and contributing to, gender strategic objectives.

While gender mainstreaming can be regarded as a tool to increase the effectiveness, efficiency and quality of programs, it also should be regarded as an end in ad of itself as it has the potential to increase the human rights goals of equality and equity (IFPRI and FAO, 2014). Strategic partnerships and synergies are needed to pursue a gender-transformative way of working that opens the doors for reducing structural inequalities and thereby, creating enabling environments for men and women smallholder farmers' integration in ARM that serve both their practical needs and strategic interests¹⁶.

¹⁶ Practical needs are material needs related to survival; what must exist in order for a person to live a decent life. Practical needs are typically of an immediate or short-term nature. Strategic interests are related to the position that a person occupies within his or her society. Strategic interests are typically of long-standing duration because they relate to roles, power and control.



As stated in previous chapters, a crucial strategic partnership will be with the smallholder farmers themselves. PARM can increasingly include them and ensure their participation as equal partners in the process, for example through collaboration with community-based organizations, and women's associations in particular, at the stages of risk assessments and tool prioritization. Depending on context, the agriculture-based enterprises of women and vulnerable groups can receive specific attention as partners so that they can benefit fully from various policies, technological and institutional interventions, training, etc. (Kiptot et al., 2014).

Dialogue and advocacy

Gender issues are still often misunderstood or cited as an afterthought, which leads to insufficient integration into policies and programmes. However, high-level actors increasingly seek to understand the impact of gender and social inclusion on the effectiveness, efficiency and quality of their agriculture-related policies, laws, strategies, plans, and budgets. For example, the Ministry of Gender and Development of the Government of Liberia, with support from the World Bank (2010), has outlined its commitment for raising gender awareness among government actors so that gender can be mainstreamed into policies to enhance agricultural supply chains.

Keeping this in mind, we need to consider the limitations of the dialogue and advocacy efforts that PARM is able to undertake within the confines of its mandate. It is not within PARM's scope to foster national dialogue around gender equality and inclusiveness – the complexity of this process has been captured by the Global Alliance for Resilience – AGIR Sahel and West Africa in 2013.¹⁷

Rather, PARM can take a non-theoretical approach in filling the technical and operational gaps in integrating gender into ARM. In line with its role as a knowledge broker, PARM would provide hard facts and convincing arguments drawn from country-level experience about why and how to integrate gender into ARM. PARM would have the added supply that, due to its approach, it can identify and design gender smart interventions within current ARM frameworks. *PARM's positive influence would then stem from offering the right solutions and strategies for gender-informed ARM.* The actions taken during the stakeholder and policy workshops tie in with the dialogue and advocacy approach. For example, as previously mentioned, the investment plans for the AR tools proposed and explained in the feasibility studies, if gender responsive or at least informed, can be one way to influence policy, and budget at national level.

3.3.4. Monitoring and evaluation

Efforts to monitor impacts and results and to facilitate implementation of action plans are not fully developed within the PARM process as of yet. This is an important next step because here is where the concrete facts about outcomes can inform the ARM cycle and integrate learnings in a long-term approach. **Future monitoring efforts should evaluate whether ARM strategies are successfully addressing the priorities of both women and men and impacting both positively.** If gender is integrated at all other stages of the process, this will contribute to a gender-informed monitoring and evaluation system, as all elements of the cycle are interconnected.

Building an M&E system from the inception of the PARM process that is gender-informed would start from defining a baseline with clear indicators, timing and responsibility for data collection by partners, especially SADD on the effectiveness of the tools for different groups. This is also an opportunity to raise awareness among stakeholders for monitoring gender data and results. Learnings can then feed back into stage III.

17 [http://www.oecd.org/site/rpca/agir/Methodological_Guide_Inclusive%20National%20Dialogue_Final%20Version%20September%202013\(wtc\)_ENG.pdf](http://www.oecd.org/site/rpca/agir/Methodological_Guide_Inclusive%20National%20Dialogue_Final%20Version%20September%202013(wtc)_ENG.pdf)

3.4. Summary

This chapter has outlined an analytical framework for integrating gender into ARM. It has identified possible opportunities (or favourable factors) and challenges at every step of the cycle, while taking into account gender-guiding concepts or principles of based constraints, social inclusion and resilience as parallel and intertwined tracks on which an integrated mechanism can be rolled out and put to scale.

In light of the proven relationship between gender-based constraints and smallholder's capacity to manage agricultural risks, and given the existing good practices to develop gender-informed solutions, effective ARM would also prioritize strategies and tools aiming at removing the constraints caused by gender inequality. Just as effective ARM, gender-informed analysis and practices at scale require appropriate solutions that identify and incorporate gender issues into all planning stages and strategic initiatives of risk management.

The in-depth discussion on the unit of analysis has shown the need to develop context-specific, tailored solutions that look at where gender-based constraints originate and at which levels they operate and/or have the most impact. The suggestion to think in terms of a unit of action can shift the focus towards the actual context, i.e. where action is most necessary.

Rather than encouraging actors to set up gender-responsive programs that are focused on women producers, **the emphasis is on ensuring that men and women can benefit equally from opportunities for effective ARM and for building their resilience.** Such an approach has the potential to deliver significant benefits for women without requiring major investments in new women-specific projects or programs.

Successful integration of gender into ARM requires a change in the way the process is carried out, as practitioners need to shift their thinking to not only be context-specific, but also, people-specific, questioning their own assumptions and embarking on the challenging process of in-depth analysis of the social element in agriculture. That said, support is available in the form of a growing and rich base of resources on gender issues and experiences in designing climate smart agriculture programs, resilience initiatives, disaster risk management programs, early warning systems, etc.

As the stages of the PARM process are all interconnected, gaps and missing links in the cycle should be avoided so as not to jeopardize gender outcomes. Efforts to integrate gender need to be tied together as an integrated whole. While it cannot be expected that all ARM practitioners will deepen their gender expertise to a degree of being able to design and implement comprehensive gender analysis, there are simple and effective steps to integrate gender into every stage of the PARM process for Horizon 2. The following chapter defines this "minimum standard" while also providing guidance for those who want to go further.

Box 4: Best Practice Example - Tying Together Partnerships, Advocacy and Knowledge Management in Senegal

Senegal's Agricultural Ministry's investments into gender mainstreaming are a good practice example for a unified approach. The Ministry of Agriculture's ARM focal point provides a convincing picture of current country-level efforts.

In Senegal, 80% of agricultural activities are carried out by women whilst they have weak access to productive assets. This means that any factors affecting the agricultural sector also has an impact that is experienced by women in particular (for example loss of production – so much of what women produce is for subsistence).

A major limiting factor has been widespread reluctance among the millions of smallholder farmers in Senegal who dominate production to assume the risks associated with increased productivity. With only limited capacity to manage these risks, highly vulnerable farmers choose to limit investments (D'Alessandro et al., 2015).

(...)



(...) The World Bank-led risk assessment for Senegal has not explicitly taken gender issues into account. However, the Ministry of Agriculture has recognized that gender has to be coherently integrated across ARM strategy and programming (KII with PARM Focal Point for Senegal). This ties in with wider efforts across the Ministry undertaken since 2015 that seek to integrate gender and to report on it systematically. FAO has assisted the Ministry in creating a gender country profile for the agricultural sector. These types of reports can and should be taken into account in ARM assessments as they provide essential information on gender-based constraints.

Recognizing the importance of coordination of gender mainstreaming, an inter-ministry, and multi-sector, multi-actor committee was put in place. It connects the Ministries of agriculture, fishery and livestock. The committee makes a yearly plan that defines priority activities and it is in charge of validating all planned studies and all TOR. They further ensure that thematic plans (such as the capacity building plan) integrate gender. The head of the committee is identical to the ARM focal point, which offers a unique opportunity to merge the two.

Moreover, the committee plays a central role in knowledge management. They organize trainings, for example on how to integrate gender into monitoring and evaluation and how to create, analyse and use gender statistics. They create and circulate technical briefings across the Ministries, for example to inform staff of the percentages of assets that need to be made available for women. Access to land is not an issue the Ministry of agriculture is traditionally concerned with but it can play a role by making land arable and accessible. Recognizing the importance of access to land for women's resilience in agriculture, the committee singled out this topic due to its high relevance for gender equality.

With regard to programming, the Ministry highlights the importance of social protection measures and financial access. In Senegal, there is a program of social security funds distributed to highly vulnerable women, with the main goal that they can provide an education to their children. In agriculture, financial access poses a barrier as women's savings often are insufficient to invest in their agricultural activities. The Ministry provides about 460.000 USD a year in microcredit loans to farmers but women tend to borrow smaller amounts than men, accounting for only a third of the total amount disbursed.

Consequently, the Ministry created a division that is focused on putting concrete projects in place that encourage female loan takers to increase the amount of credit. They are meeting a growing trend among women to take more risk and invest more into their agricultural activities.

These types of dialogue-based gender mainstreaming efforts –ideally linked with ARM, should be encouraged in PARM's engagement with Ministries as they have the potential to build sustainable outcomes. PARM could highlight good practice examples as the one from Senegal in its advocacy efforts.

In general, it would be helpful to first evaluate what the government is already doing to reduce gender inequality (while keeping in mind that this is also a socio-cultural issue that is deeply embedded in most societies). Where gaps in government policy and action are identified, PARM can offer a definition to enhance comprehension of gender and suggest routes for strengthening the response at agricultural level (KII with PARM Focal Point for Senegal).

4. Guidelines for integrating gender into ARM

This section provides brief definitions for each gender-responsive stage of the PARM process as well as the rationale for integrating gender. It provides **actionable steps for gender integration into each stage of the process**, split up into basic steps (what is the minimum “standard” at this stage) and in-depth integration of gender (what would be needed for a fully gender-responsive process). It maps out best practices and tools for each stage. Each of the tables can be transformed into a card, with the guidelines on one page and the basic tools, such as checklists, on the other side, to facilitate dissemination and use.

A word before we start: at all stages, actual people (human beings) are doing the work. Teams that are not gender balanced or which are siloed into specialisms or hierarchies may also work in ways that limit or prevent interventions from understanding and addressing gender (Oxfam, 2017). Gender needs to be mainstreamed into our ways of working, research methodologies, facilitators' profiles, and across partnership strategies. To ensure accountability for the topic, the recommendations made by Oxfam have been adapted:

- Collect, research, analyse, use SADD and gender statistics.
- Ensuring gender balance and women's meaningful participation in decision-making.
- Promoting gender justice champions/focal points at country level.
- Addressing gender-based constraints.
- Bringing gender expertise in as necessary.
- Using gender-sensitive tools and methods.
- Accountability on gender issues.
- Obtaining commitment and support from directors and managers.
- Sufficient, and representative, gender-disaggregated and gender-specific data analysis.
- Sharing consistent and repeated messages with staff and partners.
- Integrating both existing and innovative ways of working, adapting good practices to context.

4.1. Gender-responsive risk assessment and prioritization

Risk assessment

What is a gender-responsive agricultural risk assessment?

It is an analysis of different risks to agricultural that takes into account the social, gendered realities, and especially gender-based constraints of men and women smallholder farmers

Why do a gender-responsive agricultural risk assessment?

- ARM is not gender neutral, farmers are not a homogenous group
- Gender-based constraints impact and restrict male and female smallholder's ability to manage risk
- A gender analysis of agricultural risk prioritization will lead to gender responsive ARM strategies

Good practices and useful resources

- FAO. 2016. Developing gender-sensitive value chains, A guiding framework. FAO: Rome. <http://www.fao.org/documents/card/en/c/19212EN>
- Although it needs to be operationalized for ARM, FAO's 2018 vulnerability assessment guidance explores the main constraints that male and female farmers face in the agriculture sector: FAO. 2018. Guidance note on gender-sensitive vulnerability assessments in agriculture. FAO: Rome. <http://www.fao.org/3/17654EN/i7654en.pdf>
- ICRW has created a helpful overview of domains, indicators, and variables to guide measurement of gender in agricultural supply chains and related programs (2012, p. 4): International Centre for Research on Women (ICRW). 2012. Capturing the Gender Effect. Guidance for Gender Measurement in Agriculture Programs. ICRW: Washington. <https://www.icrw.org/wp-content/uploads/2016/10/ICRW-TZ-Gender--Agri-II-v7-1FINAL.pdf>
- World Bank. 2017. Gender and Agricultural Risk. A Gender Approach to Agricultural Risk Assessments and Management Strategies. World Bank: Washington DC. <https://openknowledge.worldbank.org/handle/10986/26398>
- Use FAO agriculture sector country profiles if available (example: FAO and CEDEAO, 2018 - Mali) Women's Empowerment in Agriculture Index (IFPRI et al. 2012) for domains and indicators.

How to do it: basic gender integration

- In the TOR for risk assessments, explicitly state expectations on and the importance of integrating gender in the design and implementation of the study, and seek to transversally integrate gender.
- First of all, take a flexible approach; you may not be able to access and/or collect all necessary data in every context, the risk assessment team must determine what is feasible, always with the intention in mind to integrate gender to the fullest degree possible.

- Seek to collect, track and analyse comprehensive sex and age-disaggregated data and gender statistics at all levels, in all variables and in all tools wherever possible (at production level, at food processing or marketing steps, at country level, at community level, along a supply chain, by commodity etc.). This means that all data collection tools (e.g. time series of yields, interview guides for focus group discussions and supply chain analysis tools) will seek to gather data that reflects differences between men and women;
- It also means that the approach must be adapted, for example ensuring to include the perspectives of smallholder farmers of different sex, age, location (during risk identification and risk prioritisation exercises) by carrying out gender-and age-disaggregated focus groups;

Concretely:

1. Identify the supply chains for cash crops and those for food crops;
2. Identify the supply chains with high participation of men and those of high participation of women;
3. Use population, poverty and housing census reports to obtain information of gender issues, as done in Malawi (Giertz et al., 2015);
4. Do the quantitative analyses of those supply chains based on the intensity of events and frequency of events, as PARM usually does. Ideally the risk assessment should look beyond monetary value, and income losses and disaggregating them by sex, it would also use more qualitative and participative data collection methods, such as focus groups, semi structured interviews with the diversified stakeholders previously identified to gather more information, which is not usually available, such as time spent fetching water, seasonal calendars, access to finance, or food security levels – these may be impacts of risks that are not easily quantifiable, but nonetheless necessary to integrate.
5. In assessing the Capacity to Manage by stakeholders, incorporate a vulnerability analysis. Those stakeholders with less capacity to manage will be ranked as priority for policy and interventions. Those vulnerable groups depending on the context will potentially be geographically located (i.e. arid zones), food insecure, gendered differentiated access to resources (land, technology, information, etc.), subsistence households, etc.
6. Highlight gender equality explicitly in this analysis; identifying overall contextual constraints (such as lack of access to transport; education, information, finance...) and opportunities (existence of a strong civil society, strong value chain integration for certain groups).



Tools

General (also for all other sections) – in annex:

- **Tool A in annex:** Checklists/toolkit for minimum integration of gender into the assessment/study planning, implementation and reporting (also applicable for all other sections).
- **Tool B in annex:** PARM gender-informed product checklist

ARA-specific – in annex:

- **Tool C:** Model for gender-informed terms of references for agricultural risk assessments
- **Tool D:** World Bank guidance on lines of enquiry for research and fieldwork in ASRA
 - D.1. Questions and Checklist for Background Research for a Gender-Differentiated ASRA
 - D.2. Gender-Based Line of Enquiry for ASRA Fieldwork
 - D.3. Gendered Line of Enquiry to Establish Capacity to Manage Risk
 - D.4. Guidelines for assessing risk and capacity to manage in focus Groups with farmers” from the World Bank study – to be administered to groups of men and women, possibly of different age groups.

- **Tool E:** ARM Capacity and Vulnerability Analysis (CVA) Matrix
- **Tool F:** Domains and indicators for gender-informed supply chain analysis
- **Tool G:** Gender-informed key informant interview questionnaires for agricultural value chains

Other ideas – not in annex- to be designed/developed/found by the practitioner:

It may also be useful to look into Rapid Household Care Analysis (Oxfam, 2017).

- o Technical note on examining gender-based constraints for male and female farmers (Analyze men and women's perceptions of risks and assess their specific capacities to respond to shocks and stresses, noting their differential access to resources and services, and participation in decision-making.

In-depth gender integration – How to do it

Ensure that among the authoring team, expertise on gender issues is available (not necessarily in the form of a dedicated expert, but at least one of the authors should have some knowledge and experience). The team should also be as gender and geographically balanced as possible – this means that in the competitive bid, it will be explicitly encouraged, and it will be a selection criteria.

Getting the right information

Using a holistic approach, create a context-specific mapping of gender-based constraints and gender-specific impacts of risks, diversifying available data, reports, models, frameworks, guidelines... using appropriate domains and indicators that allow for in-depth gender analysis

Search for, analyse and use SADD and gender statistics (existing literature and take into account data from vulnerability and capability assessments etc.).

Create an assessment and analysis process that is inclusive, participatory and respectful of all stakeholders. Most importantly, support and engage actively with women's civil society organisations and networks (such as farmers' groups and women's cooperatives) and facilitate their systematic inclusion and participation in the development, implementation, monitoring and evaluation of agricultural research, policies and programmes. This can translate into obtaining data from these organisations/groups on an agricultural supply chain, area, or crop.



National stakeholder workshop



What is a gender-responsive ARM national stakeholder workshop?

It is an opportunity for discussing and validating agricultural risk assessment outcomes in an inclusive manner to advance in the gender-informed prioritization of agricultural risks in preparation for delivery of a final ASRA (agricultural risk assessment) report that integrates gender transversally.



Why do gender-responsive ARM national stakeholder workshop?

Validation of the findings and prioritization exercise of the ASRA

Information and perspective on gender in ARM is often non-existent.

The Workshop itself needs to be used to create a context-specific precedent by bringing actors together that have information and/or perspective on agricultural risks and gender issues in agriculture. Create an inclusive process that brings all stakeholders (smallholder farmers --men, women and youth, exporters, financial intermediaries, traders, policy makers, input providers, etc.) to the table, and use appropriate facilitation techniques to ensure their full participation.



How to do it:

7. Bring the Ministries responsible for youth, gender equality and related topics (i.e. food security, disaster risk management) to the stakeholders workshop, as well as women's associations, cooperatives and federations.
8. Include researchers who work on the nexus between agriculture and gender.
9. Make gender a cross-cutting theme of the workshop (e.g. by creating working groups that focus on the topic, or asking gender sensitive questions to panellists).



4.2. Tools identification and prioritization

Tool Identification Stage and Feasibility Studies



What is gender-responsive tool identification in ARM?

It is the process to prioritize risk management solutions and identify feasibility studies of risk management tools that takes into account gender-based constraints to inform the strategies of risk mitigation; risk transfer; and risk coping while examining which tools can be made more gender focused and/or which tools need to be specifically tailored to the most vulnerable groups.



Why do gender-responsive tool identification in ARM?

- People mitigate and cope with risk in different ways, based also on gender-specific constraints and capabilities.
- Tools, just as they need to be context-specific, also need to be gender-specific, in order to tailor ARM to the unique needs, roles, responsibilities of smallholder men, women, boys and girls.
- Integrating results from the risk assessment stage, gender-responsive tool identification serves to identify tools for ARM strategies that are inclusive, gender-differentiated, relevant, and effective.

Good practice examples

- IFAD provides extensive guidance on how to analyse and integrate gender responsiveness into tools for poverty-focused microfinance, including an examination of remittances. It is recommended to use this resource in the design of more generalized guidance on tool design (beyond microfinance), as it is comprehensive and flexible to adaptation based on contextual needs (see checklists B-D):
- IFAD. 2009. Gender and rural microfinance: Reaching and empowering women. IFAD: Rome. https://www.microfinancegateway.org/sites/default/files/mfg-en-paper-gender-and-rural-microfinance-reaching-and-empowering-women-aug-2009_0.pdf
- CAADP approach of evidence based planning and inclusive planning processes to stimulate equitable agriculture growth: Braimoh, A. et al. 2018. Increasing Agricultural Resilience through Better Risk Management in Zambia. World Bank: Washington (also see CAADP, 2016) <http://documents.worldbank.org/curated/en/330211524725320524/pdf/125784-WP-25-4-2018-9-34-36-ZambiaAgResilienceRiskMgtweb.pdf>
- FAO. 2001. Socio-Economic and Gender Analysis Programme (SEAGA). FAO: Rome. <http://www.fao.org/docrep/012/ak213e/ak213e00.pdf> (Chapter 7: Force Field Analysis and “GMR” Method)



How to do it: Basic gender integration

10. Carry out a rapid gender analysis for each tool using 2 guiding questions:
 - a) Can everyone access and use this tool in the same way, and if not, what are the reasons?
 - b) How can this tool be adapted/completed to achieve maximum access, usability, ownership and benefits for men and women smallholder farmers?



Tools

- **Tool H in annex:** Integration of gender into ARM tools: overview

Other ideas and suggestions – not in annex:

IFAD (2009) provides extensive guidance on how to analyse and integrate gender responsiveness into tools for poverty-focused microfinance, including an examination of remittances. It is recommended to use this resource in the design of more generalized guidance on tool design (beyond microfinance), as it is comprehensive and flexible to adaptation based on contextual needs (see checklists B-D).



how to do it: in-depth gender integration in the feasibility study

11. Choose an approach that incorporates many of the same steps outlined for risk assessments, notably sex disaggregated data collection, gender sensitising the TORs etc., (section I, steps 1-7, while focusing it on the specific tool).
12. Design, clear, gender-informed indicators to measure the gendered results of each individual tool.
13. Prioritize community-based risk management strategies (unless the most appropriate unit of analysis and action is shown to be at another level).
14. Map key informants (actors that can offer information and/or perspective on gender issues related to the proposed tools) and carry out KII and focus groups.
15. Ensure that the reports and studies on tools transversally integrate gender issues, gender differentiated capacity to manage/cope with risk, and contain actionable recommendations for making tools gender-responsive.
16. Make a strong case and concrete proposal for fostering research/studies/proposals that are gender responsive by commissioning context- and gender-specific studies on certain tools.



Tools

Suggested Tools – not in annex- which can be designed/developed/undertaken by the practitioner:

- Mapping/kit with available gender resources for each type of tool (highlighting 5-10 resources to consult for each tool).
- Complete gender-sensitive guidance on tool identification and prioritization (Gender-informed, zoom-in study with specific guidance on tool identification and prioritization (like the WB study on ASRA, but just for the next stage).



High level policy dissemination workshop



What is a gender-responsive high level ARM policy dissemination workshop?

It is a participatory validation event during which results from gender-sensitive feasibility studies are discussed with high-level actors and stakeholders to influence policy design and public investment into ARM with explicit gender equality goals.



Why do gender-responsive high level ARM policy dissemination workshop?

Accountability for gender issues is created at the level of institutional leadership influencing policies is ARM's main impact. The workshop also presents an opportunity to raise awareness and create interest in the topic of gender.



How to do it

The most important and basic actionable steps towards gender goals would be to **highlight the most important actions** (3-5 at most) that decision-makers can take to remove gender-based constraints to effective ARM, notably when discussing the results of the feasibility studies on the proposed ARM tools. To deepen the process, PARM/other actors can:

17. Present salient arguments, facts, statistics about challenges and solutions, make a convincing business case to gain government buy-in on the importance of gender responsive ARM and ARM tools.
18. This would also be the time to talk about the importance of linking ARM solutions (tools for investment) to social protection programs and safety nets as well as insurance schemes, access to finance and information and so forth.
19. Seek to invite as many high-level gender actors as possible, such as gender focal points of relevant ministries, ministers of gender, youth etc., country or regional gender focal points of relevant UN agencies or NGOs, women CEOs and bankers, etc. to encourage gender-effective synergies.

4.3. Trainings, knowledge management, partnership and policy integration

Learning and knowledge management



What is gender-responsive knowledge management in ARM?

It is a collection of systematic approaches to help gender-relevant information and knowledge flow to and between the right people at the right time so they can act more efficiently and effectively on integrating gender into ARM. It also involves actively engaging with stakeholders to advance gender goals and in support of finding sustainable solutions to gender-based constraints in ARM.



Why gender-responsive knowledge management in ARM?

- Through learning and knowledge management, gender integration into ARM can be continuously improved.
- The integration of crosscutting themes like gender depends on dedicated efforts at this level to identify and harness existing knowledge (such as lessons learned from pilot projects).
- Gender issues are still often misunderstood or cited as an afterthought, which leads to insufficient integration into policies and programmes. Dialogue and advocacy are essential to promote the “gender agenda” in ARM.

Good practice examples

- WFP's “Cash Playbook”, a guide for WFP staff to communicate on cash based transfers- to be adapted to gender and ARM.
- Madajewicz, M. et al. 2017. Managing Risks in Smallholder Agriculture. The impacts of R4 on livelihoods in Tigray, Ethiopia from 2012 to 2017. WFP and Oxfam: London.
<https://docs.wfp.org/api/documents/WFP-0000074332/download/>
- Jeans, H. 2016. The Future is a Choice: The Oxfam Framework and Guidance for Resilient Development. Oxfam: London.
<https://fr.scribd.com/document/342338848/The-Future-is-a-Choice-The-Oxfam-Framework-and-Guidance-for-Resilient-Development>



In-depth gender integration - How to do it

20. Ensure that gender is transversally integrated into all TOR, reports, studies, etc.
21. Continuously seek out, monitor and distil good practices on integrating gender in related fields to inform PARM's work.
22. Encourage the generation but also dissemination of information and knowledge on gender responsive ARM.
23. Continuously engage with partners on gender responsive ARM, and create new partners, to generate new and relevant knowledge on the topic.
24. Engage in dialogue that has the potential to engender creative and innovative collaborations and out of the box thinking.



Tools

Suggested Tools - not in annex - which can be designed/developed/found by the practitioner:

- The main "tool" here is individual and institutional reading, training and learning.
- The analytical framework for this study, as well as the above cited resources, are also an important basis for further dialogue on gender issues.
- **To be designed in the future:** "PARM gender playbook" - a guide on how to "do" gender in ARM, including terminology, how to communicate on it, what are the most important reference materials etc.

Capacity development



What is gender-responsive capacity development in ARM?

Capacity development is an essential crosscutting feature of ARM to improve means to plan and achieve, gender-responsive and gender-transformative ARM.



Why gender-responsive capacity development in ARM?

Lack of knowledge and information on gender is wide-spread in the entire agricultural sector. Gender is often misunderstood, an issue which training can help to tackle.

Meso-level: extension services; community workers etc. need to be gender-focused to better serve the micro-level (farms, farmers)

Macro-level: (officials) Gender-blind extension service delivery constrains the system's ability to meet and respond to all farmers' needs. Gender-responsive extension service delivery is therefore in itself a tool for gender-informed ARM.

To create gender-aware extension service, public officials should be also sensitized on gender issues in order to mainstream this component in policy decisions.

Good practice examples

- Petrics, H., et al. 2018. The Gender and Rural Advisory Services Assessment Tool. FAO. <http://www.fao.org/3/CA2693EN/ca2693en.pdf>
- Buehren, N. et al. 2017. The impact of Strengthening Agricultural Extension Services. Evidence from Ethiopia. World Bank: Washington DC. <https://openknowledge.worldbank.org/handle/10986/27976>
- PARM. 2017c. Liberia. Agricultural Risk Management Capacity Development Seminar (CD1), Volume 1. Main Report 20-21 April 2017. PARM: Rome. <http://p4arm.org/document/liberia-capacity-development-cd1-seminar/>
- CD2 Manual 2018. All 4 Modules or just Module 1&2 with the sections on gender equality or at least the unique conditions of women.
- Platenga, D. 2004. "Gender, Identity, and Diversity: Learning from Insights Gained" in Transformative Gender Training Vol. 12, No. 1, pp. 40-46. <http://gsdrc.org/document-library/gender-identity-and-diversity-learning-from-insights-gained-intransformative-gender-training/>



Basic gender integration -How to do it:

25. Transversally integrate gender into CD needs assessments
26. Make existing training tools gender informed.
27. Enhance integration of gender at operational training level - women and vulnerable groups (according to context) need to be properly integrated as contributors, as trainers, as participants etc.



Tools

- **Tool I** (in annex): Gender-informed ARM training checklist
- Have experience in needs assessment from a gender perspective, and in the design, implementation and delivery of training on gender issues
- Have **sound knowledge of gender theories and concepts, In-depth and up-to-date knowledge of gender issues in ARM**
- Use gender-responsive teaching skills/pedagogy
- Link gender knowledge to training practice
- Use gender-sensitive language and gender-sensitive materials
- Have a strategy to challenge participants' resistance and prejudices regarding gender issues, reflecting on their own practice
- Finally, ensure gender balance in teams of trainers and among participants as much as possible.



How to do it: In-depth gender integration

28. Develop training material on gender-based ARM adapted to the PARM target audience, based on global discussions with key informants and communities, best practices, case studies and lessons learned.
29. Encourage the creation of informal communities of practice (multi-stakeholder, multi-sectoral clusters of actors interested in or engaged in, gender issues in agriculture and especially in ARM).
30. Assist partner ministries in the conceptualization of gender-informed capacity building plans.
31. Develop recommendations for village-and farm-level extension services. For example, it is preferable that trainers work in tandem or teams that are geographically and gender balanced



Tools

Suggested Tools - not in annex- which can be designed/developed/found by the practitioner:

- **Existing/Expand:** Gender-informed training resources, including modules and sessions.
- **To be designed:** Model for a gender-informed capacity building plan.

Strategic partnership and synergies



What are gender-responsive partnerships and synergies for ARM?

These are all partnerships and synergies that help to achieve effective gender mainstreaming in ARM and eventually gender responsive ARM.



Why gender-responsive partnerships and synergies for ARM?

The facilitation of a holistic approach to ARM materializes synergies and partnerships across different levels of stakeholders, from farmers' cooperatives to international institutions, which can be leveraged for not only integrating gender into ARM, but also working collaboratively towards broader gender equality outcomes.

Strategic partnerships and synergies are needed to pursue a gender-transformative way of working that opens the doors for reducing structural inequalities and thereby, creating enabling environments for women's integration in ARM.

Economic empowerment is not enough, underlying gender inequalities must be addressed. Whilst underlying laws and policies governing gender equality practices, women's land rights and women's representation and active participation in decision making, and financial inclusion, are critical in determining gender outcomes of ARM, the specific regulatory framework governing agricultural investments can also influence these outcomes – and partnerships with governments are crucial vectors for encouraging gender-transformative investments!

Good practice examples

- African Risk Capacity Strategic Framework 2016-22
http://www.africanriskcapacity.org/wp-content/uploads/2017/01/PI_Strategic-Framework-2016-2020_20161207_EN_TA.pdf
- Inderberg, T.H. et al. 2015. "The future is a choice" in Climate Change Adaptation and Development: Transforming Paradigms and Practices. Oxford: Routledge.
<https://oxfamlibrary.openrepository.com/bitstream/handle/10546/604990/ml-resilience-framework-guide-120416-e.pdf;jsessionid=FAA231E040159B44D172289BCCFF7E9D?sequence=1>
- Senegal Agricultural Ministry: Gender Focal Point and ARM Focal Point are the same person – existence of an inter-ministerial gender committee.
- WFP Gender Toolkit – Guidance on Stakeholder Analysis.
<https://docs.wfp.org/api/documents/02cb728b1dab4c5f98a747afa7c17ce5/download/>
- Global Alliance for Resilience - AGIR Sahel and West Africa. 2013b. Methodological Guide for Inclusive National Dialogue Processes: "Formulation of 'National Resilience Priorities' (NRP-AGIR). OECD: Paris https://www.oecd.org/site/rpca/agir/AGIR%20plaquette_EN_pagebypage.pdf
- Acosta et al. ("Towards gender responsive policy formulation and budgeting in the agricultural sector: Opportunities and challenges in Uganda") from 2016 described a gender analysis process at policy level. A similar exercise was undertaken with regard to multi-sectoral climate adaptation in The Republic of Congo (Mouandza, 2012).
https://www.researchgate.net/publication/314134898_Towards_gender_responsive_policy_formulation_and_budgeting_in_the_agricultural_sector_Opportunities_and_challenges_in_Uganda; methodology for gender-sensitive innovation: <http://tools4valuechains.org/tool/link-methodology>

Basic gender integration - How to do it:

This is long-term, dedicated work / no “basics” developed.



In-depth gender integration - How to do it:

32. Undertake a “gender alliances” stakeholder mapping exercise of PARM’s existing partners (global, regional national, local), their relevance for gender in ARM, how their work is linked, who are the most influential, who are the most likely to collaborate in the long term, which partners are currently missing from the network, etc.
33. Participate in and building the capacities of local gender networks (country level) in ARM.
34. Identify countries that prioritize gender in their development priorities and champion “win-win” synergies between gender and ARM (synchronize ARM proposals with government budgeting and planning).
35. Leverage, deepen, shape and build upon the mapped partnerships in order to advance gender-responsive learning, action and reflection at all levels of the PARM cycle. Seize opportunities at all stages of the ARM cycle, and PARM process, to keep the conversation around the benefits of gender-informed governance going.
36. Encourage the creation of inter-sectorial and inter-ministry committees and working groups on gender issues, or, where they already exist, engage with these types of bodies.
37. See workshop “how to do it” notes to as the partners invited to events, should also be working in organisations that promote gender equality.



Tools

- **Tool J** (in annex): Key gender stakeholder mapping checklist for ARM

Suggested Tools - not in annex- to be designed/developed/found by the practitioner:

- A note on the Senegal best practice example cited in this study to motivate creation of committees.

4.4. Monitoring and evaluation

Monitoring and evaluation



What is gender-responsive monitoring and evaluation in ARM?

It is a follow-up on an ARM strategy, routinely surveying tools for gender results and impacts, looking at immediate and longer terms impacts, to determine whether the intervention has succeeded in strengthening the ARM capacities of farmers in a strategic and inclusionary manner.



Why gender-responsive monitoring and evaluation in ARM?

Monitoring efforts should evaluate whether ARM strategies are successfully addressing the priorities of both women and men and impacting them both positively.

Good practice examples

- WFP Gender Toolkit Guidance on M&E: Gender-informed monitoring plan checklist <https://docs.wfp.org/api/documents/660925b4f7c04d5f9e9c226952b6358b/download>



Basic gender integration - How to do it:

- Specific gender-related indicators and benchmarks should be included in results management, from ASRA (risk assessment) level – defining indicators, timing and responsibility for data collection by partners, especially SADD on the effectiveness of the tools for different groups.
- Carry out data collection and fact-finding process in an inclusive, balanced and participatory manner - discuss with relevant male and female stakeholders the most useful ways to communicate monitoring and evaluation findings.



Tools

- **Tool K** (in annex): Gender-informed monitoring and evaluation checklist for ARM
Potentially, all tools for sections i and ii can be used also for monitoring and evaluation.



In-depth gender integration - How to do it:

38. Raise awareness among stakeholders for monitoring gender data and results.
39. Learnings can then feed back into stage iii. - reflect on how the findings contained therein can be shared with vulnerable groups and especially with women.
40. Planning for follow-up and application of the gender concepts learned during capacity development.
41. Evaluate public policies related to gender in ARM to guide government actions.



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PARM
PLATFORM FOR
AGRICULTURAL RISK
MANAGEMENT



Annexes

A.1: Analysis Matrix

A.2: Key Informant Interview Questionnaire

A.3: Tools

A.1. Analysis matrix

The below matrix was used to guide the process of analysing data from the desk review and key informant interviews. It simultaneously serves the purpose of identifying and justifying the good practices and solutions.

The left column of the table on page 9 below reflects the different stages of the PARM process. The top column lists the logic of analysis for each area, outlining **a)** the rationale (the “why”) of integrating gender, **b)** the favourable, **c)** the unfavourable factors for the integration of gender and **d)** necessary steps or action points (the “how”).

In order to integrate gender in ARM, it needs to be integrated at every stage of the ARM cycle, taking into account gender-based constraints, social inclusion and resilience.



I. Gender-responsive Risk Assessment and Prioritization. Stage of the PARM process: Risk Assessment Study				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<p>ARM is not gender neutral, farmers are not a homogenous group. Gender-based constraints impact and restrict male and female smallholder's ability to manage risk.</p> <p>A gender analysis of agricultural risk prioritization will lead to gender responsive ARM strategies.</p>	<ul style="list-style-type: none"> Existing resource on gender-informed risk assessment (World Bank 2017) that offers useful reflection, best practices, tools. Availability of author for assisting PARM with gender integration. Wealth of frameworks and guidelines for related assessments (gender-specific vulnerabilities in production, markets/supply chains, impact of macro-level policy and risks from a gender perspective, gender-informed DRM etc., many of which are highlighted in the present study). 	<ul style="list-style-type: none"> Lack of SADD and gender statistics at governmental level. Overall gender-blind language and perspective in existing country-level literature. Complexity of identifying an appropriate unit of analysis. Exclusion of vulnerable groups in the assessment process. 	<ol style="list-style-type: none"> Identify the supply chains for cash crops and those for food crops; Identify the supply chains with high participation of men and those of high participation of women; Use population, poverty and housing census reports to obtain information of gender issues, as done in Malawi (Giertz et al., 2015); Do the quantitative analyses of those supply chains based on the intensity of events and frequency of events, as PARM usually does. Ideally the risk assessment should look beyond monetary value, and income losses and disaggregating them by sex, it would also use more qualitative and participative data collection methods, such as focus groups, semi-structured interviews with the diversified stakeholders previously identified to gather more information, which is not usually available, such as time spent fetching water, seasonal calendars, access to finance, or food security levels – these may be impacts of risks that are not easily quantifiable, but nonetheless necessary to integrate. In assessing the Capacity to Manage by stakeholders, incorporate a vulnerability analysis. Those stakeholders with less capacity to manage will be ranked as priority for policy and interventions. Those vulnerable groups depending on the context will potentially be geographically located (i.e. arid zones), food insecure, gendered differentiated access to resources (land, technology, information, etc.), subsistence households, etc. Highlight gender equality explicitly in this analysis; identifying overall contextual constraints (such as lack of access to transport, education, information, finance...) and opportunities (existence of a strong civil society, strong value chain integration for certain groups). 	<ul style="list-style-type: none"> World Bank. 2017. Gender and Agricultural Risk. A Gender Approach to Agricultural Risk Assessments and Management Strategies. It is the only resource on specifically gender in ARA, with many helpful guidance. International Centre for Research on Women (ICRW). 2012. Capturing the Gender Effect. Guidance for Gender Measurement in Agriculture Programs. ICRW has created a helpful overview of domains, indicators, a WInd variables to guide measurement of gender in agricultural supply chains and related programs (2012, p. 4). FAO's gender-sensitive value chain framework (2016) for a conceptualization of the unit of analysis - multi-level approach that identifies gender-based constraints at several relevant levels (in ARM this can be at individual, household-farming system, community) FAO. 2018. Guidance note on gender-sensitive vulnerability assessments in agriculture. Although it needs to be operationalized for ARM, FAO's 2018 vulnerability assessment guidance explores the main constraints that male and female farmers face in the agriculture sector Use FAO agriculture sector country profiles if available (example: FAO and CEDEAO, 2018 – Mali) Women's Empowerment in Agriculture Index (IFPRI et al. 2012) for domains and indicators. A risk assessment from Malawi (Giertz et al., 2015) used the Malawi Millennium Development Goal Report, Population and Housing Census Report and Poverty and Vulnerability Assessment Report to obtain information of gender issues.



I. Gender-responsive Risk Assessment and Prioritization. Stage of the PARM process: National Stakeholder Workshop				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<ul style="list-style-type: none"> Information and perspective on gender in ARM is often non-existent. The Workshop itself needs to be used to create a context-specific precedent by bringing actors together that have information and/or perspective on gender issues in agriculture It is critical for policy makers to understand how both women and men farmers experience and adapt to climate change to redesign or formulate new policies that support food production by women and men thereby reducing food insecurity in the country (CIAT, 2018b). 	<p>The workshop offers an opportunity for making the process inclusive of a broad range of actors that can offer valuable data, information and perspective to the assessment process and aid in prioritization of risks for the local context</p>	<ul style="list-style-type: none"> "business as usual" – not enough effort is made to think beyond the agricultural sector and the typical actors consulting in national-level workshops Barriers in language Time and resource constraints 	<ol style="list-style-type: none"> Bring the Ministries responsible for youth, gender equality and related topics to the stakeholder's workshop, as well as women's associations, cooperatives and federations Include researchers who work on the nexus between agriculture and gender. Make gender a cross-cutting theme of the workshop (e.g. by creating working groups that focus on the topic, or asking gender sensitive questions to panelists). 	<p>If time and resources allow, it can be useful to organize two separate workshops: A preceding workshop tailored to farmers, where they can discuss the links between agricultural risk and gender in depth (e.g. in local languages, using tools for inclusionary and gender-sensitive facilitation, etc.). Results then feed into the national level workshop, with participants from workshop 1 presenting on the results.</p>



II. Tools Identification and Prioritization. Stage of the PARM process: Tool Identification and Feasibility Studies				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<ul style="list-style-type: none"> • People cope with risk in different ways, based on gender-specific constraints and capabilities. • Tools, just as they need to be context-specific, also need to be gender-specific, in order to tailor ARM to the unique needs, roles, responsibilities of smallholder men, women, boys and girls. 	<ul style="list-style-type: none"> • PARM's holistic approach allows for an integrated process with high likelihood of achieving desired impacts. • If gender analysis was carried out at risk assessment stage, it can serve to identify tools for ARM strategies that are inclusive, gender-differentiated, relevant, and effective • Broad evidence base on integration of gender into certain tools that can be used in ARM (e.g. agricultural technologies and service provision, credit, remittances and insurance, social protection, supply chain management, early warning systems etc.). 	<ul style="list-style-type: none"> • Lack of SADD and gender statistics at governmental level. • Overall gender-blind language and perspective. • Complexity of identifying an appropriate unit of analysis. • Exclusion of vulnerable groups in the tools identification process. • Lack of evidence and practical examples of gender integration into certain tools (e.g. warehousing, information systems). 	<p>10. Carry out a rapid gender analysis for each tool using 2 guiding questions:</p> <ol style="list-style-type: none"> a) Can everyone access and use this tool in the same way, and if not, what are the reasons? b) How can this tool be adapted/completed to achieve maximum access, usability, ownership and benefits for men and women smallholder farmers? <p>11. Choose an approach that incorporates many of the same steps outlined for risk assessments, notably sex disaggregated data collection, gender sensitising the TORs etc., (section 1, steps 1-7, while focusing it on the specific tool).</p> <p>12. Design, clear, gender-informed indicators to measure the gendered results of each individual tool.</p> <p>13. Prioritize community-based risk management strategies (unless the most appropriate unit of analysis and action is shown to be at another level).</p> <p>14. Map key informants (actors that can offer information and/or perspective on gender issues related to the proposed tools) and carry out KI and focus groups.</p> <p>15. Ensure that the reports and studies on tools transversally integrate gender issues, gender differentiated capacity to manage/cope with risk, and contain actionable recommendations for making tools gender-responsive.</p> <p>16. Make a strong case and concrete proposal for fostering research/studies/proposals that are gender responsive by commissioning context- and gender-specific studies on certain tools.</p>	<ul style="list-style-type: none"> • Investments in community-based risk reduction processes as crucial measures as they harness capacities and assets that can best absorb shock and stress • CAADP approach of evidence based planning and inclusive planning processes to stimulate equitable agriculture growth (Bramoh, 2018; CAADP, 2016) • IFAD (2009) provides extensive guidance on how to analyse and integrate gender responsiveness into tools for poverty-focused microfinance, including an examination of remittances. Use this resource in the design of more generalized guidance on tool design (beyond microfinance), as it is comprehensive and flexible to adaptation based on contextual needs. • FAO, 2001. Socio-Economic and Gender Analysis Programme (SEAGA)

II. Tools Identification and Prioritization. Stage of the PARM process: High Level Policy Dissemination Workshop				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<p>Gender mainstreaming necessitates a top-down element: accountability for gender issues is created at the level of institutional leadership.</p>	<ul style="list-style-type: none"> Influencing policies is PARM's main impact. An opportunity to raise awareness and create interest in the gender topic. 	<ul style="list-style-type: none"> High-level actors often lack awareness of, knowledge about, and accountability for: gender based constraints, non-women-centred approaches that promote broader social inclusion, relevance of gender in agriculture, and especially in risk management, actionable solutions Absence of agricultural research, policy and programming taking into account women farmers and their different needs Lack of dedicated funds, fluctuations in funding for increasing gender-based constraints to resilience and risk management Compartmentalization between different sectorial ministries and other actors 	<p>17. Present salient arguments, facts, statistics about challenges and solutions, make a convincing business case to gain government buy-in on the importance of gender responsive ARM and ARM tools;</p> <p>18. This would also be the point to talk about the importance of linking ARM solutions (tools for investment) to social protection programs and safety nets as well as insurance schemes, access to finance and information and so forth;</p> <p>19. Seek to invite as many high-level gender actors as possible, such as gender focal points of relevant ministries, ministries of gender, youth, etc., country or regional gender focal points of relevant UN agencies or NGOs, women CEOs, bankers, etc. to encourage gender-effective synergies.</p>	



III. Trainings, Knowledge Management, Partnership and Policy Integration. Stage of the PARM process: Learning and Knowledge Management				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<p>Through learning and knowledge management, ARM can be continuously improved.</p> <p>The integration of crosscutting themes like gender, depends on dedicated efforts at this level to identify and harness existing knowledge (such as lessons learned from pilot projects). Gender issues are still often misunderstood or cited as an afterthought, which leads to insufficient integration into policies and programmes. Dialogue and advocacy are essential to promote the "gender agenda" in ARM.</p>	<p>Existing resources from agriculture related fields.</p>	<ul style="list-style-type: none"> Lack of literature that explicitly deals with the link between gender and ARM Need for context-specific knowledge – necessitating a critical approach to whether learning and knowledge gains are replicable and transferable Current lack of multi-lingual consultants with extensive expertise in both areas (ARM and gender) 	<p>20. Ensure that gender is transversally integrated into all TOR, reports, studies, etc.</p> <p>21. Continuously seek out, monitor and distil good practices on integrating gender in related fields to inform PARM's work.</p> <p>22. Encourage the generation but also dissemination of information and knowledge on gender responsive ARM.</p> <p>23. Continuously engage with partners on gender responsive ARM, and create new partners, to generate new and relevant knowledge on the topic.</p> <p>24. Engage in dialogue that has the potential to engender creative and innovative collaborations and out of the box thinking.</p>	<ul style="list-style-type: none"> For #22: WFP's (internal) "Cash Playbook", a guide for WFP staff to communicate on cash based transfers, integrating the list of criteria that was used for chapter 2.3, can offer useful direction and be adapted to ARM. R4 Rural Resilience Initiative - WFP (Madajewicz et al., 2017). The impacts of R4 on livelihoods in Tigray, Ethiopia from 2012 to 2017. Jeanes, H. 2016. The Future is a Choice: The Oxfam Framework and Guidance for Resilient Development. Oxfam: London.

III. Trainings, Knowledge Management, Partnership and Policy Integration Stage of the PARM process: [Capacity Development](#)

a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<p>When asked what would be the key barrier for integrating gender into ARM, nearly all key informants pointed towards the lack of knowledge and information on the topic that is wide-spread in the entire agricultural sector. Gender is often misunderstood, an issue which training can help to tackle.</p> <p>Gender-blind extension service delivery constrains the system's ability to meet and respond to all farmers' needs. Gender-responsive extension service delivery is therefore in itself a tool for gender-informed ARM.</p>	<ul style="list-style-type: none"> The audience of capacity building does not only consist of general officers in projects, but also includes leaders and directors, and government officials, as well as extension services. It therefore offers another central opportunity for increasing awareness of, knowledge about, and accountability gender-responsive ARM Increased interest in ARM AND gender as both thematic areas continuously gains momentum (e.g. with OECD, African Risk Capacity, NEPAD, World Bank...) trainings are most likely very welcome especially with government actors 	<ul style="list-style-type: none"> PARM CD can deliver training at university level, not at extension worker level. However, extension services worldwide need to be overhauled to become more gender-sensitive A central challenge is that in developing countries, most participants in trainings are men (whether at university level or at farm level/extension workers) and that there can be a cultural identity issue if the trainer is a white and/or female outsider Partner organizations carrying out village or farm level trainings need information on gender-informed training 	<ol style="list-style-type: none"> Transversally integrate gender into CD needs assessments Make existing training tools gender informed. Enhance integration of gender at operational training level - women and vulnerable groups (according to context) need to be properly integrated as contributors, as trainers, as participants etc. Develop training material on gender-based ARM adapted to the PARM target audience, based on global discussions with key informants and communities, best practices, case studies and lessons learned. Encourage the creation of informal communities of practice (multi-stakeholder, multi-sectoral clusters of actors interested in or engaged in, gender issues in agriculture and especially in ARM). Assist partner ministries in the conceptualization of gender-informed capacity building plans. Develop recommendations for village-and farm-level extension services. For example, it is preferable that trainers work in tandem or teams that are geographically and gender balanced. 	<ul style="list-style-type: none"> Petrics, H., et al. 2018. The Gender and Rural Advisory Services Assessment Tool. FAO. Buehren, N. et al. 2017. The Impact of Strengthening Agricultural Extension Services. Evidence from Ethiopia. World Bank: Washington DC. PARM. 2017c. Liberia. Agricultural Risk Management Capacity Development Seminar (CD1), Volume 1. Main Report 20-21 April 2017. PARM: Rome. D2 Manual 2018. All 4 Modules or just Module 1&2 with the sections on gender equality or at least the unique conditions of women. Platenga, D. 2004. "Gender, Identity, and Diversity: Learning from Insights Gained" in Transformative Gender Training Vol. 12, No. 1, pp. 40-46. Provides training methodology for social inclusion.



III. Trainings, Knowledge Management, Partnership and Policy, Stage of the PARM process: Strategic Partnerships and Synergies				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
<ul style="list-style-type: none"> While gender mainstreaming can be regarded as a tool to increase the effectiveness, efficiency and quality of programs, it also should be regarded as an end in itself as it has the potential to increase the human rights goals of equality and equity. Economic empowerment is not enough, underlying gender inequalities must be addressed. Strategic partnerships and synergies are needed to pursue a gender-transformative way of working that opens the doors for reducing structural inequalities and thereby, creating enabling environments for women's integration in ARM. Whilst underlying laws and policies governing gender equality practices, women's land rights and women's representation are critical in determining gender outcomes of ARM, the specific regulatory framework governing agricultural investments can also influence these outcomes – and partnerships with governments are crucial vectors for encouraging gender-transformative investments. 	<p>In countries where gender is a dedicated development priority, gender-sensitive ARM processes can be "sold" as being in line with, and contributing to, gender strategic objectives. PARM can be a positive influencer as it regularly engages with a broad range of stakeholders.</p>	<ul style="list-style-type: none"> PARM has a limited mandate with regards to partnerships. No dedicated staff for managing partnerships, let alone with a gender focus. As of yet, PARM has to complete a learning cycle on gender issues in order to become effective advocates (this study seeks to contribute to that). PARM participates in numerous conferences and events where it can promote a new, gendered approach to ARM and engage in dialogue with other actors (e.g. Ilaria Tedesco's presentation at the 2nd International Workshop on Modelling of Physical, Economic and Social Systems for Resilience Assessment organized by the EU Commission in 2017). 	<p>32. Undertake a "gender alliances" stakeholder mapping exercise of PARM's existing partners (global, regional national, local), their relevance for gender in ARM, how their work is linked, who are the most influential, who are the most likely to collaborate in the long term, which partners are currently missing from the network, etc.</p> <p>33. Participate in and building the capacities of local gender networks (country level) in ARM.</p> <p>34. Identify countries that prioritize gender in their development priorities and champion "win-win" synergies between gender and ARM (synchronize ARM proposals with government budgeting and planning).</p> <p>35. Leverage, deepen, shape and build upon the mapped partnerships in order to advance gender-responsive learning, action and reflection at all levels of the PARM cycle. Seize opportunities at all stages of the ARM cycle, and PARM process, to keep the conversation around the benefits of gender-informed governance going.</p> <p>36. Encourage the creation of inter-sectorial and inter-ministry committees and working groups on gender issues, or, where they already exist, engage with these types of bodies.</p> <p>37. See workshop "how to do it" notes to as the partners invited to events, should also be working in organisations that promote gender equality.</p>	<ul style="list-style-type: none"> Inderberg, T.H. et al. 2015. "The future is a choice" in Climate Change Adaptation and Development: Transforming Paradigms and Practices. African Risk Capacity Strategic Framework 2016-22. Global Alliance for Resilience - AGIR Sahel and West Africa. 2013b. Methodological Guide for Inclusive National Dialogue Processes: "Formulation of National Resilience Priorities" (NRP-AGIR). OECD: Paris WFP Gender Toolkit – Guidance on Stakeholder Analysis. Acosta et al. ("Towards gender responsive policy formulation and budgeting in the agricultural sector: Opportunities and challenges in Uganda") from 2016 described a gender analysis process at policy level. A similar exercise was undertaken with regard to multi-sectoral climate adaptation in The Republic of Congo. Senegal Agricultural Ministry: Gender Focal Point and ARM Focal Point are the same person – existence of an inter-ministerial gender committee. Ministry: Gender Focal Point and ARM Focal Point are the same person – best case scenario!



III. Trainings, Knowledge Management, Partnership and Policy, Stage of the PARM process: Integration Monitoring of Impact and results , Facilitate Implementation of Action Plan .				
a) Rationale for integrating gender	b) Opportunities	c) Threats	d) Operational steps to be implemented	e) Good practice examples (ideas and entry points related to this stage)
Monitoring efforts should evaluate whether ARM strategies are successfully addressing the priorities of both women and men and impacting both positively. Disaster resilience and risk reduction approaches must be gender-sensitive and integrated with development interventions (ActionAid and DFID, 2011).	Wealth of resources on gender-sensitive monitoring and evaluation.	<ul style="list-style-type: none"> Challenge: project implemented by partners at local level, hard to follow up. Absence of gender-informed indicators against which to monitor and evaluate results. When "baseline" (ARA, feasibility studies, training...) does not integrate gender, M&E cannot do so, neither. 	<p>38. Raise awareness among stakeholders for monitoring gender data and results.</p> <p>39. Learnings can then feed back into stage III, reflect on how the findings contained therein can be shared with vulnerable groups and especially with women.</p> <p>40. Planning for follow-up and application of the gender concepts learned during capacity development.</p> <p>41. Evaluate public policies related to gender in ARM to guide government actions.</p>	<ul style="list-style-type: none"> WFP Gender Toolkit, section on M&E. IFAD, 2018. How to do design of gender transformative smallholder agriculture adaptation programmes. IFAD: Rome.



A.2. Key informant interview questionnaire

Study on Identifying the Conceptual and Operational Gender Dimension in Agricultural Risk Management
Survey Questions with Guidance Note

I would like to ask you some questions about how gender is considered in ARM or related fields, within your organisation or institution, or in the work of others that you are aware of. Your responses will inform the fact-finding process and focus the paper objectives towards partner needs and interest areas. These inputs will enhance the vision put forward in the paper on how to move towards improved gender-responsive food security and nutrition early warning monitoring systems, building on existing approaches and initiatives among the partners and members.

Gender analysis refers to the process of identifying social differences between and among women and men, girls and boys, including relationship dynamics, decision-making power, risk perceptions, beliefs and values, and their different life circumstances, drawing from qualitative and quantitative sources, to assess how these impact upon their vulnerabilities and outcomes.

We will ask you 9 questions (please see attached questionnaire). You can also opt to fill in the questionnaire and send it back to Desiree Zwanck (zwanck@gmail.com) without any interview taking place. The interview discussion itself should not take more than 20 minutes. The interviewer will note all responses. We thank you for your time and contribution to this process. Please state if it is ok if your answers are attributed to your name and organisation, or if they should not be for attribution?

1. Interviewee information

Name:

.....

Organisation/Institution:

.....

Title/technical unit:

.....

a) Where do you see a link between gender and ARM?

.....

.....

.....



2. Conceptual outlook

b) Are you familiar with agricultural risk management? If yes, can you give a very brief definition?

.....

.....

.....

c) Where do you see a link between gender and ARM?

.....

.....

.....

d) Do you see a link with any other policies or interventions that seek to enhance resilience in agriculture?

.....

.....

.....

3. Experience and perceived priorities and gaps

e) Do you have any experience with gender in any agriculture-related field? What are your lessons learned, for example about how risks affect men and women farmers differently?

.....

.....

.....

f) Do you know of analytical work, frameworks or guidelines that shows or addresses

.....

.....

.....



How droughts and other climate shocks, pests, diseases, policy changes, market-related risks (shocks to supply chains, price fluctuations) affect women farmers and men farmers differently?

.....

.....

.....

How women farmers manage agricultural risk differently from men farmers?

.....

.....

.....

How to link agricultural risk with social protection?

.....

.....

.....

Or any other work related to gender and ARM?

.....

.....

.....



4. Necessary and proposed actions

g) If you were to try and integrate gender into the ARM process (e.g. risk assessment, tool identification, advocacy, partnerships, learning...) how would you go about it? For example,

.....
.....
.....

where would you start/where do you see the best entry point?

.....
.....
.....

where would you see the biggest challenge?

.....
.....
.....

how would you go about tackling that challenge?

.....
.....
.....

with whom would you collaborate, who would be your allies, who would open doors?

.....
.....
.....



how would you go about knowledge management?

.....
.....
.....

h) How would you ensure a “true” gender approach to ARM (not women-centred, and with intersectional focus (age, ethnicity, handicap...)?

.....
.....
.....

5. Wrap Up

i) Is there anything you would like to add, something that was not reflected in the survey ?

.....
.....
.....

A.3. Tools

This annex contains

Tool A: Checklist for a gender-responsive ARM process

Tool B: PARM gender-informed product checklist

Tool C: Model for gender-informed terms of references for agricultural risk assessments in Liberia

Tool D: World Bank guidance on lines of enquiry for research and fieldwork in ASRA

Tool E: ARM Capacity and Vulnerability Analysis (CVA) Matrix

Tool F: Domains and indicators for gender-informed supply chain analysis

Tool G: Gender-informed key informant interview questionnaires for agricultural value chains

Tool H: Integration of gender into ARM tools: overview

Tool I: Gender-informed ARM training checklist

Tool J: Key gender stakeholder mapping checklist for ARM

Tool K: Gender-informed monitoring and evaluation checklist for ARM



Tool A: Checklist for a gender-responsive ARM process

Modeled after FAO. 2016b. Gender-responsive disaster risk reduction in the agriculture sector, Guidance for policy-makers and practitioners. FAO: Rome.

Conceptual foundation:

- Recognize that risk and vulnerability have a fundamental social dimension: men and women's livelihoods and perspectives differ in relation to specific risks and this awareness should guide all work related to ARM. For example, men and women may have different jobs along a supply chain. These jobs may imply different types of vulnerability to risks, making it essential that risks be understood from men and women's perspectives.
- Be aware of and avoid gender-based biases, such as assuming that women are more vulnerable than men. Women and men, boys and girls often have their own experience responding to risks and all can be powerful agents of risk management. Gender biases can also influence what is defined as being at-risk. For example, in some households, men and women grow different types of crops, with men's crops generating an income and women used for household food consumption. While the crops may have different economic values, or uses, both sets of crops should be prioritized for protection from disaster-related impacts.
- Take into account gender-based constraints, gender equality and social inclusion, and resilience as cross-cutting issues.

Participating organizations and people:

- Encourage a participatory process with consultations and feedback mechanisms with a wide range of stakeholders, including women's networks and academia.
- Ensure that the team members responsible for the process have different backgrounds and skills to provide deeper insights and understanding into the information gathered. Ideally all should have skills in gender analysis and one member should be the lead gender expert.
- Include women's organizations and farmers' organizations in the planning/steering committee.
- Provide gender training as part of capability development.
- Aim for a balanced representation of women and men among leadership and decision-making positions, and at all levels of staffing.

Work approach:

- Promote an attitude of respect, humility, patience and a willingness to learn in order to build a positive relationship within the planning team, and with local women and men from different socio-economic groups, who will contribute to the ARM process.
- Collect information from various sources using both quantitative and qualitative approaches so that as many perspectives as possible are captured.

ARM cycle (risk identification/ assessment / tool assessment/ tool implementation / M&E):

- Carry out gender analysis at all stages of the cycle, starting from the initial risk identification and assessment phase and develop gender-sensitive indicators.
- Allocate funds in the planning budget to recruit gender experts and for the collection and analysis of sex-disaggregated data.

(...)

Summary of gender entry points in the development of gender-informed PARM process		
Stages	Conceptual guidance	Gender entry points
Risk assessment	<p>To understand gender based constraints to risk management, a set of criteria can be applied. Criteria include:</p> <ol style="list-style-type: none"> 1. Those gender-based constraints that restrict a more efficient response to shocks or place disproportionate costs or weights on women in the face of risk; 2. Those gender-based constraints that exclude women's access to (and disposal of) assets; 3. Those that discriminate against women's participation in technology, information, and higher- value markets; 4. Those that interfere with the achievement of more livelihood resilience to shocks. 	<ul style="list-style-type: none"> • In the TOR for risk assessments, explicitly state expectations on and the importance of integrating gender in the design and implementation of the study, and seek to transversally integrate gender. • Document the gender dimensions of the risks addressed, notably how men and women are impacted by them, taking into account vulnerability analysis, and their ability to manage them. Drawing on communities' perspectives and experiences, taking into account the perceptions of both men and women. • Seek to collect, track and analyse comprehensive sex and age-disaggregated data and gender statistics at all levels, in all variables and in all tools wherever possible (at production level, at food processing or marketing steps, at country level, at community level, along a supply chain, by commodity etc.). <p>Concrete guidance for supply chains (example):</p> <ol style="list-style-type: none"> 1. Identify the supply chains for cash crops and those for food crops; 2. Identify the supply chains with high participation of men and those of high participation of women; 3. Do the quantitative analyses of those supply chains based on the intensity of events and frequency of events, as PARM usually does. Ideally the risk assessment should look beyond monetary value, and income losses and disaggregating them by sex, it would also use more qualitative and participative data collection methods, such as focus groups, semi structured interviews with the diversified stakeholders previously identified to gather more information which is not usually available, such as time spent fetching water, seasonal calendars, access to finance, or food security levels – these may be impacts of risks that are not easily quantifiable, but nonetheless necessary to integrate. 4. When assessing the impact and frequency of risks, and prioritizing them, 5. In assessing Capacity to manage by stakeholders, incorporate a vulnerability analysis. Those stakeholders with less capacity to manage will be ranked as priority for policy and interventions. Those vulnerable groups depending on the context will potentially be geographically located (i.e. arid zones), food insecure, gendered differentiated access to resources (land, technology, information, etc.), subsistence households, etc. 6. Highlight gender equality explicitly in this analysis; identifying overall contextual constraints (such as lack of access to transport; education, information, finance...) and opportunities (existence of a strong civil society, strong value chain integration for certain groups). <p>When presenting and validating results in a workshop:</p> <p>Highlight the most important actions (3-5 at most) that decision-makers can take to remove gender-based constraints to effective ARM, notably when discussing the results of the feasibility studies on the proposed ARM tools.</p> <p style="text-align: right;">(...)</p>



(...) Summary of gender entry points in the development of gender-informed PARM process

Stages	Conceptual guidance	Gender entry points
Tool identification	<p>Carry out a rapid gender analysis for each tool using 2 guiding questions:</p> <ol style="list-style-type: none"> 1. Can everyone access and use this tool in the same way, and if not, what are the reasons? 2. How can this tool be adapted/completed to achieve maximum access, usability, ownership and benefits for men and women smallholder farmers? Make tools accessible and usable by both men and women. If necessary, develop women-specific tools (sometimes this is needed to balance out gender-based constraints) 	<ul style="list-style-type: none"> • Prioritize community-based risk management strategies (unless the most appropriate unit of analysis and action is shown to be at another level); • Map key informants (actors that can offer information and/or perspective on gender issues related to the proposed tools), carry out key informant interviews, and focus groups. • Present salient arguments, facts, statistics about challenges and solutions, make a convincing business case to gain government buy-in on the importance of gender responsive ARM and ARM tools; • This would also be the point to talk about the importance of linking ARM solutions (tools for investment) to social protection programs and safety nets as well as insurance schemes, access to finance and information and so forth; <p>When presenting and validating results in a workshop:</p> <ul style="list-style-type: none"> • Seek to invite as many high-level gender actors as possible, such as gender focal points of relevant ministries, ministries of gender, youth, etc., country or regional gender focal points of relevant UN agencies or NGOs, women CEOs, bankers, etc. to encourage gender-effective synergies.
Learning, Knowledge Management and Capability Development, Partnerships and Dialogue	<ul style="list-style-type: none"> • Through learning and knowledge management, ARM can be continuously improved upon. • The integration of cross-cutting themes like gender depends on dedicated efforts at this level to identify and harness existing knowledge (such as lessons learned from pilot projects) 	<ul style="list-style-type: none"> • Continuously seek out, monitor and distil good practices on integrating gender in related fields to inform PARM's work. • Engage in dialogue that has the potential to engender creative and innovative collaborations and out of the box thinking. • Transversally integrate gender into CD needs assessments • Make existing training tools gender informed. • Enhance integration of gender at operational training level - women and vulnerable groups (according to context) need to be properly integrated as contributors, as trainers, as participants etc. • Develop recommendations for village-and farm-level extension services.
Monitoring and Evaluation	<p>The last section of the plan usually addresses the practical issues related to putting the plan into place. Even if gender issues are thoroughly addressed in the previous sections of the plan, special attention must be given to how practical gender issues will be addressed in order for the implemented DRR activities to meet men's and women's needs.</p>	<ul style="list-style-type: none"> • Employ monitoring mechanisms that ensure participation by women and decision-making power of women's groups. • Monitoring efforts should evaluate whether ARM strategies are successfully addressing the priorities of both women and men and affecting both positively. • Raise awareness among stakeholders for monitoring gender data and results • Learnings can then feed back into stage iii. - reflect on how the findings contained therein can be shared with vulnerable groups and especially with women.

Tool B: PARM gender-informed product checklist

Any document produced by PARM (TOR, studies etc.) should include following criteria:

1. The authoring team of the resource (study, report etc.) is geographically and gender balanced;
2. The resource uses gender-informed language throughout, including male and female forms for terms describing key actors, avoidance of gender-blind terminology (e.g. "farmers");
3. The authoring team's expertise on gender issues can be confirmed;
4. Data collection tools are gender-informed and the resource points out gaps in gender disaggregated data and gender-informed data (gender-specific indicators and gender statistics);
5. The resource takes into account information and literature on gender issues, as well as relevant instruments or policies, listing them in the resources section;
6. Expectations on gender integration in the design and implementation are stated explicitly;
7. There is a specific section on gender differences that summarizes or highlights the gender-informed analysis, findings, results, factors, conclusions and recommendations;
8. Gender differences are reflected in every section (context analysis, design, operational plan, recommendations, etc.);
9. The stakeholder analysis takes into account gender-specific vulnerabilities;
10. The data collection and fact-finding process has been carried out in an inclusive, balanced and participatory manner;
11. The resource reflects on how the findings contained therein can be shared with men and women;
12. The resource does not reinforce or reproduce gender stereotypes, for example by depicting men or women in gender normative roles or stating - and failing to reflect on - gender-biased assumptions;
13. The reports concerning tools and training activities prove to be gender balanced, applying a gender lens on the activities' outcomes and achievements.



Tool C: Model for gender-informed terms of references for agricultural risk assessments in Liberia

Context

The Platform for Agricultural Risk Management (PARM), a G8-G20 initiative hosted by the International Fund for Agricultural development (IFAD), provides technical support to Governments on Agricultural Risk Management (www.p4arm.org). PARM Secretariat is working in the African continent in strategic partnership with the NEPAD Agency (African Union's New Partnership for Africa's Development), which, in collaboration with the Food and Agriculture Organization (FAO) has been establishing since 2011 an Agriculture and Food Insecurity Risk Management (AFIRM) initiative to support African countries in mainstreaming agriculture and food security risk management into their Comprehensive Africa Agriculture Development Programme (CAADP) implementation (Antonaci et Al., 2013). PARM shares the commitment to gender equality that its partners, through their policies and actions, engage in.

Agricultural Risk Management (ARM) can significantly contribute to improve the resilience of vulnerable rural households by increasing their capacity to absorb and adapt to risks. The PARM is a global platform that builds on existing initiatives and knowledge, in particular from the World Bank that has already undertaken "agricultural sector risk assessment" reports in several countries, the FAO, the World Food Program (WFP), Non-Governmental Organizations (NGOs) and the private sector. The PARM activities are oriented to facilitating the development of Agricultural Risk Management knowledge and tools, creating synergies and complementarities among different partners and stakeholders. This specifically applies to the Risk Assessment Studies (RAS) under this Terms of References (ToR): they necessarily need to build on existing reports and statistics from other organizations and partners.

The PARM process follows five phases in: setting up of activities, risk assessment, policy dialogue, follow-up and implementation. The first substantial phase of the PARM process consists in assessing agricultural risks through a long-term vision and a holistic approach (OECD, 2009). It is essential to begin the process from the risk assessment in order to define the problem before the potential solutions that will subsequently emerge in terms of risk management tools to be discussed and evaluated. The risk assessment phase is built on a risk assessment study that is then discussed in a National Stakeholders Workshop. As a result of the risk assessment study and discussion with stakeholders, a Policy Dialogue will lead to the identification of the main ARM priorities in a roadmap, including capacity building support to improve local stakeholders awareness and knowledge on Agricultural Risk Management (ARM), as well as capacity to manage and conduct appropriate institutional reforms in countries and regions. The identified ARM tools will be the subject of different feasibility studies and policy dialogue, both of which are outside these TOR. The final objective of the whole process is facilitating a holistic risk management strategy mainstreamed into national policy documents and agricultural investment plan, and its implementation, by matching the demand and supply of ARM tools suitable for men and women farmers, market level stakeholders and Governments.

The Risk Assessment Study (RAS) should be useful beyond the PARM-NEPAD process. The resulting document should be usable as reference guide for the government, all stakeholders, the donors, service providers and International organizations that work on agricultural risk management issues in each country. To the extent possible the RAS in all countries will follow a similar methodology and common indicators so that country comparisons can be undertaken.

Gender-based discrimination negatively influences the capabilities of women, girls and vulnerable groups to prepare for, cope with, and recover from, shocks. All types of agricultural risks have differentiated impacts on women and men, and that gender inequalities also affect the way that individual men and women working in agriculture can manage risk. Interestingly, the constraints that limit women's access to productive assets and resources also limit their opportunities for empowerment. Therefore, persistent gender inequalities can jeopardize the sustainability and effectiveness of agricultural risk management strategies. Therefore, the study takes a crosscutting perspective of gender. This means that the specific roles, responsibilities, needs and constraints of smallholder men and women are taken into account at every stage of the process to adequately reflect the distinct needs and roles of men, women, boys and girls.

Purpose

The purpose of the RAS is to provide a comprehensive mapping and assessment of agricultural risks in Liberia over the past three decades and in the foreseeable future, and inform about their likelihood and their economic and agricultural impacts, as well as their impact on the livelihoods of rural producers. The RAS will be conducted in a rigorous and holistic manner to ensure that the study is a useful tool and reference for all stakeholders to identify and prioritize main agricultural risks and risk management gaps and needs.

The risk assessment study will have five main objectives: to inform on the main risk factors and their likelihood; to analyse their economic and agricultural impacts; to identify and assess the existing ARM tools and policy instruments; to identify the main ARM gaps and needs; provide guidance for a prioritization of agricultural risks and ARM tools to be implemented. The assessment takes into account gender-based constraints, gender equality and social inclusion, and resilience as crosscutting issues. The scope of the study is defined through the following set of definitions that are applicable to this RAS.

Definition of the scope of the work under the RAS

What is a risk? Risk is the effect of an uncertain event (potential situation or scenario), involving exposure to danger or loss of something of value. A risk can typically impede the achievement of the objectives of individuals or organizations (ISO 2009a).

What is an agricultural risk? Agricultural risk is a risk from any origin that involves a loss or damage on agricultural production, farm household income or food security.

Whose risk? Impacts on whom?

- First, the RAS will analyse the agricultural risks that threaten the poverty and food security levels in the country. These risks are systemic, that is, they affect significant population groups or regions. The government is accountable to put in place the tools and the enabling environment that help to manage these risks. This is the country or government level risk.
- Second, the RAS will also analyse agricultural risks that can damage the economic activity and livelihood of farm households and the rural poor, particularly poor smallholders. Some of these risk situations are systemic, but others may only affect an individual farm or household, or a small group. The farmer bears these risks and is primary responsible to manage them using available policies and strategies. This is the producer level risk and will have a particular focus on poor producers and smallholders.

The gender dimension of these risks also needs to be analysed, as men and women producers can be affected differently and use different coping or mitigation mechanisms.

What does “holistic approach” mean? It means that, both at the farmer and the government level, all agricultural risks and their interactions are considered in the risk analysis, and all possible risk management tools and techniques and their interactions are also analysed. This includes risks that are originated in any link of the value chain and tools that are facilitated by any private or public entity.

What does rigorous assessment mean? It is an assessment that uses all available quantitative and qualitative information and statistical sources to estimate the frequency and intensity (consequences) of agricultural risks at both government/country level and farm level. The RAS also assesses the capacity to manage risk by stakeholders along supply chains. Thus, other levels may need to be taken into consideration, especially when it comes to gender-based constraints that can limit risk mitigating or coping capabilities of vulnerable women and men. Rigorous means evidence based and, to the extent possible, expressed in quantitative terms including the likelihood of occurrence of a risk, and the losses or damages that it is expected to cause. Risk perceptions, if recorded with some method, can also be part of the risk assessment.

(...)



(...)

What is the sectorial or geographical coverage of the RAS? The RAS will provide a good overview of agricultural risks in the whole country. However a differentiated assessment may be needed for specific geographical areas, specific commodities and value chains, and socio-economic groups¹ (sectors). The ToR of the RAS in a specific country may require a special geographical or sectorial focus that will be discussed with the national stakeholders and decided in an early phase of the RAS.

The main outcomes of the RAS will be discussed and validated during a National Stakeholder Workshop, followed by a Policy Dialogue. This Agricultural Risk Assessment Study will benefit from methodological developments in other risk assessment studies such as OECD (2011 and 2014), and World Bank (2013), and also from capacity and vulnerability assessment studies undertaken by various UN institutions and NGOs including WFP, FAO and OXFAM. It will use as point of departure any available agricultural risk assessment report on Liberia.

Outcome

The main outcome of a RAS will be a report including four main components: 1/ Liberia context and identification of agricultural risks; 2/ mapping of existing agricultural risk management tools and initiatives; 3/ definition, analysis and evaluation of risks and capacity to manage; 4/ prioritization of risks and risk management needs.

The assignment of the four components could be conducted by a single expert or team, or it could also be divided into parts. For examples: Part I including the two first components could be conducted by a national expert or team; Part II including the last two components that require more statistical and econometrical expertise and could be conducted by an international expert or team. The work will have to be undertaken in close coordination to create synergies as the information of Part I will inform Part II and the overall outcome of the RAS. All these outcomes will be shared and discussed during the validation workshop and the Policy Dialogue process. The author/s will present the report during the National Stakeholders Workshop for prioritization, and will proceed to the revision of the RAS to reflect the views expressed by the stakeholders during the workshop.

In any case the final report will include possible recommendations or priorities to improve agricultural risk management and related tools, to implement specific capacity building activities or to develop information tools.

Outline of the study

The full study will cover all the items in the following outline. However in some countries the existing analysis and needs may differ, and some items in the outline could be undertaken as single items.

I Part One

1. Introduction: The country context
2. Identification of agricultural risks: country risk profile
3. Mapping of existing Agricultural Risk Management tools and policies

II Part Two

4. Risk analysis: a systematic quantification of impacts and likelihood
5. Prioritization of risks and ARM tools
6. Sources and methodology

Also, integrate a specific section on gender differences that summarizes or highlights the gender-informed analysis, findings, results, factors, conclusions and recommendations.

¹ For the purpose of this TOR, these specific geographical areas, value chains, and socio-economic groups will be referred as "sectors", regardless if they are defined by geographic, productive, economic or social characteristics.

Following ISO (2009b), the outline of the report distinguishes between risk identification, risk analysis and risk evaluation. In the context of agricultural risk management, a specific section is included on identifying and analysing the exiting ARM strategies in Liberia. The content of each of the items in the outline is further described below.

1. The country context

This section will provide an overview of the production, economic and demographic characteristics of the agricultural sector, in particular those aspects that are more relevant for agricultural risk management. Some key aspects to analyse are: the importance and trends of the food and agricultural sector for GDP, employment, imports and exports; the incidence of poverty and malnutrition, in particular in rural areas; the major characteristics of the agricultural sector and the influence of production structure on the risk exposure (e.g. agro-climatic zones, farm size, share of subsistence farming, irrigation); the major commodities and production trends for crops, livestock, fisheries, and forestry, and their relative importance for vulnerable populations/groups; the employment level and the share of men and women small-scale farmers for each major commodity and zones; infrastructure and public goods (e.g. transportation, energy services, agricultural information and extension systems, warehouses and storage facilities, weather stations, financial sector infrastructure, telecommunication, fertilizers and seeds markets...); market structure and access (for smallholders), private sector actors (MFI, Banks, Insurances...), organizational level of farmers, productions and productivity of most relevant commodities. This section also takes into account, both transversally and explicitly, information and data on gender issues.

This information will be the basis to identify the sectors, agro-ecological zones and groups of men and women farmers that are important and deserve to be the main focus of the study. If their risk exposure is likely to differ, separate information on the specific risks of these specific “sectors” will be provided in the risk assessment study in the following sections.

2. Identification of agricultural risks: country profile

Purpose

The agricultural risk country profiling consists of identifying and reviewing the available literature and statistical sources on agricultural risk in Liberia and presenting its implications in a systematic way. The profile will identify and review all available studies and documents related to agricultural risks in Liberia, both at the national/government and at the producer levels. It will also identify all other sources of quantitative (statistical) or qualitative information on agricultural risks and risk perceptions. This information will be presented in an integrated manner to provide a clear profile of the agricultural risks in Liberia. The data collection and fact-finding process is carried out in an inclusive, balanced and participatory manner; taking into account gender-specific constraints and vulnerabilities.

Scope

The following risks will be considered in the identification process, even if not all of them may need to be part of Liberia profile (Table 1): (i) food security and agricultural production (drought, floods, crop pests and diseases, livestock diseases); (ii) food markets and trade (output price risks, fertilizer, feed, improved seeds and other input risks); (iii) policy and regulatory risk (e.g. related to trade); and iv) other risks affecting household income and food security (e.g. wages and non-farm income). The impact of the different risks at national level for the Government and on smallholder livelihoods will be analysed. The risk profile will include an assessment and quantification of the different risks (likelihood and severity of damage) in the different “sectors” at both government and producer levels.

Table 1: Sources of agricultural risk

	Risk	
	Weather risks	Periodic deficit and/or excess rainfall or temperature, hail storms, strong winds, cropping calendar changes...
	Natural disasters	Major floods and droughts, hurricanes, cyclones, typhoons, earthquakes, volcanic activity (...)
	Biological and environmental risks	Crop and livestock pests and diseases; contamination affecting food safety; contamination and degradation of natural resources and environment; contamination and degradation of production and processing processes
	Health risks	Health risks for members of the household and farm workers; production failure for health and/or food insecurity reasons
	Market-related risks	Fluctuations in prices of inputs and/or outputs due to different causes such as changes in national, regional or international supply and/or demand that impact domestic, regional and/or international markets; changes in demands for quantity and/or quality attributes, changes in food safety or production requirements; delays and disruptions of charges along the value chain... Fluctuations in prices of inputs and/or outputs due to different causes such as changes in national, regional or international supply and/or demand that impact domestic, regional and/or international markets; changes in demands for quantity and/or quality attributes, changes in food safety or production requirements; delays and disruptions of charges along the value chain...
	Logistical and infrastructural risks	Changes in access (physical or economical) to transport, communication, energy; degraded transport, communication or energy infrastructure, due to physical destruction / lack of maintenance, conflicts and political or labour disputes
	Management and operational risks	Uninformed or poor management decisions in asset allocation, choice of crops and seeds, swing time, equipment; use of inputs, planning errors, breakdowns in equipment, inability to adapt to changes. Health risks for members of the household.
	Macroeconomic Public policy and institutional risks	Macroeconomic shocks and downturns. Changing or uncertain policies and weak enforcement: monetary, fiscal and tax; financial (credit, savings, insurance); unpredictable regulatory and legal measures; trade and market disruptions; uncertainty land tenure. Governance uncertainty: corruption, weak institutions.
	Civil unrest, conflict and Political risks	Security-related risks and uncertainty (e.g., threats to property and/or life). Social/political instability within and in neighbouring countries. Nationalization of assets for foreign investors.

Some groups, depending on their level of vulnerability and capacity to manage risk, may be more affected by these risks than other groups. For example, health risks to farm workers may affect women in the reproductive age and especially pregnant women more strongly. Security risks may bring higher protection concerns for women and girls. Changes in access can exacerbate existing challenges for certain groups to access markets - for example, women typically have less capital, less access to land and other productive assets, to storage, transportation, information etc.

Outcomes

- A literature review of reports and sources that identify and measure agricultural risks in Liberia, mainly expressed in terms of variability, or severity and frequency.
- A review of available statistical sources in Liberia to identify and measure agricultural risks in Liberia. Those will typically be time series data on diverse matters such as weather, production, prices, input use, nutrition etc. and household or other surveys. If sex- and age-disaggregated data is available, this should be included, if not, it should be explicitly stated that it is not available, pointing up existing gaps.
- Based on the previous information, an integrated and systematic presentation of the agricultural risks in Liberia (risk profile).
- An assessment of the implications of Climate Change on the future agricultural risk profile of Liberia.
- Last point: an analysis of gender-based constraints along the supply chain.

Main sources

- The literature review will cover academic papers, government documents and reports from international organizations or NGOs, including smallholder farmers and farmers' organizations, especially women's associations who are not typically given a voice.
- The review of statistical sources will look at all the offer of surveys (including farm household surveys and vulnerability assessments), censuses and other statistics from the statistical agency/ies in Liberia, the meteorological agency/ies, the research centres, International organizations and NGOs.
- Other source of information could include interviews with experts and stakeholders.
- The systematic risk profile will be based on the previous information. Further analysis of this information will be undertaken in Section IV.

Methodology

The main methodology will be literature reviewing and basic statistical and graphical risk analysis. The use of tables of indicators and graphs will be an essential part of the country risk profile.

The reviewed studies could have been based on statistical analysis of time series of historical information or on other sources of information gathered with all kind of methods. According to ISO-IEC (2009) the most applicable methods for risk identification are: brainstorming, structured or semi-structure interviews, Delphi techniques to combine experts' opinions and scenario analysis.

The assessment of the ARM implications of Climate change will be done on the basis of the available literature and sources.

3. Mapping of Agricultural Risk Management initiatives

Purpose

The mapping of risk management initiatives and tools consists of identifying, describing and analysing the main government policies, donor-financed initiatives, market instruments, community devices and farm household strategies that have high incidence in facilitating the management of risk at government or producer level. The scope, participation, financial resources and implementation of these initiatives will be investigated, presented and discussed. The analysis will focus on matching the existing initiatives with the risks and sectors for which they provide risk management solutions. It will also discuss the possible interactions between different tools and how they reinforce or crowd out each other, and the institutional and policy gaps.

Scope

The review will cover experiences, ongoing projects, coordination mechanisms and studies related to instruments for agricultural risk management. These will include local strategies led by households or communities, market tools to transfer risk and government policies, focused on either risk reduction, mitigation or coping (Table 2). Government policies can also be designed to underpin market tools or local strategies. For instance: technology adoption, disaster risk management, safety nets (both producer and consumer oriented), insurance schemes and financial products including from microfinance institutions; market and trade risk management such as warehouse receipt systems, commodity exchanges, market information systems and contract farming; grain stock management and trade policies; and any other risk management strategy. If the list of existing initiatives is too long for a single report, at least a full list of initiatives should be presented and only a selection of tools will be analysed. The selection will include the tools with the largest scope of use or financial size, the largest potential to respond to the main risks in Liberia and the largest innovative potential (World Bank 2005). The assessment could include political economy aspects that are relevant for understanding the existing measures and for the implementation of potential new ARM tools.

For each initiative or tool the report will provide:

- Background information including type of ownership of risk management programs and projects (public, private, cooperatives, NGO), coverage, major hurdles (in relation to accessing the instrument by small holders), etc. Consider gender-based constraints as major hurdles.
- Review and assess the performance of existing tools, coordination mechanisms, regulations, legal frameworks, programs and policies in place.
- Identify institutional and policy gaps and chart out a strategy/direction to cover them and meet the diversified needs of all members of the rural community and the value chain.

Table 2: Risk management tools and strategies.

	Local strategies	Market tools	Policies
Information	Information Systems on weather, production, yields, prices, pest and diseases.		
Risk reduction and mitigation	Technological choice, Diversification in production Crop sharing Common storage facilities and other Community base coord. Mechanisms for risk sharing	Training on risk management Commodity exchanges (Futures options...) Insurance Vertical integration Contracts in production or marketing Spread sales and warehouse receipts Diversified financial investment Off-farm work	Macroeconomic policies Legal frameworks Disaster prevention (flood control) Prevention of animal diseases Early Warning Systems ARM coordination platforms Regional market and trade policies Tax system income smoothing Counter-cyclical programmes Border and other trade measures (e.g. in the case of contagious disease outbreak)
Risk coping	Borrowing from neighbours/family (ROSCAs...) Intra-community charity Small scale loans Selling assets	Selling financial assets Saving/borrowing from banks and Microfinance Institutions Off-farm income / work	Disaster relief Social assistance Agricultural support programmes Emergency stocks

Outcomes

- An inventory of all identified agricultural risk management tools and strategies, also taking into account whether these tools truly serve the needs of all smallholders, or if any groups (women, youth...) are left behind/excluded, or if inequalities may even be exacerbated by the tool in this context.
- Description of the scope and characteristics of each tool and strategy.
- Analysis of the performance and matching between existing tools and existing risks.
- Identification and discussion of policy gaps.

Main sources

- A review of all sources of statistical information (including time series) related to agricultural risks.
- Government information and reports on existing policies and implementations.
- Reports and information of International Organizations, NGOs and research centres on the performance of existing agricultural risk management tools.
- Existing work on resilience strategies in Liberia .
- Interviews with government officials, experts and stakeholders.

Methodology

The main methodology is the review of the existing policy information and reports for a policy assessment. Existing policy analysis will also be reported.

4. Risk analysis

Purpose

Risk analysis involves understanding the risks, their natures causes and sources, and, to the extent possible, quantifying their likelihood and consequences at the country level and on smallholders livelihoods. It also involves understanding the existing ARM tools and strategies and, to the extent possible, quantifying their implications for producers and government and their capacity to contribute to manage agricultural risks. Finally it implies the identification and analysis of the main ARM gaps and needs in Liberia.

Scope

This section on risk analysis will be quantitative and complement the discussion and assessment of existing reports and available statistics in Part One. This component of the study requires the use of more sophisticated techniques to analyse the risk and tools that have already been identified. Original analysis of statistical information, in particular in time series form, is expected to quantify the consequences and likelihood of different risks. The analysis should cover the two levels envisaged in this study: the national level, and the producer/household level. Aggregate, commodity, market and sector specific data will be the main data source for the former, while individual data on households and farms will also be used in the latter. The availability of such data should be investigated during section 1 on country profile. Among the producers, the analysis should also investigate the impacts for different "sectors" if identified as having differentiated risks in Part One.



The analysis could include measuring and understanding the variability of weather, prices, production, yields, income, consumption and other relevant variables. Statistical methods will be used to measure variability. The main indicator of variability will be the standard deviation or the coefficient of variation² of the variable/s that best summarize/s the impact of risks on livelihoods and food security, such as income, consumption or nutrient intake in the household and their distribution across households. Other indicators to analyse the risk could also be envisaged, such as ownership of arable land between men and women, sources of water and median distance to water sources, or nutritional data such as the Household Hunger Scale (HHS) which can be adapted for Women's Hunger Scale and so on. The indicators developed by the study will be compared or presented together with any other risk assessment indicators available in Liberia.

Shocks of different degrees of severity will be identified using different techniques or available sources, including the analysis of historical data. A key outcome of the risk analysis will be the identification of well-defined sources of risks. For each source of risks the risk analysis will quantify a "expected shock" scenario from this source and a "maximum loss" scenario. The quantification of the "expected shock" shock will include the expected severity of the shock (e.g. in terms of income or consumption losses), and its expected frequency or likelihood. The quantification of the "maximum loss" scenario will at least include an estimation of the maximum losses (e.g. in terms of income or consumption losses).

The analysis will attempt to define three risk layers: frequent but small normal risks, medium risks and rare but very damaging risks (disasters). These different layers normally have different requirements in terms of policy action (OECD 2009). Two criteria could be used for the identification of risk layers: the severity of the impacts compared to the trend or average variability, and the frequency or likelihood of such events to occur. The occurrence of normal, medium and disaster consequences will be associated with the occurrence of specific situations or sources of risk. To the extent possible, different risks will be characterized with the corresponding indicators of variability, mean severity and frequency, and subsequently classified in different risk layers.

The correlation between different sources of agricultural risk will also be investigated and appropriate indicators of correlation developed, calculated and incorporated into the analysis.

The existing ARM tools and strategies and the actual beneficiaries will be analysed with respect to the main risks identified in the study. This analysis could be based on the knowledge about the ARM initiatives in previous sections, but further analysis including modelling is encouraged. This may require the use of economic models with uncertainty, Monte Carlo simulations and/or scenario analysis.

Finally, the indicators about Liberia will be benchmarked with respect to other relevant countries, whenever possible.

Main Outcome

- A well-defined list of agricultural risks with a quantification of the "expected shock" scenario from this source and the "maximum loss" scenario.
- A table of main correlations between sources of risk.

² These indicators may need to be adjusted for the trend in the time series. This could be done using the Cuddy and Della Valle (1978) index, or using the standard deviation of the percentage change in the variable (this is typically called volatility and applied mainly to prices).

Additional and intermediary Outcomes

- Statistical analysis of risks using time series at aggregate country level and at producer level data, possibly with some differentiated sectors of producers. Coefficients of variation.
- Table/s of agricultural risk indicators: one aggregate for the country and possibly, one by sector of producers.
- Table/s of agricultural risk correlations.
- Table of main agricultural risks and available initiatives to manage each of them, with indicators of their capacity to deal with that risk.
- Analytical report on Liberia Risk Assessment.
- An assessment of availability of data in Liberia for Risk Analysis.
- Gender analysis across the board.

Main sources

- Statistical sources on production, yields, income, consumption, prices and weather, from statistical agencies, International Organizations, Research institutions or NGOs.
- If available, household income or expenditure surveys are recommended for the producer risk assessment.
- Possible elaboration of specific surveys for the study, if resources are available.
- Existing reports on risk assessment from any source.
- If quantitative information is not available, qualitative sources will be used.

Methodology

The main methodology is the time series analysis of available statistical sources. Whenever the analysis of the past is likely to be biased to estimate future risks (e.g. implications of climate change on weather conditions), the likely sign and size of the bias should be discussed. When quantitative statistical information is missing any other relevant source or technique will be used. According to IOS-ICE (2009) other methods may include: supporting methods based on a structured discussion in a meeting or workshop of experts or stakeholders (e.g. Structured "What-If" Technique or SWITF); Scenario Analysis defining a specific set of scenarios of risks and policies (this will typically require to be supplemented with an economic model) and more sophisticated statistical methods based on Montecarlo simulations, Markov analysis or Bayesian statistics.

If resources are available, specific policy analysis could also be covered or undertaken. This would require the use of economic models with uncertainty, Montecarlo simulations and/or scenario analysis. See OECD (2014) for an example of the use of these type of policy analysis.

If quantitative information is not available, qualitative sources and methodologies will be applied.



5. Prioritization

Purpose

Risk evaluation and prioritization involves using the information and indicators from the country profile and the risk mapping (sections 1 and 2) and the risk analysis (section 3) to assist agricultural risk management policy decision making. This assistance will involve the development of easy-to-use graphs or tables showing the main characteristics of different risks, the vulnerability to those risks, the impacts of existing ARM tools and, subsequently, the existence of ARM gaps.

Scope

The objective of this Section is to identify the main gaps in terms of the existing risks and the ongoing risk management activities, tools, policy and coordination mechanisms in the country. This final step of the risk assessment study (RAS) focuses on a prioritization of risks based on the previous analysis. The prioritization is based both on aggregate figures (e.g. overall losses to the GDP) as well as on disaggregated figures for producers, particularly small holders (e.g. events that may not affect overall GDP severely and may not affect many producers at the same time, but that have major consequences for large numbers of smallholders producing certain commodities, in particular non-traded ones). The discussion about the prioritization of risks should be based on a method such as the Consequence / probability matrix, and/or scenario analysis. Other methods could be proposed and implemented if appropriate.

This final section will provide the national government and the stakeholders with clear assessment of:

- Priority risks to make rational decisions on what areas to focus on. The analysis quantifies risks and their impact at country and producer level and allows the government to make an evidence-based prioritization of risks.
- The analysis will point out tools and policy instruments that could efficiently improve agricultural risk management in Liberia related to the identified risk priorities and level of vulnerability to those risks. It will include specific suggestions for feasibility studies to manage the identified prioritized risks to be implemented.
- Gaps related to information and capacity. The analysis will assess which are the most critical capacity and information needs and bottlenecks. It will also include suggestions on improving information, knowledge and capacity.
- It will also highlight any gender differentials.

Outcomes

- Consequences / probability matrix.
- Changes in the Consequence / probability matrix of the use of different tools.
- Scenario Analysis covering: a limited number of scenarios that are identified and quantified with event/consequence/likelihood information; and a limited number of tools and their consequences in each scenario.
- Based on the previous analysis, recommendations (or policy options) on identified information gaps and risk management priorities.

Main sources

Risk identification, mapping and analysis in previous sections.

Methodology

The use of Consequence / probability matrixes, and scenario analysis are strongly advised. Other methodologies could be developed.

The use of supporting methods such as discussions in meetings or workshops of experts and/or stakeholders should be envisaged if possible as part of this study and the PARM process.

6. Sources and methodology

The last section of the study will be devoted to discuss all the information and methodological challenges in Liberia. The methodological choices made for the study will be discussed and well documented.

Duration of the study

The study will be implemented in a maximum duration of four months. A timeline with different deliverables will be designed for each country.

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Tool D: World Bank guidance on lines of enquiry for research and fieldwork in ASRA

Extracted from World Bank. 2017a. Gender and Agricultural Risk. A Gender Approach to Agricultural Risk Assessments and Management Strategies. World Bank: Washington DC.

- d.1. Questions and Checklist for Background Research for a Gender-Differentiated ASRA
- d.2. Gender-Based Line of Enquiry for ASRA Fieldwork
- d.3. Gendered Line of Enquiry to Establish Capacity to Manage Risk
- d.4. Guidelines for assessing risk and capacity to manage in focus Groups with farmers” from the World Bank study – to be administered to groups of men and women, possibly of different age groups.

D.1. Questions and checklist for background research for a gender-differentiated ASRA

(See Box 4.1. Questions and checklist for Background research for a Gender-differentiated ASRA, p24, WB 2017a.)

When conducting the background research for an ASRA, using a gender-focused checklist can help ensure that the assessment team collects the information it needs to incorporate a gender dimension from the start. These questions are for illustrative purposes and may vary from country to country depending on the circumstances and required depth of the risk assessment in question, but should generally be guided by two overarching questions:

- What constraints limit women’s full involvement along all parts of the value chains in question?
- What are the differences between men and women in their capacity to manage agricultural risk?

Information from a gender perspective to gather during a background research should include, but is not limited to, the following:

- National and cultural policies around asset ownership (i.e., women’s ability to legally own assets without men’s permission, joint ownership, ability to make asset-related decisions)
- National and cultural policies and practices around women’s access to land, mobile assets, and finance/loans
- National and cultural policies around inheritance
- Women’s flexibility and possibilities to seek employment, attend trainings and meetings, and organize childcare
- Women’s mobility to travel for jobs, trainings, market sales, milk delivery, etc.
- Women’s ability to travel alone
- Gender differences in access to assets (physical and financial)
- Gender differences in access to technology and information
- Gender differences in roles played in the supply chains
- Gender differences in education and literacy and numeracy skills of participants in supply chains

D.2. Gender-based line of enquiry for ASRA fieldwork

(See Box 4.3. Gender-based line of enquiry for ASRA fieldwork, p28 WB 2017a.)

The following activities are part of the line of enquiry for team members participating in the ASRA. These can be used as a checklist for interviews and focus group discussions:

- Identify the causes of losses and their attribution (single or multiple causes) by women.
- Assess how losses affected women participating in the supply chains.

- Corroborate the frequency of those events.
- Determine if losses were evenly distributed by area, by farmer groups, by gender.
- Establish how different stakeholders (women and men) managed risks.
- Find out how shocks were absorbed by women and men.
- Determine if any women enterprise went out of business.
- Get a sense of long-term threats to livelihoods.
- Assess capacity to manage risks by existing institutions managing risks (any gender bias).
- Test if magnitude of losses estimated during the desk assessment are correct.
- Analyze government's current strategies to respond to shocks.
- Elicit women's perceptions of risk priorities.
- Identify women's suggested solutions.

D.3. Gendered line of enquiry to establish capacity to manage risk

(see Box 4.2 Gendered line of enquiry to establish capacity to Manage risk, WB 2017a).

Understanding risk profiles entails (i) analyzing the roles of different stakeholders for each supply chain under assessment in a gender-disaggregated enquiry, and (ii) understanding their risk management capacities. To guide the assessment of stakeholders' risk profiles, the team should aim to answer the following broad questions:

- Who is involved in the value chain analyzed (different stakeholders, segments of population, gender roles, etc.)?
- What risks affect most at women?
- What is the differentiated exposure and impact of risk for women and men? Are there regional differences?
- What are the current risk management practices of women? In terms of risk mitigation, risk transfer, and/or risk coping strategies.
- How do men and women manage risks, and are their instruments effective? Why or why not?
- What are the limitations of current risk management practices by women?
Why are some risks not being managed?
- What is the capacity of supporting institutions to manage key risk predominantly faced by women?

The assessment team needs to address those questions during the field interviews with stakeholders along each supply chain. For smallholder women farmers, who are often the most vulnerable and least vocal, focus group discussions are an important technique to discuss their risks and vulnerabilities, mitigation strategies, and coping mechanisms.

D.4 Guidelines for assessing risk and capacity to manage in focus Groups with farmers” from the World Bank study – to be administered to groups of men and women, possibly of different age groups.

See Annex A.3: Guidelines for assessing risk and capacity to manage in focus groups with farmers, 54 WB 2017a.

The full report, including Annex A.3. can be found by searching the www.p4arm.org Library, or by click the following link: <http://p4arm.org/gender-agricultural-risk-gendered-approach-agricultural-risk-assessments-management-strategies/>



Tool E: ARM Capacity and Vulnerability Analysis (CVA) matrix

Adapted from FAO. 2016b. Gender-responsive disaster risk reduction in the agriculture sector, Guidance for policy-makers and practitioners. FAO: Rome.

Purpose

The aim of this tool is to understand the resources and needs of men and women, the underlying vulnerabilities of different groups to disasters as well as the existing capacities for responding to crisis situations. It is an approach that can support and maximize local capacities, and supports long-term planning. Gender analysis is embedded in CVA to understand women's and men's roles in decision-making, their access to and control of resources and social systems of exchange. In other words, it helps you to gather information related to the gender issues:

1. Needs, capacities and perception of risks of men, women, boys and girls.
2. Access to and control over productive resources, goods and services, including information.
3. Participation in decision-making and empowerment.

When to use this tool

This tool is useful during the development of the **situation analysis (at Risk Identification, stage 1 of the ARM Cycle, however the information gathered will be useful at stage 2 Risk assessment & prioritization and stage 3 and 4 Tool identification and implementation)**, as it provides information on the current situation, as well as for framing and defining the **strategic areas of action**, as it helps clarify areas of existing strengths and those requiring additional support.

Process

In a CVA, three components of capacities and vulnerabilities are considered: physical and material resources; social and organizational institutions and relationships; and motivational and attitudinal factors. The goal is to use the matrix to identify the capacities and vulnerabilities of different groups in the target population in relation to the type of disaster that participants have identified as their focus (the Risk Mapping tool can help you with agreeing to a focus). This tool can also help you identify the differential access to and control over resources of men and women. It might be useful to focus on a specific past event (for example a drought last year) to keep the discussion concrete rather than talking about types of events (droughts) in general.

You will want to prepare a matrix ahead of time to be filled out with a group of men and another with a group of women so that you can compare their views. Ideally you should also aim to capture the views of other groups, such as young men and women.

Begin by explaining to the group the types of information you would like to discuss with them. Be clear on the definitions of vulnerability and capacity, i.e.

- **Vulnerability** is a set of prevailing conditions adversely affecting people's ability to cope with a threatening situation. (It can also be defined as: the characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard; see UNISDR 2009). Vulnerabilities need to be assessed to identify men and women who are more at risk and to understand why.

- **Capacity** is a set of qualities that increase people's ability to cope with a threatening event (i.e. needs exist when there is no local capacity to meet them).
- You may also want to explain the potential uses of this matrix, including:
 - Improve targeting and prioritization of needs of men and women;
 - Support long-term development and DRM tools to address the underlying population vulnerabilities;
 - Support and maximize local capacities and coping strategies in humanitarian response;
 - Contribute to disaster risk response (Preparedness) with baseline information.

The following diagram shows an example of the matrix. At the top, both capacities (what people can do, who they rely on) and vulnerabilities (what they need or lack) are listed. These are divided into categories of men, women, boys and girls so that you can record the responses from these different groups to be assessed according to gender and age. This could be simplified to include only "men" and "women", or, instead of youth groups, other categories could be captured such as landholding (male landowners, female landowners, landless men and landless women). Listed in the left-hand column are the three dimensions of capacities and vulnerabilities to be assessed.

Capacities and vulnerabilities matrix

	Capacities				Vulnerabilities		
	Men	Women	Boys	Girls	Men	Women	Boys
Physical and material Resources							
Social and Organizational							
Motivational and Attitudinal							

Physical and material capacities and vulnerabilities may be related to:

- Land
- Health and disability
- Livelihoods and vocational skills
- Livestock and crops
- Markets
- Housing
- Water and food supply
- Capital and other assets, etc.

Social/Organizational capacities and vulnerabilities may be related to:

- Family structures
- Social and political organizations
- Informal social gatherings
- Divisions of gender, race, ethnicity, class
- Social capital (support and power systems)
- Education



Motivational and Attitudinal capacities and vulnerabilities may be related to:

- Experiences of the history of crisis
- Expectations of emergency relief
- Existing coping strategies
- Cultural and psychological factors
- Changes in power structures and relations

The following probing questions can help you facilitate a discussion and enable you to fill in this matrix. You do not need to go cell-by-cell in the matrix; rather, the note taker should record insights from the discussion in the appropriate place in the matrix.

Probing questions:

- Who (women, men, girls, boys or all) is affected when there is (insert specific event identified by the group)? How are they affected?
- What kinds of adjustments do men and women make in their daily activities, including household responsibilities and work on the farm or outside the home?
- Do you have access to credit or savings that you rely on during this time? Is credit used for buying food or other household necessities?
- Do any of your possessions get affected, can you replace them?
- Is there anyone – a person or an organization – that has helped you when the event took place in the past?
- What else would help you?
- Have you ever learned techniques and processes that help you respond to this event from people in another village?

Utilizing the information gathered from this tool

The information produced by this tool is helpful for informing the capacity to manage risk and identifying where strengths already exist within communities, and prioritizing which assistance is needed for specific groups. You will need to develop a descriptive summary of the information collected via the matrix and summarize the responses provided by men and women (and other groups) about where they have existing capacities – this can then become a recommendation for groups or initiatives to be explored and supported further. The other key point summarizes which groups have vulnerabilities and in which areas. Further research may be warranted to understand the relative importance of these vulnerabilities and how best to address them. It is critical that in your summary you combine responses where there was agreement between different groups and that you highlight where there were differences between men and women. This type of nuanced information is essential for developing targeted approaches that are gender-responsive.

Tool F: Domains and indicators for gender-informed supply chain analysis

Copied from Pepper, A. 2016. Value Chain Development, Gender and Women's Empowerment in Ghana. WFP: Dakar.

Attn: PARM does not conduct representative surveys. The detailed amount of information that can be derived from this survey might not be needed to identify capacity to manage risk. However, we include this tool as it offers a useful blueprint for the type of data that can be collected if an in-depth gender analysis is to be carried out; for example for ARM tools or projects with a stronger gender focus.

Indicators and sample questions on empowerment in agricultural supply chains:

The following indicators reflect the main areas of empowerment within agricultural supply chains and markets. The questions are recommended to assess gender dynamics and empowerment in supply chains. They can be adjusted and integrated into questionnaires for smallholder farmers and other market actors, including aggregators, small-scale processors and marketers. They can also be integrated into focus group discussions separated by sex of participants. The tool below is adapted from the Women in Agricultural Development Index (WEAI) in accordance with findings from the preliminary assessment of ENVAC (Enhanced Nutrition and Value Chains) gender-specific information needs.

Indicators	Questions	Included in 2016 Ghana EFSA Market Assessment
Decision-making on value chain activities	Who exerts leadership in your commercial activities (whether buying or selling)?	
	Who decides, most of the time: <ul style="list-style-type: none"> - whether you will sell? - what products to sell? - in what quantity? - at what price you will sell product(s)? - where to sell? - to whom to sell? - where product(s) will be sourced from (if you do not produce them yourself)? - to take out credit to finance market/trade activities? 	X: Who decides whether you will sell this product most of the time? Who decides at what price you will sell this product most of the time? Who decides from whom/ where you will purchase this product most of the time?
Access to and decision-making power over productive resources	Who, if anyone, in your household has access to productive capital (financial, land, other)?	
	Who decides, most of the time, how productive capital will be used?	
	Who in your household has access to the market (buying and selling)?	
	Who, if anyone, in your household has access to financial services?	
	Who decides, most of the time, whether financial services will be used (and from which sources)?	
	Who, if anyone, in your household has access to and knowledge of agricultural technologies/equipment? <ul style="list-style-type: none"> - Who decides, most of the time, whether technologies/equipment will be used? 	
Do you have access to storage facilities?		(...)



(...) Indicators	Questions	Included in 2016 Ghana EFSA Market Assessment
Skills/capacity	Literacy rate between female and male actors	
	Ability to operate agricultural input technology/equipment	
	Knowledge and use of quality and food safety (among small-scale processors)	
	Access to, and ability to operate quality control equipment	
Control over use of income	Who has individual or shared ownership of assets in order to undertake market activities?	
	Who decides, most of the time, how income will be used, both in market activities and in the household	
	Who decides, most of the time, how much of your generated income will be spent on food for your household?	
Leadership in markets	Do you feel comfortable speaking up in public (i.e. in commodity associations, other local groups) to decide on marketplace issues?	X: in Trader questionnaire
	Do you participate in a FO or market-based community group? If so, do you participate in the main decision-making body?	
Time use	Do you regularly have time available to dedicate to market activities outside the home?	
	How much time do you spend on domestic tasks, including child care?	
	How does your time-use impact your scale of agricultural activities (production, aggregating, marketing, processing, etc.)?	
Mobility	How far do you travel to sell your product(s)? How often?	
	Do you have access to multiple selling points?	
	Do you have access to safe (i.e. vehicle/road quality) and efficient transport?	
	Is security a concern for you in transporting commodities?	
Institutions	What process is necessary to have access to market floors (for selling)?	
	Who controls the market? (Government body, market association, market queens, etc.)	These questions may be best used in key market informant interviews.
	Do women have equal rights to men related to food markets?	
Self and gender perceptions	What will be the biggest challenge/obstacle for your business in the future?	X: in Trader questionnaire
	In the future (6 months – 1 year) how do you think the situation for this product will evolve?	X: in Trader questionnaire
	What does it mean to have market power?	
	Do you associate your market activities with market power?	
	To you, what is important to know when considering women's access to, and power in markets?	
	What other demographic information about marketplaces can inform power and gender relations?	

(...)



(...) Indicators	Questions	Included in 2016 Ghana EFSA Market Assessment
Value chain	Do you or someone in your household produce what you sell? -If not, from whom and where do you get your product(s)? Who do you sell to? (i.e. wholesalers, aggregators, market queens, direct to consumers) Where do you sell most of your product? (i.e. Farm gates, wholesalers, local markets, other) Do you receive or provide credit to actors producing or trading in the same commodity? -	



Tool G: Gender-informed key informant interview questionnaires for agricultural value chains

Gender-specific questions are important for each actor in the value chain. Questions should be specific to an actor's contextual situations. Below are identified sample of questions to be asked to the following actors:

- G.1. Input Supplier Interview Guidelines
- G.2. Farmer Interview Guidelines
- G.3. Market Intermediary Interview Guidelines
- G.4. Processor Interview Guidelines
- G.5. Trader Interview Guidelines
- G.6. Government Official Interview Guidelines
- G.7. Technical Specialist Interview Guidelines
- G.8. Financial Institutions
- G.9. Farmer Organizations

G.1. Input supplier interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Do you have regular input supply arrangements? With whom?	Are they men or women?		Knowledge of different links within the supply chain, main partners
How are supply chain problems influenced by buyers/ buying relationships?	Who are your buyers? Are they mainly men or mainly women?		Understanding vulnerability of certain consumers within supply chains by gender
How are supply chain problems influenced by commercial relationships?			% by government, public, domestic individual/ company, foreign individual/
What business relationships (if any) exist with processors, traders, retailers?	What role does gender play any role in these relationships?		If yes, when privatized
What spillover effects (i.e., linked impacts) do input supply problems have on the wider supply chain?			Permanent and temporary (seasonal) (...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part I: Role in Supply Chain: What are you doing?			
Describe input supply activities in relation to the commodity.			Type of inputs supplied, Importance of commodity in overall market for input supplies
What is the average level of input supplies and revenue in an average year for the given supply chain?			Inputs supplies to supply chain measured in tons
How has input supply and revenue varied in the last five years for given supply chain?			Can variability be directly attributed given risk(s).
How would you describe your position in the domestic market with respect to the given supply chain?			Dominant, major, important regional, relatively small Level of understanding of how the supply chain works.
Where are inputs sourced from?			Domestically, imported
What farmers/farming organizations do you supply in the chain?		Are they predominantly men or women?	Number of farms. Approximate share of small, large farms
How many agents/distribution centers do you have? What is the geographic spread of these centers?			Own distribution centers versus agents, and/or public access markplaces
What quality, licensing specifications are required?			How is quality certified? By whom?
How are sales financed? How are purchases financed?			Credit institutions, lending from processors etc
How do government subsidies or credit guarantees affect business?		Are there any difficulties you experience due to being a man or a woman?	Perceived as "opportunity" or "threat" that increases or decreases risks, decisions, outcomes?
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part II: What can go wrong?			
In broad terms, what are the main sources of risk that you face in: <ul style="list-style-type: none"> • Sourcing of inputs? • Storing and Handling of inputs? • Sales/Marketing of inputs? 	Do you think that men and women in the same position as you face different risks? If so, how?		Probe against specific risk factors in Annex 3 e.g.: weather, price, logistics, policy restriction, environment.
What are the direct negative impacts that potentially arise from these risks?	Are these impacts different for you because you are a man or a woman? If so, how?		See Annex 3. e.g. E.g. direct impacts of policy risks include competition from subsidized enterprises.
What are the three main types of risk that most concern your business enterprise?			Ranking of potential problem areas Determination of severity
Of the risks identified what are their frequency?			Often/seldom, seasonal, annual. Temporal impacts
How would you describe the potential severity of impact and expected losses arising from major risks?			Expected loss minimal, low, medium, high, very high
Overall, are underlying conditions in the supply chain, and your position in particular, deteriorating/ improving in recent years? Have you kept any records to track this?			Check for available records and request Perceptions versus records (...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part III: Relationship with other supply chain participants?			
Do you have regular input supply arrangements? With whom?	Are they men or women?		Formal, informal arrangements Knowledge of different links within the supply chain, main partners
How are supply chain problems influenced by buyers/ buying relationships?	Who are your buyers? Are they mainly men or mainly women?		Formality of contracting, length of trading relationships, small versus large enterprises
What spillover effects (i.e., linked impacts) do input supply problems have on the wider supply chain?			Role of farmers, SMEs, farmer organizations, cooperatives, donors/ngos
How are supply chain problems influenced by commercial relationships?			Contract farming, vertical integration, guaranteed sales contracts
What business relationships (if any) exist with processors, traders, retailers?		Who do you mainly interact with, men or women, Does this play a role for your interactions?	Perception of risk transmission across supply chain
Part IV: How do you manage and respond to problems?			
What is being done to address risk-related problems in advance of a risky event? How long have these actions been in place?	Would you say that men and women take the same actions? If not, how and why?		Ex ante strategies : a) asset and enterprise diversification, b) compensation arrangements, c) lessening involvement in supply chain (e.g.. migration/reduce production)
What is done to address negative impacts after a risky event?	Would you say that men and women take the same actions? If not, how and why?		Ex post strategies.
How effective have actions been? What actions have been most effective? Least effective? Why?			a. Ex-ante b. Ex-post
What interventions have been supported by public sector 'agents' (including donors/ngos) to manage input supply problems?			Public sector versus market based actions. Ex ante v. ex post.
How effective have public interventions been? Which are more/less effective?	Have they been satisfactory to you? If not; why?		Timing, targeting, delivery aspects Responding to needs?
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What has recent experience illustrated about input supplier capacity to withstand major deviations, disruptions, and disasters in the supply chain?			Ability to manage risk on own versus need for external "partners"
What information sources, if any, are used to assess the potential frequency/magnitude / severity of problems?	Do you feel that these sources are well adapted to your needs? If not, why?		Early warning information, price tracking, local knowledge Gaps in information products and provision
How would you describe overall access to credit and insurance? What are the benefits/costs from credit and/or insurance?			Availability, affordability of credit and timely/"fair" payment of insurance
Part V: What could be done in the future, and by whom?			
What are the main lessons learned from past experiences in risk management?			
What options could be explored to manage input supply related problems more effectively? By input suppliers? By others?			
What are the perceived potential options for managing problems jointly with other supply chain actors?	Does it make a difference whether they are men or women?		
What roles might private and public sector actors play, including donors and NGOs?			



G.2. Farmer interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Name			
Contact Details			
Geographic Location			
Type of Enterprise			Family owned, small scale, modern commercial, agri-industrial
Number/ Type of Employees			% Permanent, Temporary; % Family, Own versus Hired
Part I: Role in Supply Chain: What are you doing?			
Briefly describe your production activities in relation to the supply chain?			Crops cultivated (% area or value), Total area farmed & owned (ha),
What is your average level of production and revenue in a given year? What have been the trends in recent years?			Price, yield, and (gross) revenue trends Check for records. May be available in annual reports, for larger farmers
What is the significance of the commodity in overall production and in terms of annual crop rotations?			Crop rotation calendar, seasonal scheduling
What is your reliance on household versus hired labor? Is there a seasonal dimension to this?			
What inputs do you use? Where do you source inputs from?			Fertilizer, seeds, pesticides reliability, quality, utilization
What type of irrigation is in use?	If applicable: How much time do you spend with water collection? Who collects water?		Furrow, drip, overhead etc; Gender-specific roles in water collection
Briefly describe farming assets and level of technological adoption?	Do you own these assets? If not who; owns then? Do you have access to them?		Infrastructure, investments Asset ownership and access
What are the factors which motivate planting of crop? What are the alternatives?			Return to assets vs. risk management Substitute, complementary goods
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What access do you have to local markets and traders? What is the distance from the nearest trading centre?	Do you have any specific issues with leaving home/ the farm to reach the market and to sell or buy there?		Formal versus informal markets Gender-specific transport vulnerabilities and childcare/ housework issues as well as non-women-friendly market spaces due to lack of WASH facilities...
Are you a member of a farming cooperative/organization? What are the primary benefits of this relationship?			Is membership a "pre-condition" for participation in the supply chain?
Part II: What can go wrong?			
In broad terms, what are the main sources of risk that you face in? Sourcing inputs/ Production, Sales/Marketing of goods?	Do you think that men and women in the same position as you face different risks? If so, how?		Nature of risk probe against specific risk factors impacting on farm level e.g.: weather, price, environment, labor standards, logistics, operational
What are the direct negative impacts that potentially arise from these risks?	Are these impacts different for you because you are a man or a woman? If so, how?		
In summary, what are the three main sources of risk that most concern your business enterprise?			Ranking of potential problem "areas"
Of the risks identified what are their frequency?			Often/seldom, seasonal, annual.
How would you describe the potential severity of impact and expected losses arising from major risks?			Expected loss – minimal, low, medium, high, very high
Overall, are underlying conditions in the supply chain, and your position in particular, deteriorating/ improving in recent years? Have you kept any records to track this?			Check for available records and request
Part III: Relationship with other supply chain participants?			
Do you have regular input procurement arrangements? With whom? How effective are existing input arrangements?	Do you mainly make these arrangements with men or with women, and does it make a difference? If so, how?		Timely provision of inputs, cost factors, logistics issues. Formality of arrangements
Do you have fixed selling (contract) arrangements with processors or other intermediaries? How often are these negotiated?	Do you mainly make these arrangements with men or with women, and does it make a difference? If so, how?		Formality of contracting, length of trading relationships. Logistics issues.
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
How are transport requirements met? How effective are transport facilities?			Availability, affordability, dependability
What feedback mechanisms/ interactions (if any) exist with traders and retailers?			Shared concerns related to Environmental, labor, food safety
What spillover effects do farm level production problems have on the wider supply chain? Which entities are most impacted?			Impacts of production/supply shortfalls, labor constraints, etc.
Part IV: How do you manage and respond to problems?			
What is being done to address problems in advance of a risky event? How long have these actions been provided?	Would you say that men and women take the same actions? If not, how and why?		Ex ante – investments in infrastructure, technology, management practices, financial instruments, organizational arrangements.
What is done to address problems after a risky event?	Would you say that men and women take the same actions? If not, how and why?		Ex post strategies - reallocation of assets, sales of assets, seek employment/migration, transfers etc.
How effective have actions been? What actions have been most effective? Least effective? Why?			a) Ex-ante b) Ex-post
Who typically provides these actions?	men? Women?		Self-made decisions, decisions by farmer organizations, formal versus informal mechanisms,
What interventions have been supported by public sector 'agents' (including donors/ngos) to manage problems?			Public sector versus market based actions. Ex ante v. ex post.
How effective have public interventions been? Which are more/less effective?	Have they been satisfactory to you? If not; why?		Timing, targeting, delivery aspects Responding to needs?
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What has recent experience illustrated about farmer capacity to withstand major deviations, disruptions, and disasters in the supply chains?			Ability to manage risk on own versus need for external "partners"
What information sources, if any, are used to predict/assess the potential frequency/magnitude / severity of problems?	Do you feel that these sources are well adapted to your needs? If not, why?		Early warning information, price tracking, local knowledge Gaps in information products and provision
How would you describe overall access to credit and insurance? What are the benefits/costs from credit and/or insurance?			Availability, affordability of credit and timely/"fair" payment of insurance
Part V: What could be done in the future, and by whom?			
What are the main lessons learned from past experiences in risk management?	Would you say that men and women take the same actions? If not, how and why?		Opportunities and constraints
What options could be explored to manage production problems more effectively? By farmers? By others?	Would you say that men and women take the same actions? If not, how and why?		
What are the perceived potential options for managing problems jointly with other supply chain entities?			
What roles might private and public sector actors play, including donors and NGO's.			



G.3. Market intermediary interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Company Name			
Contact Person & Title			
Address and Geographic Location			
Contact Details			
Year Established			
Number of Employees		Permanent and temporary (seasonal)	
Part I: Role in Supply Chain: What are you doing?			
Briefly describe your position and prominence in the supply chain?		Small, medium, large buyer. Private, NGO entity.	
Do you purchase as an agent on behalf of another entity (e.g. exporter, processor), or on own accord		Buying on own behalf or as agent.	
What is the significance of the commodity in your overall portfolio? How many other commodities do you purchase and trade?		Mix of commodities, significance of supply chain commodity.	
What seasonal aspects affect buying activities?		Seasonal variability.	
Describe buying trends in the last 5 years? How are purchasing patterns different now to when they were before?		Sales revenue records Contracting arrangements	
Average annual sales turnover. Share of local sales versus export sales turnover?		Also check annual report	
Where are your main operations, trading centers and markets?		Spatial dimensions, geographic spreads	
Describe your system for coordinating product sourcing and sales? How much flexibility do you have in terms of selecting goods?		E.g. purchase based on specific orders, purchase according to availability	
How are purchasing prices set?		According to market, negotiated	
What are your buying volume requirements?		Quantity per year, Time period (seasonality, continuous). Preferred/ minimum lot size	
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What types of quality specifications are required, if any?			Quality attributes (color, moisture, dirt), food safety. Environmental aspects
What is your storage and transportation capacity? Are these facilities adequate for enterprise activities?			
Part II: What can go wrong?			
Describe the typical risks incurred in: sourcing products?/ Storage, transportation?/ Sales, marketing of goods to processors, traders?	Do you think that men and women in the same position as you face different risks? If so, how?		Probe against specific risk factors impacting processors e.g. price, transport, food quality, environment
What are the direct negative impacts that potentially arise from these risks?	Are these impacts different for you because you are a man or a woman? If so, how?		
What are the three main sources of risk that most concern your business enterprise?			Ranking of potential problem areas
Of the risks identified what are their frequency?			Often/seldom, Seasonal, annual. Temporal impact
How would you describe the potential severity of impact and expected losses arising from major risks?			Expected loss – minimal, low, medium, high, very high
Overall, are underlying conditions in the supply chain, and your position in particular, deteriorating/ improving in recent years? Have you kept any records to track this?			Check for available records and request
Part III: Relationship with other supply chain participants?			
Do you have regular procurement relationships with farmers? Do you buy on a period spot price basis or set prices?			Procurement: Domestic (own farm, intermediaries), international. Formal v. Informal.
Do you have regular sales relationships with processors?			Marketing aspects. Formal v. Informal.
Describe transport costs and availability of suitable transport connections?			Market access etc.
What spillover effects do buyer problems have on the wider supply chain?			
To what extent are buying activities affected by government policy regulations			Restrictions on trade, physical goods, rice controls (...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part IV: How do you manage and respond to problems?			
What is being done to address problems in advance of a risky event? How long have key actions been in place?	Would you say that men and women take the same actions? If not, how and why?		Ex ante – interlinked contracts, insurance
What is done to address problems after a risky event?	Would you say that men and women take the same actions? If not, how and why?		Ex post strategies
Who typically provides these actions?	Men? Women?		Buyers, third parties
How effective have interventions been? What actions have been most effective? Least effective? Why?	Would you say that some of these actions are more effective for certain groups than for others?		a) Ex-ante b) Ex-post Understand social inclusion aspects
What interventions have been supported by public sector 'agents' (including donors/ngos) to manage problems?			
Who are the main providers of the above interventions?			Government, NGO Extension services etc.
How effective have public interventions been?	Would you say that they have been equally effective for men and women?		Timing, targeting, delivery aspects
What has recent experience illustrated about farmer capacity to withstand major deviations, disruptions, and disasters in the supply chain?	Are there any gender differences between men and women's capacities?		Ability to manage on own versus need for 'external partners' in ability to manage
What information sources, if any, are used to assess the potential magnitude / severity of problems?			Early warning information, price tracking, local knowledge
How would you describe overall access to credit and insurance? What are the benefits/costs from credit and/or insurance?	Would you say it is the same for men and for women?		Availability, affordability of credit and timely/"fair" payment of insurance in financial access
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part V: What could be done in the future, and by whom?			
What are the main lessons learned from past experiences in risk management?			
What options could be explored to manage buyer-related problems more effectively? By buyers? By others?			Opportunities and constraints
What are the potential options for managing problems jointly with other supply chain entities?			
What roles might private and public sector actors play, including donors and NGO's.			



G.4. Processor interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Company Name			
Contact Person & Title			
Address and Geographic Location			
Contact Details			
Year Established			
Type of ownership			% by government, public, domestic individual/ company, foreign individual/company, general public
Previously a state enterprise			If yes, when privatized
Number of Employees	Sex of employees		Permanent (seasonal)
Main operations and procurement/ purchasing areas			..
Description of main assets			Maybe available for annual report
Part I: Role in Supply Chain: What are you doing?			
Briefly describe the steps that you undertake in the processing of the supply chain commodity?			Form and steps involved in processing
Describe your overall production activities, and the relative importance of the supply chain commodity to your enterprise. How has this changed in recent years?			Mix of commodities. If processor is engaged in other sectors.
Describe your processing trends in the last 5 years in relation to the supply chain commodity? What have been the main products and uses?			Processing production levels. Sales Revenues. Query for records. Check seasonal impacts.
Share of processed goods for local, domestic versus export markets?			Also check annual report
How would you describe your position in the domestic market?			Dominant, major, important regional, relatively small
What are your key target markets/ market segments?			Differentiations of market segments according to different commodity qualities/standards. (...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What are your crop/ raw material volume requirements?			Quantity per year, Time period (seasonality, continuous). Preferred/ minimum lot size
What types of quality specifications are required for traders and retailers?			Quality attributes (color, moisture, dirt), food safety. Environmental
Describe your system for coordinating input sourcing, production and sales? How much flexibility do you have in terms of selecting goods			E.g. produce, then sell; produce for specific orders; inventory for specific orders; produce for season /annual orders, real time matching.
How are purchasing prices set?			According to market, negotiated
Part II: What can go wrong?			
What are the main sources of risk that you face? Sourcing crops/ Processing/ Sales/Marketing of goods?	Would you say these are the same for men and for women? If not; how and why?		Probe against specific risk factors impacting processors e.g. price, transport, food quality, environment
What are the direct negative impacts that potentially arise from these risks?	Would you say these are the same for men and for women? If not; how and why?		
What are the three main sources of risk that most concern your business enterprise?			Ranking of potential problem areas
Of the risks identified what are their frequency?			Often/seldom, Seasonal, annual. Temporal impact
How would you describe the potential severity of impact and expected losses arising from major risks?			Expected loss – minimal, low, medium, high, very high
Overall, are underlying conditions in the supply chain, and your position in particular, deteriorating/ improving in recent years? Have you kept any records to track this?			Check for available records and request
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part III: Relationship with other supply chain participants?			
Do you have regular buying relationships? Do you purchase on a period spot price basis or set prices?	Who are your buyers? Are they mainly men or mainly women?	Who do you mainly interact with, men or women, Does this play a role for your interactions?	Procurement: Domestic (own farm, intermediaries), international in relationships
Do you have regular selling relationships?			Marketing arrangements
Have you provided any financial or technical support to farmers or other intermediaries to strengthen procurement?			Seed supply, input , credit provision, extensions, operations, sales, etc.
Describe transport costs and availability of suitable transport connections?	Do you have any specific issues with leaving home/the farm to reach the market and to sell or buy there?		Market access etc. Gender-specific transport vulnerabilities and childcare/hosuework issues as well as non-women-friendly market spaces due to lack of WASH facilities...
What spillover effects do agro-processing problems have on the wider supply chain?			(...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part IV: How do you manage and respond to problems?			
What is being done to address problems in advance of a risky event? How long have these actions been in place?	Would you say that men and women take the same actions? If not, how and why?		Ex ante – insurance, warehouse receipts, early warning information
What is done to address problems after a risky event?	Would you say that men and women take the same actions? If not, how and why?		Ex post strategies
Who has provided these interventions?	Men? Women?		Agro-processors, third parties
How effective have interventions been? What actions have been most effective? Least effective? Why?	Would you say that some of these actions are more effective for certain groups than for others?		a) Ex-ante b) Ex-post Understand social inclusion aspects
What interventions have been supported by public sector 'agents'(including donors/ngos) to manage problems?			
Who are the main providers of the above interventions?			Government, NGO Extension services etc.
How effective have public interventions been?			Timing, targeting, delivery aspects
What has recent experience illustrated about processor capacity to withstand major deviations, disruptions, and disasters in the supply chain?	Are there any gender differences between men and women's capacities?		Ability to manage on own versus need for 'external partners'
What information sources, if any, are used to assess the potential magnitude / severity of problems?			Early warning information, price tracking, local knowledge
How would you describe overall access to credit and insurance? What are the benefits/costs from credit and/or insurance?	Would you say it is the same for men and for women?		Availability, affordability of credit
Part V: What could be done in the future, and by whom?			
What actions could be supported to manage processing related problems more effectively?			Opportunities and constraints
What are the potential options for managing problems jointly with other supply chain entities?			
What roles might private and public sector actors play?			



G.5. Trader interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Company Name			
Contact Person & Title			
Address and Geographic Location			
Contact Details			
Year Established			
Number of Employees	sex		Permanent and temporary (seasonal)
Ownership Structure			Public, private
Link to international company			Subsidiary etc
Part I: Role in Supply Chain: What are you doing?			
Briefly describe your trading functions and the significance of the crop to your commercial activities?			Mix of commodities, significance of supply chain commodity.
How would you describe you position in the domestic market?			Dominant, major, important regional, relatively small
Describe your buying and trading trends in the last 5 years? How are patterns different now to when they were before?			Sales revenue records
Average annual sales turnover. Share of local sales versus export sales turnover?			Also check annual report
What is the significance of seasonal aspects to trading activities?			Seasonal variability in relation to supply chain
Where are your main operations, trading centers and markets?	Do you have any specific issues with leaving home/ the farm to reach the market and to sell or buy there?		Do you have any specific issues with leaving home/the farm to reach the market and to sell or buy there?
What quality specifications are required?			Quality attributes (color, moisture, dirt), food safety. Environmental aspects
How are purchasing prices/selling prices and margins set.			According to market, negotiated
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What is your storage capacity?	Do you have any specific issues with storage?		Adequacy of capacity.
What are your transportation requirements and arrangements?			Owned, rented.
Part II: What can go wrong?			
Are underlying conditions deteriorating in recent years? Have you kept any records to track this?			Check for records
Describe the typical risks incurred in: sourcing products?/ Storage, transportation?/ Sales, marketing of goods to processors, traders?	Would you say these are the same for men and for women? If not; how and why?		Nature of risk Probe against specific risk factors impacting processors e.g. price, transport, food quality, environment
What are the direct negative impacts that potentially arise from these risks?	Would you say these are the same for men and for women? If not; how and why?		
What are the three main sources of risk that most concern your business enterprise?			Ranking of potential problem areas
Of the risks identified what are their frequency?			Often/seldom, Seasonal, annual.
How would you describe the potential severity of impact and expected losses arising from major risks?			Expected loss – minimal, low, medium, high, very high
Overall, are underlying conditions in the supply chain, and your position in particular, deteriorating/ improving in recent years? Have you kept any records to track this?			Check for available records and request. To what extent can this be attributed to certain risks.
Part III: Relationship with other supply chain participants?			
Do you have regular procurement relationships with processors?	Are they predominantly men or women?		Procurement: Domestic (own farm, intermediaries), international
Do you have regularized sales relationships with retailers?	Are they predominantly men or women?		Marketing aspects?
Describe transport costs and availability of suitable transport connections?			Market access etc.
What spillover effects do trader problems have on the wider supply chain?			
To what extent are trading activities affected by government policy regulations			Restrictions on trade, physical goods, rice controls
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part IV: How do you manage and respond to problems?			
What is being done to address problems in advance of a risky event? How long have these actions been in place?			Ex ante – interlinked contracts, insurance
What is done to address problems after a risky event?			Ex post strategies
Who typically provides these actions?			Traders, third parties
How effective have interventions been? What actions have been most effective? Least effective? Why?	Would you say that they have been equally effective for men and women?		
What interventions have been supported by public agents to counteract processing problems, including donors/ NGOs			
Who are the main providers of the above interventions?			Government, NGO Extension services etc.
How effective have public interventions been?			Timing, targeting, delivery aspects
What has recent experience illustrated about vulnerabilities and resilience to withstand major shocks? Minor disruptions?	Are there any gender differences between men and women's capacities?		Ability to manage on own versus need for 'external partners'
What information sources, if any, are used to assess the potential magnitude / severity of problems?			Early warning information, price tracking, local knowledge
How would you describe overall access to credit and insurance? What if any are the major barriers to credit access?	Would you say it is the same for men and for women?		Availability, affordability of credit
Part V: What could be done in the future, and by whom?			
What actions could be supported to manage trading related problems more effectively?			Opportunities and constraints
What are the perceived potential options for managing problems jointly with other supply chain entities?			
What roles might private and public sector actors play?			



G.6. Government official interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Name and title of official			
Designation		E.g. Ministry of Agriculture, Crop Board	
Province/District			
Part I: National Significance of Supply Chain and Role of Government as Service Provider			
What is the significance of the commodity in relation to national economic objectives?		Poverty reduction, growth/employment, foreign exchange	
What is the significance of the commodity in terms of state revenue,		employment, regional development?	
What is the nature of public sector presence in the sector?		E.g. Subsidies. Research Extension. Laboratories.	
What direct actions, if any, has the government adopted to promote supply chain performance?		Has the government taken gender issues into account? If so in which way?	E.g. price, trade controls, legal
Part II: Perceptions of Risks, Expected Losses facing supply chain entities and the public sector			
Broadly described, what are the main types of risk which impact on the overall performance of the supply chain?			
What are the key risks impacting at different stages of the supply chain? Input suppliers/ farmers/ processors/ traders and retailers	It it the same for men and women?		Differentiation of risks across different supply chain entities & by gender
Does risk exposure vary across different regions, productive zones?		Regional prioritization	
What are the three main risks that are prioritized from the public perspective?	It it the same for men and women?		Ranking of potential problem areas
What are the main direct impacts and expected losses that are of concern occurring to supply chain participants from public perspective?	It it the same for men and women? If not how?		Expected losses e.g.. effects on input demand, production, trading
What are the main spillover impacts of concern to public sector stakeholders and supply chain service providers		relationships	
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Are underlying conditions deteriorating/improving in recent years? To what extent can this be attributed to changing risk factors?			Expected losses e.g. food safety
Part III: Risk Management Priorities and Approaches			
What is being done within the public sector to address key risks before they occur? How long have these actions been provided?			Ex ante : extension services, insurance, policy assistance
What is done within the public sector to address problems after a risky events?		Ex post strategies - short term policy measures, transfers	
How effective have actions been? What actions have been most effective? Least effective? Why?	It it the same for men and women? If not how?		Timing, targeting, delivery aspects..
What, if any, lessons have come from experience in providing extension services?			
What risk management alternatives are under consideration, if any e.g. financial instrument support, technology development, organization and institutional arrangements.			
How would you describe overall access to credit and insurance? What are the major constraints of concern to the public sector?	Would you say it is the same for men and for women? If not; how and why?		Availability, afford ability
	How would you describe overall access to insurance? What if any are the major barriers?	Would you say it is the same for men and for women? If not; how and why?	Types of insurance, providers
			(...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part IV: Response Recommendations			
What options could be supported by the public sector to enhance supply chain performance and manage risks more effectively?			
What are constraints in considering risk management instruments?	Any gender-based constraints?		
What are the potential options for managing problems jointly with different supply chain entities?			
What roles might private sector actors play?			



G.7. Technical specialist interview guidelines

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Company Name			
Name(s) and Title(s) of interviewee			
Address and Geographic Location			
Contact Details			
Part I: Nature/Incidence and Severity of Particular Problems?			
What are the pertinent problems facing different supply chain players in this commodity?	Would you say it is the same for men and for women? If not; how and why?		
Which supply chain players are most affected e.g. input suppliers, farmers, processors, firms, traders, retailers?	Would you say it is the same for men and for women? If not; how and why?		
How widespread are the identified risks??			
What is the level/pattern/frequency of incidence?			
What players in the supply chain are most affected?			
What are the implications/damages due to this problem---i.e. affect on yields, on tree crop longevity; on quality; on nearby resources/communities; on market access/trade; on consumers?	Would you say it is the same for men and for women? If not; how and why?		
What indicators/data are available to quantify the extent of the problem or its adverse impact?	Is sex and age disaggregated data available?		
What evidence that these problems are more/less prevalent; more/less difficult to manage?			
Part II: Managing Problems and Risks			
What measures are commonly taken by farmers/firms/other supply chain players to reduce the risks associated with these problems? To otherwise mitigate their impact? Cope with the impacts?	Would you say it is the same for men and for women? If not; how and why?		(...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What is the evidence of the effectiveness of these measures?			
Do farmers/firms act independently, or do they draw upon support services from the private sector and/or government. Describe the nature of these services?	Would you say it is the same for men and for women? If not; how and why?		
What measures/programs/policies/regulations does government deploy to address these problems?			
What institutions are involved? What levels of resources are dedicated to this?			
What capacities are evident to implement these measures/enforce the policies?	Do they have capacities to integrate gender?		
What are pertinent externally financed programs in this area?			
What are the available indicators/data/other evidence on the effectiveness and/or limitations of these interventions?			
What lessons can be learned from the implementation of on-going programs/policies?			
What are examples of effective public-private collaboration in managing identified risks?		Are there any best practice examples for gender-sensitive programming?	
What is the role of technology and technical innovation in addressing risks?			
Part III: Gaps/Opportunities/Future			
What are new and emerging issues or issues that will likely pose challenges to this industry in the upcoming years?			
What opportunities are there to better manage existing risks or to address the emerging issues?			
What would be priority next steps (in relation to legal/regulatory reform; capacity building, etc.)			



G.8. Financial institutions

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Name of Institution and Contact Information			
Name(s) of person participating in interview			
Year of incorporation			
Type of institution? Regulated or Unregulated?			Finance cooperative Commercial or bank government, Unregulated: NGO, financial
Size of agricultural portfolio			cooperative, community bank.
Number of branches			Total portfolio, gross non-performing loans (%) borrowers
Number of employees			
Part I: Significance of Supply Chain and Role as Supply Chain Service Provider			
What is the size of lending to the commodity / supply chain sector.			Share of commodity sector lending % of agricultural lending
What have been the trends in lending to the sector over the last five years?			Check for financial records
What are the main types of loans to the sector?			Short term, long term, collateral
What is the approximate share of lending allocated across different supply chain entities? Are their explicit norms followed in this regard e.g. types of clients		Are clients mainly women or men and for which products?	% Breakdown for input supplies, farmers, processors, processors, , traders and retailers
What are the general lending purposes?			Crop production, farm equipment, agribusiness warehouse receipt financing, loans against forward contract, factoring
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part II: Perceptions of Risks, Expected Losses facing supply chain entities and financial intermediaries			
What are the key risks impacting at different stages of the supply chain? Input suppliers/ farmers/ processors/ traders and retailers		Have any measures been put in place to encourage women taking credit?	Differentiation of risks across different supply chain entities
Does risk exposure vary across different regions, productive zones?			Regional prioritization
Broadly described, what are the main types of risk impacts which affect the supply chain?			Expected losses e.g.. effects on input demand, production, trading relationships
What are the main spillover impacts of concern to financial intermediaries			Financial defaults, declining loan demands, uncertainty etc.
Are underlying conditions deteriorating/ improving in recent years? To what extent can this be attributed to changing risk factors?			Check for recorded information e.g. price, rainfall, logistic trends. (...)
Part III: Managing Problems and Capacity			
What are the typical lending requirements?			Minimum property size, mortgage of land, house, assets; loan payment agreement, borrower has life/health insurance, borrower has asset/crop insurance
What type of limits are imposed on lending			Limits to agricultural sector concentration, geographical concentration, ban on financing specific activities
What other policies/practices are supported by the institution to manage risk?			Facilitation of crop/weather insurance, price hedging, specialized risk ratings, lending in kind, provision/facilitation of technical advice
What if any risk transfer tools are in use?			Use of credit derivatives, securitization
How effective have actions been? What actions have been most effective? Least effective? Why?		Have you been effective in including women and other vulnerable groups? If so, how?	
What risk management alternatives are under consideration?			(...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part IV: Response Recommendations			
What have been the major lessons learned in previous risk management activities			
What options could be supported to enhance supply chain performance and manage credit risks more effectively?			
What are the major constraints in considering financial risk management instruments?	Any gender-based constraints?		
What are the potential options for managing problems jointly with different supply chain entities?			



G.9. Farmer organizations

Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Profile			
Name and title of official			
Name of Organizations			
Number of Members	Sex and age		
Number of Branches			
Province(s)/District(s)			
History of Organization			Year established, stability.
Part I: Relationship to Supply Chain			
Briefly describe the role of the organization and the type of activities which are supported?			Year established, overview of services: extension, technical assistance, lending support
Role in input procurement? Inputs procured, sourced from?			Input types and sources
Role in commodity selling/trading?			Contract arrangements and relationships
Describe the breakdown of membership in your organization. What is the national representativeness of the organization?		Sex and age	
What is the share of small holder farmers in the production system? What is the spatial distribution?		Sex and age	
What are the incentives for smallholders in producing the commodity? What are the alternatives?		Would you say it is the same for men and for women? If not; how and why?	Investment return v. risk mitigation
(...)			



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
Part II: Perceptions of Risks, Expected Losses facing farming entities and the farmer organization			
Broad describes, what are the main types of risk which impact on the overall performance of farmers? Smallholder, medium sized, agro industrial type enterprises	Would you say it is the same for men and for women? If not; how and why?		Probe against specific risk factors impacting on farm level e.g.: weather, price, environment, labor standards
Describe the typical risks incurred in: sourcing inputs/ production/ sales, marketing of goods.	Would you say it is the same for men and for women? If not; how and why?		Frequency of risk – seasonal, annual etc.
Are underlying conditions deteriorating/ improving in recent years? Have you kept any records to track this?			Check for any records on rainfall, yields etc.
How are risks transmitted across different regions, productive zones?			Spatial distribution/ Regional aspects
What are the three main risks that are perceived from the farmer organization's perspective?	Would you say it is the same for men and for women? If not; how and why?		
What are the direct impacts that might be expected / of concern from farmers perspective?	Would you say it is the same for men and for women? If not; how and why?		Expected losses i.e. effects on input demand, production, trading relationships
What if any risks are faced by the farmer organization in			Review as per line of inquiry above.
Part III: Managing Problems and Capacity			
What is being done by the farming organization to address problems in advance of a risky event? How long have these actions been provided?			Ex ante – Enterprise/ livelihood, crop diversification
What is done by the farming organization to address problems after a risky event?			Ex post strategies -
To what extent have actions joint actions been undertaken with government or private sector entities? Describe?			Recent patterns. Public sector v. market based actions. Type of instruments
What separate actions are being undertaken by other actors?			Self interventions, government officials, formal v. informal actions
How effective have these interventions been? What have been the main lessons?			Timing, targeting, delivery aspects
			(...)



(...) Original questions	Follow-up questions	Additional questions to ask	Issues to probe (Compare responses from men and women throughout)
What has recent experience illustrated about small farmer's capacity to withstand major shocks? Minor disruptions?	Would you say it is the same for men and for women? If not; how and why?		Ability to withstand shocks versus need for 'external' partners
What information sources, if any, are used to assess the potential magnitude / severity of problems?	Would you say it is the same for men and for women? If not; how and why?		Early warning information, price tracking, local knowledge
How would you describe overall access to credit? What if any are the major barriers to credit access?	Would you say it is the same for men and for women? If not; how and why?		Availability, affordability of credit
How would you describe overall access to insurance? What if any are the major barriers?	Would you say it is the same for men and for women? If not; how and why?		Types of insurance, providers
Part III: Managing Problems and Capacity			
What key lessons have been learned by the organization related to risk and risk management?		Have you learned anything about gender roles? What other factors may be central?	
What options could be supported to enhance supply chain performance and manage risks more effectively?		For men and for women actors	
What are constraints in considering risk management instruments?	Any gender-based constraints?		
What are the potential options for managing problems jointly with different supply chain entities?			
What roles might private sector actors play?			



Tool H: Integration of gender into ARM tools: overview

Tool h includes a sample of common ARM tools, defines them, describes their basic advantages and disadvantages, (mostly based on PARM's CD2 Manual, Module 3) and adds some gendered considerations to be taken while proposing, designing or implementing the various tools proposed.

PARM Tools* and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
Crop and Enterprise Diversification	Crop diversification refers to adding and/ or substituting new crops (or cropping systems) to a current production programme on a farm. Diversification can generally be implemented by adopting crop rotation over multiple seasons or a mixed/ intercropping system in the same season.	Mitigate against localised weather-related crop losses; reduce income variability by reducing dependency on monoculture and providing different sources of revenue; contributes to soil conservation, wildlife habitats, and increased populations of beneficial insects.	The new/additional crops planted may require investment in additional equipment; farming on several tracts of land (especially if they are geographically diverse) and growing multiple crops (especially if they require new capital) may reduce economies of scale, thereby raising production costs; if the yields of two or more crops planted have a strong positive correlation, the overall risk may not be reduced.	This tool has a high potential of connecting smallholder farmers to valid supply chains, however, the preconditions (access to several plots of land and access to equipment, capital) may be hard to meet for the most vulnerable, especially for women. Needs to be based on a thorough; gender-informed value chain analysis as men and women are often active in different value chains, or at different stages of the same value chain. Also, certain basic questions need to be evaluated: <ul style="list-style-type: none"> • Does the government see gender differences, reflect and accommodate them? • Who works where, under which conditions? • How do they manage risks associated to transport? • Who takes which roles along the value chain? • Who is involved in processing? • Under which conditions, having which needs?
Crop Rotation	Crop rotation is a form of crop diversification. It is a planned system of growing different kinds of crops in recurrent succession on the same piece of land. In terms of risk management, crop rotation helps mitigate the risk of disease and pests. It can also help reduce risk from adverse weather, especially drought, because a variety of crops are planted across the entire farm each year.	Increases soil fertility; can increase crop yield; reduces soil erosion; limits concentration of pests and diseases.	Requires more machinery and labour; may give lower financial returns during certain times; requires more knowledge and skills; often requires investing in specialised equipment (e.g. irrigation system); obligatory crop diversification.	Needs to be examined with regards to the seasonal calendars for both men and women farmers. Knowledge and skill transfer needs to be adapted to both men and women's needs, especially as women often have less access to information, trainings, skills etc. Vulnerable farmers, and especially women, may be at a disadvantage due to not being able to invest in specialised equipment as they often lack capital. (...)

*(see CD2 Manual Module 3)



(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
<p>Livestock Management</p>	<p>Livestock management as a risk management tool entails a number of animal husbandry practices. They can be organised into three categories, each of which has a number of possible risk management tool options.</p> <ul style="list-style-type: none"> • Stock Management; • Stock enterprises; • Disease management. 	<p>Strengthening the overall management of livestock production; heightening the awareness and vigilance of livestock producers of the relationship between on-farm and value-chain risks – especially with regard to disease risk.</p>	<p>The level of detailed analysis required is time consuming; the tools and methods can be costly or otherwise difficult to implement, especially for small-scale production systems.</p>	<p>This tool needs to be implemented with a very high level of awareness of how gender influences the way livestock are raised, treated and how value chains are structured. For example, cattle herders engaged in transhumance in the Sahel are almost exclusively men (and integrate young boys at school age, so there is an age component here too), but the dairy processing and selling is almost exclusively done by women.</p> <p>As this tool needs more time, technical expertise and follow up and higher costs, it must be implemented with a strong gender component. Considering women often work in the fields and are the primary care takers of the family, and thus have less time, and often have low skillsets, and low access to knowledge and information and extension services, and quality inputs, and credit etc, this tool may be too labor intensive and technical in order to be done by those who are already pressed with time and have low skillsets OR it needs to be done with care to take these types of capacities into consideration (encouraged option).</p>
<p>Soil and Water Conservation</p>	<p>Soil and water conservation is a key tool in agricultural risk management. The aim of soil conservation is to ensure that top soil and soil fertility are not lost. The aim of water conservation, in this context, is to mitigate the risk of weather variability (i.e. drought, extreme temperatures, damaging winds), and other climate change related effects.</p>	<p>Reduce water runoff and soil erosion; conserve soil moisture for plant growth; increase ground water supplies.</p>	<p>Labour intensive and time consuming to establish; the amount of crop residue required may be more than is available; physical barriers (e.g. ridges and mulch layers) can inhibit carrying out field operations – especially planting and harvesting.</p>	<p>Opportunity to analyse and value men and women's local knowledge while considerably empowering them with the tools and practices that can help them continue and grow their livelihoods in the long run. Highly gender-relevant as in many settings; women are traditionally more intensively involved in conservation techniques. Furthermore, as this tool is labor and time intensive, it is important to assess if the groups involved are able to carry out the physical labor, and have the time to do so, or find solutions to adjust schedules etc. Considering women often work in the fields and are the primary care takers of the family, they may have less time to dedicate to the implementation of tools, this needs to be taken into consideration.</p> <p>(...)</p>



(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
<p>Reduced, Modified and Minimum Tillage</p>	<p>Reduced, modified and minimum tillage systems are conservation tillage strategies to reduce soil degradation and erosion, protect water quality and, especially conserve soil moisture. These systems improve soil quality and soil drainage and help reduce the occurrence of soil-borne diseases. As a risk management strategy, they help to mitigate the risk of drought. Essentially, the idea is to implement direct seeding without turning the soil.</p>	<p>Excellent erosion control; soil moisture conservation; reduces fuel and labour costs; builds soil structure and health.</p>	<p>No incorporation of residue into the soil; less decomposition of organic matter and release of nitrogen; lower rate of seed germination, leading to lower yields or the need to replant; increased dependence on herbicides.</p>	<p>It is usually a good idea to make sure the technology, and skills needed to implement these tools, are accessible and useable by all the groups involved. For example, some technology is too heavy, or the explanations need to be adjusted to certain audiences. Make sure those are taken into consideration.</p>
<p>Contract Farming</p>	<p>Contract farming or marketing contracts transfer risks from farmers to the other contracting party. This reduces price/marketing and financial risks, especially if the provision of necessary operating and investment capital is involved, and production risk if the supply of high quality/improved seeds, fertilizer, chemicals, etc.</p>	<p>Inputs and production services are often supplied by the buyer; usually on credit through advances from the buyer. Advisory services, information, and other risk management tools can be provided by the contractor to help improve production. Introduces new technology; enables farmers to learn new skills; farmers' price risk is often reduced as many contracts specify prices in advance; contract farming can open up new markets which would otherwise be unavailable to small farmers; promotes private-sector investment in agriculture.</p>	<p>Farmers face the market and production risk associated with new crops and technologies; Inefficient management or marketing problems can mean that quotas are manipulated so that not all contracted production is purchased; buyers may be unreliable or exploit a monopoly position; the quota system (if there is one) can be manipulated by the buyer (or his staff); farmers may become indebted because of production problems and excessive advances.</p>	<p>As shown by Purchase for Progress programming at WFP, this can be a viable tool especially to support women farmers who would otherwise not be encouraged to produce at scale. The prospect of being able to sell all their production makes them take higher risks/make greater investments. However, there needs to be a thorough; gender-differentiated risk analysis as women may have less access to information, technologies etc. to ensure that they benefit from the process. Also, in many contexts men have the right to use productive equipment first, which means that women plant and harvest later and have lower yields and may not be able to meet quotas. This system may be useful for empowerment if coupled with measures that seek to render the farmers gradually independent of the forward contracts, connecting them directly to the market. Adequate explanation of new technologies, the contract modalities etc need to be in place to avoid misunderstanding, manipulations from buyers or low yields etc.</p>

(...)



(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
<p>Spreading Sales</p>	<p>Spreading sales refers to making several sales of a product during a year. As an ARM tool, it is effective for dealing with the risk of short-term price variability.</p>	<p>Spreads income out over the year (or other selling period), improving cash flow; helps stabilise livelihoods; helps avoid selling all of the production at the lowest price in the market.</p>	<p>Requires storing the products which can be costly, which may not be an option, and may involve loss due to damage, pests, rotting or shrinkage; could result in a decrease in gross revenue if prices are lower than expected; may require introduction of new varieties and new husbandry practices; requires adequate financial resources; requires adequate information about the market.</p>	<p>Vulnerable farmers and especially women often lack access to sufficient and affordable storage and they also lack access to the market. In many contexts, they are dependent on middle men and they adapt to their buying pattern. Therefore, it would need to be closely examined where and how and under which conditions men and women store their products and if both sexes are likely to use and benefit from this tool, e.g. . How and what do women and men store, what are their specific needs and priorities, what are their volumes, how do they organize themselves? the different access to financial resources, and information about the market also needs to be taken into consideration and addressed before implementation.</p>
<p>Hedging</p>	<p>It is a strategy that uses future contracts to reduce the risk of adverse price changes before a cash sale or purchase of an agricultural product. It is essentially the act of taking opposite positions in the cash and futures markets. It is the process of shifting price risks in the cash market to the futures market by holding opposite positions in these markets.</p>	<p>Most effective for long-term large scaled traders; can be used to lock in a profit; assists during poor market periods; protects against price changes, inflation, currency exchange rate changes, and interest rate changes; relatively simple to implement; global commodity markets could be used by producers/ traders for price risk management, even when not delivering the physical product there.</p>	<p>The cost of hedging can minimize overall profits; reducing the risk can reduce profits; it is a difficult strategy to understand and is not commonly used by the short-term trader; when markets are moving in a positive direction, hedging proposes little benefits; it requires an increase in account balances; it requires excellent trading skills and experience; may not be applicable everywhere; may not be applicable to all crops; it is not meant for small scale individual farmers.</p>	<p>Encourage use especially by women large-scale traders who area minority in many contexts - adapt the tool to meet their needs in particular (needs analysis via interviews)</p>

(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
Forward Pricing	<p>Forward pricing is an ARM tool used to hedge against price risk. It is a practice where the buyer and producer agree on a price, or a limit on the price for the sale of crops or livestock in advance of delivery.</p>	<p>Cash forward contracts: relatively easy to understand and implement because contract terms are in writing; there is some flexibility regarding pricing; buyers can spread out payments according to cash flow, etc.</p>	<p>Cash forward contracts: not very flexible; not a simple tool; requires investing time to learn how the market works and how local prices relate to future prices; during volatile markets, the premium can be high.</p>	<p>This tool can be related to improving access to information, financial inclusion, for vulnerable farmers and especially women. It can offer greater security to traders overall, but especially to women who are often more vulnerable to shocks as they have lower profit margins, are unable to make larger investments and so forth. It demands however that traders receive ample information about market fluctuations and are financially educated. Given the information gap between men and women, this would need to be coupled with other measures in order to truly benefit both sexes.</p>
Warehouse Receipt System	<p>A warehouse receipt system (WRS) is a relatively modern innovation based on a variation of traditional storage strategies. It has significant potential and has already been adopted in several developing countries.</p>	<p>Potentially provides credit to farmers, producers and traders by providing collateral for such loans; produce is stored in a secure environment; allows producers to take advantage of price fluctuations and sell when the market conditions become favourable.</p>	<p>Risk of inefficiency, mismanagement, fraud, failure or bankruptcy on part of the warehouse or the MF; it is hard to implement if the network and state of MFIs is weak in the country; lack of expertise for WR service providers to handle the attack of pests or other hazards to crops stored in the warehouse.</p>	<p>Needs to be adapted to be user-friendly and as safe as possible for vulnerable farmers with little formal education. May be met with distrust especially from women or older farmers who tend to rely more heavily on informal systems. Also, in many contexts a lot of bargaining and strategizing occurs within the household in order for women to exercise control over the use of stored grain. These complex processes may be influenced by this tool and it therefore needs to be preceded by a thorough social analysis of the gender dimensions of storage.</p>
Insurance	<p>In general, insurance is a risk management tool used to hedge against a contingent loss. Agricultural insurance can be used to cover losses for all the farming activities. It is one of the best-known ARM risk transfer tools. It is not limited to crop insurance, it can also be applied to livestock, bloodstock, forestry, aquaculture, and greenhouses.</p>	<p>Can transfer the risk away from households, communities, regions, and even countries; ensures a reliable level of cash flow; allows more flexibility in marketing plans leading to a more predictable level of income.</p>	<p>It can be expensive, especially for farmers with fewer financial resources; it can be expensive for insurers to implement, especially when underwriting small portfolios; it is complex and requires that farmers/business operators have the education or capacity to understand the concept of insurance.</p>	<p>As the discussion of R4 in the study has shown, hybrid models combining savings; index-based insurance, capacity building and provision/creation of productive assets can cater to the needs of women smallholder farmers. Women are often deemed uninsurable due to their lack of collateral but index-based insurance rather looks at the conditions under which they practice agriculture than their assets. Insurance products are complex and financial education is a must.</p> <p>(...)</p>



(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
Leasing Assets	When faced with various kinds of risk, the farmer/business operator has an option of leasing assets from other farmers or business operators. Hired or rented assets can be conducted for a specified period and at a specified price. The asset remains the legal property of the owner.	Allows farmers to access/ purchase productive assets they could otherwise not afford; provides access to medium term finance which is particularly difficult for farmers to obtain; spreads out the payment for the assets.	The lessee doesn't own the asset; in some cases there could be high down-payment requirements; in some cases it could result in higher payments (compared to term loans) due to shorter lease periods.	It may be more helpful to look into longer-term asset ownership especially for women. This can be strengthened at government level, for example increasing land ownership (many agricultural ministries across the globe collaborate on policy design and reforms to encourage this): 1. Referring to the Convention for the Elimination of all Forms of Discrimination Against Women (CEDAW), to which most countries are signatories; 2. Address laws regarding property rights; 3. Local negotiation by women; 4. Local negotiation with leaders. Collective action; 5. Land titling
Individual and Household Coping Tools	Risk coping tools are an important component of ARM, particularly for poorer and more vulnerable individuals and households. Further, some risks, such as weather risk and pest and disease risk, often affect a substantial geographic area at the same time. Thus, many of the informal coping strategies, regardless of the cultural norm, are not sufficient because many if not all the households in the affected area, suffer from the same impact and experience loss.	Help those who are victims of the impact of unfavourable events smooth consumption or survive those events; create a form of self-insurance for enduring and recouping from substantial loss; many of the tools are embedded in social structures and are a reflection of the cohesiveness of a community in which most, if not all, the members are experiencing the same challenges.	They tend to be based on consumption; they are not investment orientated; put more pressure on human and social assets; limited in their capacity to provide relief.	This is a particularly gendered type of ARM tool. For example, often as it is based on consumption and are tied to household food consumption, the effects are most negatively felt by women. Women tend to eat less to be able to feed the rest of their families, affecting their food security levels severely. Some form of household level analysis may be necessary to understand and see the effects of such tools on different members of the farming household. Malnutrition leads to bad health, low productivity levels, which can further impact the farm. It is important then to analyse. (...)

(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
Community-based Coping Tools	Some of the tools are similar or even linked to the tools that individual and households might adopt. The main difference is the collective nature of the tool, and that, by design, the decision to create, adopt and implement the tool is a collective endeavour. Most of them are embedded in social networks some of which are implicit through long-standing socio-cultural practices, and some of which are newly-created emerging out of changes in society, technology (particularly communications technology), economies and politics; and, they are context-specific.	Group enterprises provide confidence for more vulnerable group members; economies of scale in service provision, including bulk purchase of inputs, bulk marketing of produce, and information collection and dissemination; organization of farmers improves negotiating power with buyers and traders.	Potential for group conflict and poor sustainability; potential for mismanagement; requires strong financial management and good communication between members.	While these arrangements can have a potential to improve risk management, they are also affected by gender differentials, with women's networks generally having less capital to pool. Some steps that may be helpful in making the tool gender-informed: <ol style="list-style-type: none"> 1. Encourage and re-value social safety nets, and women's crucial role in them, 2. provide training and education in citizens' centres; make them accessible to women farmers, ensure that they are held in local languages... However, community safety nets have also the capacity to be transformative for women, as women can pool their resources together, and of course it has been proven that women prefer to receive assistance from their community or family rather than from other more official sources. Therefore it can be a tool that is more easily implemented if targeting vulnerable groups that are women. These networks may already exist, and can be built upon.
Public Food Grain Reserves	Many developing countries established public food grain reserves to help control unfavourable price fluctuations and to mitigate the adverse impacts on farmers and low-income consumers. Given that the aim of public food grain reserves is to reduce the price and market risk of selected agricultural commodities, and in general improve farming resilience, this practice acts as a potential tool for ARM.	From the farmers' point of view, the major benefit of the food reserve tool is the protection from a collapsing market – that is, the government purchases 'replace' the market.	Food reserves are expensive. The costs include procurement (buy expensive and sell cheap), transportation and distribution which can be high and unpredictable. If they are big enough, the cost of supporting food reserve programmes can divert much-needed funding for public investment in agricultural productivity and rural infrastructure and discourage private investment in the grain sector.	Just a note on the need to find out the difference in asset ownership and access to credits between men and women when proposing a tool that is expensive.

(...)



<p>(...) PARM Tools and other ARM tools</p>	<p>Definition/ Reasoning's behind the selected tool</p>	<p>Advantages</p>	<p>Disadvantages</p>	<p>Gender aspects</p>
<p>Disaster Relief Programmes</p>	<p>The United Nations Office for Disaster Risk Reduction (UNISDR) defines disaster as "a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources."</p>	<p>Helps farmers and business operators cope with a realized risk; preparation activities such as building infrastructure that will help contain damage; ensuring that agricultural practices do not make land more vulnerable to natural hazards.</p>	<p>Often difficult to reach micro-level stakeholders timely way and with the relevant assistance; very expensive and often requires more than is provided in government budgets due to fiscal constraints.</p>	<p>Very high relevance for gender as this is a community-based approach where men and women engage at different stages and in different ways, and that also offers opportunities for empowering women and youth through their involvement and leadership (if it is encouraged). Ample guidance on gender sensitive DRR exists and should be taken into account. Women are also often the primary recipient for disaster relief, and this is something to take into account as well.</p>
<p>Options</p>	<p>An option is the right but not the obligation to buy or sell a certain quantity of some underlying asset at a specific price at a specific date. An option is therefore essentially a futures contract without basis risk. If the price of the underlying commodity does fall below an agreed threshold, the farmer can exercise his/her right to sell the produce at the superior price stipulated in the option. Usually however, options, like futures, are traded on an exchange and a farmer would simply need to sell his put options to other participants in the exchange. The farmer could then sell produce using the normal trading channels.</p>	<p>The revenue generated from the sale of the options would constitute the hedge against negative price movements for the underlying commodity. A further advantage of options is that because the holder of an option is not compelled to exercise it, a negative production event which reduces a farmer's output will not require him/her to have to buy commodities back at inflated market prices to satisfy the terms of, for example, a forward contract.</p>	<p>The cost of premiums on options, if high enough, can cancel out the price stabilising benefits.</p>	<p>This tool can be related to improving access to information, financial inclusion, for vulnerable farmers and especially women. It can offer greater security to traders overall, but especially to women who are often more vulnerable to shocks as they have lower profit margins, are unable to make larger investments and so forth. It demands however that traders receive ample information about market fluctuations and are financially educated. Given the information gap between men and women, this would need to be coupled with other measures in order to truly benefit both sexes.</p>

(...)

(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
<p>Relevant, timely, accessible Information</p>	<p>Information is a key tool to ARM. Farmers need access to information, in real time, and in a way that they understand it and use it according to their needs. Farmers need information on weather, markets, prices and trends, pests and diseases and they need this information to be in a format that they understand (not too technically complex, in a language they comprehend...) and accessible to them. Some farmers may not have access to one of more of these information providers: radio, TV, cell phones, or social media or extensive service agents. The medium of information chosen is highly correlated to effectiveness. Early warning systems are a very effective and important ARM tool, to detect droughts, pests outbreaks and so on, in time for farmers to prevent, mitigate, or avoid risks by implementing other ARM tools for example, however those systems need to be designed and</p>	<p>Not necessarily the most costly, it is flexible as it can be a through a variety of different ICTs (cell phones, extensive service agents, radio etc.). The information usually exists, it is more a question of packaging it and diffusing it. It promises to enhance farmers' access to risk mitigation practices and weather and climate information, reduce the perceived risks, and strengthen their participation in commodity value chains.</p>	<p>There are no real disadvantages to receiving information. The disadvantages are linked to farmers' ability to process the information, the lack of information available or of the medium through which it is being diffused, or information that is not up to date or in a language or format that is not userfriendly.</p>	<p>"Broad range of actions to take, starting with surveys of what works best for men and for women, which channels an types of information they need and prefer, encouraging the government and other partners to disaggregate data related to information etc. All information is accessible in local languages, together with visual information accessible to those many women who cannot read or write. Infographics and visual communication through apps could help reach less educated women. Extension services are often male dominated and do not reach women and men farmers equally due to social barriers and other difficulties, making women less informed and supported, this can be remedied by training extension services and encouraging women extension service agents."</p>

(...)



(...) PARM Tools and other ARM tools	Definition/ Reasoning's behind the selected tool	Advantages	Disadvantages	Gender aspects
<p>Improved participation of smallholders in associations and association leadership roles</p>		<p>Serves strategic interests of empowerment as well as horizontal value chain integration. Women can often only play a greater role in formal markets and supply chains through participation in farm-based organizations (such as rotating savings and credit associations). This allows them to pool investments, secure more favourable marketing conditions, reduce risks, increase agency and social capital, strengthen participation in decision-making processes and heighten acceptance for advocacy and social organizing.</p>		<p>Gender aspects</p> <ol style="list-style-type: none"> 1. Make information about how to join trade associations available to men, women, boys and girls through community/ local services (as. local development agencies, etc.); 2. Encourage a support network for women farmers ; 3. Reserved seats to women in mixed gender associations.
<p>Social protection measures</p>	<p>Social protection is an important solution for a more inclusive approach towards ARM. Social protection measures are important means of moving beyond short-term shock relief.</p>	<p>formal, through government agencies, long-term, multidimensional, not time or labor intensive and based on many factors which allow for a support that is more holistic in some ways..</p>	<p>must meet certain requirements in order to receive certain 'entitlements', usually government based, and the authorities are not always fair, or efficient, or effective etc.</p>	<p>Adaptive social protection: needs through gender analysis. These generally</p> <ol style="list-style-type: none"> 1. place social protection within a risk management framework for both idiosyncratic and covariate shocks; 2. identify the need to strengthen the collection and analysis of data on poverty and vulnerability, including through early warning and targeting systems; 3. highlight food and nutrition security as a focus; iv) identify social transfers as an instrument of choice to reach the poorest and most vulnerable; and v) underscore the importance of multisectoral action and a move towards integrated and coherent social protection systems.



Tool I: Gender-informed ARM training checklist

Ensure that trainers:

1. Have experience in needs assessment from a gender perspective, and in the design, implementation and delivery of training on gender issues.
2. Have sound knowledge of gender theories and concepts, In-depth and up-to-date knowledge of gender issues in ARM.
3. Use gender-responsive teaching skills/pedagogy.
4. Link gender knowledge to training practice.
5. Use gender-sensitive language and gender-sensitive materials.
6. Have a strategy to challenge participants' resistance and prejudices regarding gender issues, reflecting on their own practice.
7. Finally, ensure gender balance in teams of trainers and among participants as much as possible.
8. Model for a gender-informed capacity building plan.



Tool J: Key gender stakeholder mapping checklist for ARM

Based on guidance resource from WFP, which can be directly transferred into ARM using the WFP Gender Toolkit – Guidance on Stakeholder Analysis.

<https://docs.wfp.org/api/documents/02cb728b1dab4c5f98a747afa7c17ce5/download/>

Stakeholder analysis is the systematic identification and analysis of the different individuals and groups, who have an interest in, can influence and/or can be impacted by ARM activities and agendas positively or negatively. In ARM with supply chain focus “stakeholders” are: input providers, service providers, small farmers, medium & large farmers, financial intermediaries, traders, processors, exporters, government.

Gender sensitive stakeholder analysis consciously examines the commitments, capacities and efforts of the different women and men (and girls and boys), as well as organisations, in mainstreaming gender and in advancing gender equality and women’s empowerment.

Stakeholder analysis involves:

- identifying ARM stakeholders;
- identifying the interests (needs, concerns, priorities etc.), influence (degree of power) and capacities of key stakeholders;
- understanding the relations between the different stakeholders, which may be cooperative or conflictual;
- identifying how each stakeholder will be impacted by ARM;
- using the analysis to inform programming.

Interest: Stakeholder’s needs, concerns, priorities are central to the Tool

Influence: capacity to significantly affect (positively or negatively) the Tool implementation and outcomes

1. Identify stakeholders and whom they represent

- List the primary and secondary stakeholders in the ARM process, indicating whom they represent.
- Check: Are all the key stakeholders listed, including at the micro, meso and macro-levels?
- Does the list of stakeholders include individuals and groups that support the tool and those who do not?
- How has a gender analysis been used to identify the different stakeholders?
- What is the gender composition of the stakeholders listed? Are the members of a stakeholder group who participate in the ARM process mostly men or women?
- Are any new stakeholders likely to emerge during the ARM process?
- Are there women only or men only groups among stakeholders? Are women’s rights organisations listed?
- Are women and men leaders listed?

2. Identify interests and influences of each stakeholder

- Identify the interests of each stakeholder paying attention to who the stakeholder represents (e.g. rural women, land owners, youth, persons with disabilities, men smallholder farmers, religious leaders).
- Information about a stakeholder's interests and influence can be obtained from, for example, their official documents and communications, member lists, budgets, interviews, group discussions, references and media coverage.
- From the various sources of information, interests and influence can be identified by asking:
- Why was the stakeholder (e.g. NGO) created? What is its vision and mandate?
- Who are the stakeholder's members? Who does the stakeholder represent? (women? men? girls? boys of particular ages, dis/ability, ethnicity, religion, sexuality, economic status etc.?)
- What has the stakeholder done before and what future activities / outputs are planned?
- Who are the stakeholder's donors, funders and allies? What are the stakeholder's expectations of the ARM process?
- Is the stakeholder likely to benefit from the tool? How?
- What resources will the stakeholder likely commit (or avoid committing) to the ARM process?
- What other interests does the stakeholder have which may conflict with the ARM process?
- Have the interests of each stakeholder been identified? Remember, a stakeholder usually has more than one interest.
- What efforts have been made to identify any hidden interests?
- If a stakeholder has several interests, which is the dominant one? For example, are issues about gender equality at the top or bottom of a stakeholder's priority list? Are the interests of one group of members given priority over those of other members?
- If a stakeholder is a coalition of groups, who speaks on behalf of whom? Does the collective opinion represent the interests of women and men equally?
- Do the stakeholders listed represent the interests of the diverse women? Men? Girls? Boys? If not, who speaks on behalf of the women, men, girls and/or boys who are not organised or do not have access to decision-makers?
- Are there differences between the stakeholders who operate at the micro-, meso- and macro-levels in terms of representing the specific interests of women, men, girls and boys?
- Which stakeholders can have a significant influence (positive or negative) on the tool? Are they women, men, girls, boys?
- Has each stakeholders' level of commitment to gender equality been determined?

3. Identify the relationships between the stakeholders

Identify the relationships that exist between the different stakeholders.

The relationships may be cooperative or conflictual. There may be active collaboration between some stakeholders or competition.



Check:

- How do the stakeholders regard one another? Do they operate independently? Do they interact?
- Are there coalitions or groups of allies among the stakeholders? If so, what brings the stakeholders together (e.g. shared interest, common donor, location)?
- What are the power dynamics between the different stakeholders? Who dominates? Does power differ according to gender? How?
- Is there a conflict of interest between any stakeholders?
- Could the tool lead to conflict between stakeholders? Which stakeholders? How? What can be done to prevent conflict between stakeholders?

4. Identify how the ARM tool will affect each of the stakeholders

- Analyse how the ARM process will affect the different stakeholders positively or negatively.
- Consider the potential impact of the tool on women, men, girls and boys separately; identifying who gains and who, if anyone or any entity, doesn't gain

5. Identify the different capacities of each stakeholder in relation to tool implementation and outcomes. Indicate the potential roles of each stakeholder in the Tool.

- Check: Consider each question with gender equality and empowerment in mind. What are each stakeholder's gender relevant knowledge, skills, experiences, influence, resources etc.? Remember, women, like men, have capacities; not just vulnerabilities.
- Are there differences in capacities and influence between stakeholders at the micro-, meso- and macro-levels? What implications do any differences in capacities and influence have for tool implementation and outcomes, including in relation to gender equality? Which stakeholders have most influence over the ARM process? Who, and which interests, do they represent?
- Which stakeholders positively influence the tool in terms of gender equality?
- What capacities do the stakeholders have to oppose and resist (negatively influence) the tool, including gender equality outcomes?
- Is it safe for stakeholders to share their interests and needs?

6. Use the stakeholder analysis

Use the results of the stakeholder analysis to:

- Identify the key stakeholders who should be involved in the tool and/or will be directly impacted (e.g. cash, food, voucher recipients)
- Determine the nature and extent of each stakeholder's participation in the tool the capacities that key stakeholders can bring to the tool identify alliances
- Pay particular attention to stakeholders with a high degree of influence power. Do the influential stakeholders represent the interests of women, men, girls and boys?

Tool K: Gender-informed monitoring and evaluation checklist for ARM

Monitoring should be an **inclusive and collaborative process involving partners** – governments, civil society organisations, service providers etc. and the women and men (and girls and boys) in communities.

Inclusive, participatory processes are important because monitoring is both a political and a technical process. Interests and influence differ across the stakeholders.

1. Apply gender sensitive indicators

What are gender-sensitive indicators?

An indicator is a **measure of change**. An indicator reveals the progress that is made towards achieving our objectives. Gender-sensitive indicators ensure that we detect progress – or not – for women, men, girls and boys, and towards achieving gender equality.

Gender-sensitive indicators are NOT just sex-disaggregated indicators. A gender-sensitive indicator should involve collecting sex-disaggregated data and information AND measuring equal access to ARM tools.

The availability and accessibility of data and information are important considerations when formulating indicators. The lack of data, however, is not sufficient reason to exclude an indicator. This is because the lack of data, or the lack of sex-disaggregated data, is informative in itself. It indicates that there might be inequalities between different groups of people, such as women and men in a particular community, and that redressing the lack of data might help to reduce the inequalities.

Indicator Quality Check:

- Were the different tool stakeholders involved in formulating the indicators? Do the indicators measure progress and issues relevant to the tool?
- Are all people-related indicators disaggregated by sex and age?
- Are there both qualitative (e.g. perceptions, opinions, observations, judgments) and quantitative (e.g. numbers, percentages, proportions) indicators?
- Are the indicators easy to understand?
- Are the indicators specific and clearly defined?
- Are there a sufficient, but not excessive, number of indicators? (Approximately six per type of indicator - process, output, outcome.)
- Are the indicators technically sound?
- Are the indicators relevant to different contexts? (if applicable)
- Do the indicators measure impact, including in gender equality?
- Do the indicators capture the tool impact on the situations of women and men, girls and boys, and gender relations?



2. Develop a monitoring plan

In consultation with key stakeholders, draft a simple and practical monitoring plan that specifies:

- Who will be responsible for monitoring the tool - Ensure that at least some of the people involved have sound gender competencies
- Sources of data and information - For quantitative indicators: secondary data, records or information databases or surveys, questionnaires, interviews, or tests. For qualitative indicators: observations, document reviews, focus groups, interviews, attitude surveys, participatory appraisals, field research, community meetings.
- Methodology - Indicate measures for ensuring that monitoring is participatory and inclusive and how the methodology is gender-sensitive (e.g. gender training for enumerators).

3. Gather data & information

- Are all data disaggregated by sex and age?
- Have data and information been collected from women and men?
- Have data and information been collected about relevant gender issues?
- Do the enumerators have sufficient capacities to gather gender specific data and conduct participatory gender analysis?
- If gender knowledge and skills are weak, what capacity strengthening opportunities will be necessary?

4. Analyse data & information

General:

- How does the tool affect women? Men? Girls? Boys? If there are differences, what are they and why do they exist?
- Who is benefiting from the tool? How? What benefits is the tool bringing to the lives of women, men, girls and boys?
- Are women (men, girls, boys) supportive of the tool? Why?
- What are the – positive and negative – opinions of the women, men, girls and boys involved in, and/or benefiting from, the tool?

5. Gender & monitoring checklist for possible outcomes of PARM process

- Would women like to see changes to the tool? If yes, what changes? Why? And men?
- Is progress towards specific gender equality outcomes on track?
- What are possible long-term impacts of the tool on gender equality?
- Has the tool had any undesirable effects on gender equality? For example, increased workload, incidents of violence, backlash
- Do women enjoy greater participation in public forums and decision-making bodies (e.g. food distribution committees, local government bodies) where they were previously disenfranchised?
- Has the social status / positions of women changed? Of men? How? Why?
- Have more women's organisations been established or strengthened through the ARM process?
- Has women's access to and control over natural and economic assets (land, household finances, other assets) increased?
- Has the tool contributed to a reduction in violence against women and/or girls? Or, has the tool contributed to violence against women and girls or to women and girls fearing violence?
- Is implementation of the tool causing harm to women, men, girls and/or boys? Are any women, men, girls or boys at risk of harm because of their participation in the tool? What can be done to reduce and eliminate the risks of harm?
- Has the tool contributed to changing oppressive gender stereotypes?
- Has the tool contributed to changing discriminatory gender attitudes?
- Are women empowered to acts as agents of change?
- Do women feel empowered? Men? Girls? Boys? How? Why? Why not?
- How can the tool be revised so that it is empowering for women (or men, girls, boys)?
- Has women's self-esteem and self-confidence to participate in organisations and institutions increased?
- Are women able to exercise their capacity for leadership?

6. Communicate and use the data & information


- When drafting progress reports, remember to:
- Disaggregate all data and information by sex and age
- Describe the nature and extent of participation of women and men (girls and boys)
- Describe the (positive and negative) impacts of the tool in the lives of women, men, girls and boys
- Describe the (positive and negative) unintended consequences of the tool
- Indicate how the tool is performing in terms of promoting gender equality
- List recommendations for strengthening the ARM process, including in relation to gender equality
- Reinforce the elements of the ARM process that make it an inclusive, participatory and empowering process.
- Revise the elements of the ARM process that the monitoring indicates are: not economical, efficient, effective or equitable or are causing unintended harm.



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