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LAND RIGHTS AND ECONOMIC RESILIENCE OF RURAL WOMEN IN THE G5-SAHEL COUNTRIES, WEST AFRICA

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ABSTRACT

This article discusses different issues pertaining gender and land governance with focus to access and control of land by rural women and how this affects their resilience in G5-Sahel region- Chad, Niger, Burkina Faso, Mali, and Mauritania. Findings show that land remains the property of men, customary chiefs, male members of the family who have the full control of land use; women continue to serve as servants of their husbands in the farming activities. Limited access to production resources such as land, agricultural inputs, small scale irrigation and agricultural mechanization, and lack of post-harvest handling facilities; all restrain women's economic capacity for their economic resilience to climate change and other natural disasters. There is need, therefore, for innovative models of land tenure regularization systems in the G5-Sahel countries; models that take into account current social, cultural and religious barriers for women's land access and use for their economic activities.

Key words: Land rights, gender, Economic Resilience, G5- Sahel, and West Africa.

1. INTRODUCTION

The G5-Sahel countries are extremely vulnerable to food crises arising from erratic rainfall and drought. The Sahel region has one of the world's highest poverty rates and lowest development levels (UNDP-HDI, 2012). This is linked to a series of structural factors including, high demographic growth, low levels of education¹ (UNDP, 2012), lack of access to basic or foundational services, weak social protection systems, political instability, conflicts, weak economies, and trends towards urbanization and rural exodus (Haub and Kaneda, 2014). Mass poverty affects nearly 51% of the population, especially young people and women. The proportion of the population living below income poverty line of US\$ 1.25 is estimated 44.5% for Burkina Faso, 50.6% for Mali, 23.4 % for Mauritania, 40.8 for Niger, and 36.6 for Chad (Human Development Report, 2015). These estimates show how these countries are struggling to reverse the poverty trend.

The Northern belt of the Sahel is also increasingly facing political insecurity and instability due to increase in armed groups conflicts, terrorism and subsequent massive displacements of populations within and outside the borders along Lake Chad mostly due mainly to the 2012 conflicts in Northern Mali. Current estimates show more than 60, 000 people of internal migrants in Mali, about 23,000 of Malian refugees in Mauritania , about 34,027 Malian refugees in Burkina Faso, around 500, 000 of refugees in Chad from Nigeria, Centre Afrique, and Soudan.

The last two decades' efforts in land tenure regularization in Africa aimed at promoting private land rights remain a grasp of the central government and not really a reality at the ground in the Sahel Region. Private lands rights guarantee a number of benefits such as land

transfers, long-term investment in land, female empowerment, among others (investments (Place, 2009; Lawry et al. 2014). Particular to female's empowerment. Evidences from Rwanda show that land tenure regulation opted since 2009 has significantly contributed to some positive gender impacts. Ali et al. (2014) sustain that "land tenure regularization in Rwanda has improved land access for legally married women (about 76% of married couples) and prompted better recording of inheritance rights without gender bias". Since land is the main asset for production and long-term investments, private women's land rights is instrumental towards female economic empowerment and resilience. Results from Melesse and Bulte (2015) for the case of Ethiopia show how private land rights through land titling or registration offered positive farm productivity effects. For women to be able to gain benefits offered by land, their land rights need to be well recognized by the prevailing policy, legal, and other institutional frameworks.

Women in the G5-Sahel constitute the majority of the poor and are more dependent on limited land resources for their farming which, in turn is threatened by a highly fluctuating natural environment. Climate change is well recognized to be another stress for Sahelian farmers where their proven ability to coping with even the hardest crises, such as the long period drought and other extreme climate events is limited (Mertz et al. 2009). Furthermore, women face social, economic and political barriers that limit their coping capacity. Women in rural areas are charged with the responsibility to secure water, food and fuel for cooking. When the above barriers are coupled with unequal access to land resources and to decision-making processes at all levels including in their homes, these place rural women in a position where their economic resilience to poverty and other natural shocks is

¹ Adult literacy rate, both sexes (% aged 15 and above): Chad: 33, 6; Niger: 28, 7; Burkina Faso: 28.7; and Mali: 26.2 (Source: <http://hdr.undp.org>, December 2012).

disproportionately affected. Therefore, the overall objective of this paper is to assess the land and other socio-economic constraints of women's economic resilience in the Sahel region.

The remainder of this paper is organized as follows. Section 2 provides the background and the conceptual framework. Section 3 describes the data and the analytical approach. Section 4 presents and discusses the results on the socio-economic constraints of economic resilience as well as the resilience options for rural women in the G5-Sahel region. Section 5 ends with some concluding remarks.

2. ECONOMIC RESILIENCE AND GENDER GAPS IN THE G5-SAHEL COUNTRIES

2.1. Economic Resilience

The notion of resilience has been scaled up from the ecology, climate change, and ecosystem origins into other domains. Ecologists were the first to embrace the general concept of resilience more than 30 years ago. Since then, it has been adapted to short term disasters and long term phenomena such as climate change and was followed by its economic interpretation (Rose, 2009). Subsequently, various definitions and interpretations of resilience have evolved from ecological definition to engendering, organizational behavior, planning, and economic resilience. In the economic literature, according to Rose (2009), resilience has four major roles. It is seen as an attribute in the studies of economic shocks, an attribute of sustainability in ecological economics; it is extended to the socio-economic arena with some overlap with the study of institutions, and an important dimension of hazard economic loss estimation and terrorist consequence analysis.

There exist two different economic resilience categories that is static and dynamic resilience (Rose, 2009). In the first case is linked to short term where productive resources needed to respond to an economic shock are fixed factors.

For the dynamic resilience, this is in line with the long-term where all productive inputs are variable such as labor, natural resources, and intermediate goods. Land is one of the measure variable needed to explain the resilience at micro-level. Furthermore, the economic resilience can be seen as an outcome from adaptation capacity or the ability to cope with disaster, climate change, and economic shocks.

This paper adapts the notion of resilience to understand how limited female land rights in the Sahel region may affect their ability to cope with natural disasters and the resulting economic effects. The literature documents three major phases or periods during of which economic effects of environmental disasters can be traced (Carter et al. 2004): the period of the shock itself, the coping period in which households deal with the immediate losses created by the shock, and the recovery period in which households try to rebuild the asset lost to disaster and depleted through coping strategies. Land is one of the main assets that is directly affected by the shock especially when this has not received adequate investments in environmental protection to help in addressing the challenges during the recovery and the coping periods. Land is an alternative source of coping mechanisms especially if one has the rights to diversify its use and management. Improved access and control over land by women in the Sahel are critical since these have strong correlation with their economic resilience (Simelton et al. 2009).

2.2. Gender gaps in agriculture in the G5-Sahel region

Rural women are the most affected section of the population that is exposed to climate change and disaster crises, especially those in rural areas in the research area. Women and girls are often excluded in household and community decision-making, which impede the abilities of households and communities to mitigate and recover from climate shocks and natural disasters. Women and girls are also often exposed to additional, gender-specific barriers –

due to socially constructed gender roles and power relations – that consistently render them more vulnerable to the impacts of climate and disaster shocks. For example, drought and erratic rainfall increase the workload of women and girls on family farms because they must walk longer distances and spend more time securing water for cooking, household sanitation needs, and caretaking of animals. Additional time spent on resource collection means less time available for education, income generation, or household food production – all of which are cornerstones for resilient individuals and households (Adger, 2000).

Women make essential contributions to agriculture and rural economic activities in all developing country regions. Agriculture remains one of the most important areas of women's work globally, with more than one-third of employed women in the agricultural sector. In developing countries, women comprise 43% of the agricultural workforce. They play a critical role in supporting household and community food security, often in contexts of severe rural poverty and precarious livelihoods. In sub-Saharan Africa, women comprise an average of almost 50% of the agricultural labour force (FAO, 2012).

Women roles vary across regions but, everywhere, women face gender-specific constraints that reduce their productivity and limit their contributions to agricultural production, economic growth and the well being of their families, communities and countries. For example, despite their significant involvement in the agriculture, women farmers have significantly less access to land compared to men. An international comparison of agricultural census data by the Food and Agriculture Organization shows that less than 20% of landholders worldwide are women. Of the 161 countries examined in OECD's 2014 Social Institutions and Gender Index (SIGI), women and men have equal rights to land ownership, use and control in only 37 of the

assessed countries. In four percent of assessed countries, women explicitly have no legal right to own, or use land. In sub-Saharan Africa, SIGI data indicates that significant discrimination against women continues in practice in 29 of 43 countries. In addition to land, the gender gap exists throughout various agricultural assets, inputs and services, such as land, livestock, labour, education, extension and financial services, and technology. It imposes costs not only on women themselves, but also on the agriculture sector, the broader economy and society as a whole. Closing the gender gap in agriculture would generate significant gains for the agriculture sector and for society. If women had the same access to productive resources as men, they could increase yields on their farms by 20–30%.

Most agricultural policies and investments still fail to consider differences in the resources available to men and women, their roles, labour burdens and the constraints they face – and how these gender differences might be relevant to economic resilience. It is often assumed that interventions to facilitate access to finance, technology or markets will have the same impacts on men and women; however, a growing body of evidence indicates that most likely they will not.

Food security and nutritional development are mostly negatively affected by extreme climate change shocks faced by the Sahel region and long term conflict as well as the effects of terrorism in the cross border area. As a result of aggravating impacts caused by climate change, such as flooding and prolonged drought periods, populations are at greater risk of being subject to natural disasters with the rural population that primarily depends on agriculture are the most affected. In this context, women and children belong to the most vulnerable section (FAO 2011-2013). Estimates by UNDP concur that in terms of flooding about 55% of victims are women and children. Since women are predominantly employed in agriculture (approximately 60-80% across

Africa) and are responsible for 70-80% of the agricultural production, their output and income generation levels are particularly at risk, given that their agriculture produce is rain fed dependent and hence more vulnerable to extreme climate change. In event of natural climate change disasters women are also obliged to migrate, thereby making them more fragile to other challenges such as gender-based violence.

Climate shocks and chronic food crises in the Sahel region also continue to weaken women's coping mechanisms and their economic resiliency capacities as the limit income and assets. Women, especially those living in rural areas, are the most affected category given their reduced access to appropriate coping and resilience capacity. Additionally the majority of women are also affected by other structural factors including poverty, heavier workload, and limited access to foundational services such as health, limited access to production resources (e.g. inputs, credits, and extension services). Therefore, climate change is adding more pressure and severity on female poverty in the Sahel region, both qualitatively and quantitatively. Consistent with the MGD report (2014) poor environmental sustainability can be an impediment to structural transformation and inclusive growth. This is especially true in cases where some population groups, for example the poor, youth and women have poor access to environmental resources and information, and are excluded from decision-making processes relating to environment issues. This applies exactly for women in the Sahel region.

3. DATA AND APPROACH

Data used for this paper were collected through a number consultations with key informants and focus group discussions made during August and September 2015 in the G5-Sahel countries namely Burkina Faso, Mali, Niger, Chad, and Mauritania. Participants in these consultations include representatives of government entities (such as Ministry in charge

of economic planning, Ministry in charge of gender mainstreaming, Ministry of Agriculture), UN organizations including UN Women, FAO, WFP, Civil Society Organizations, Private sector entities, and Women's organization. Some field visits were also organized in some of the above countries to gain insights of rural women themselves in their respective communities.

The above consultations were made in the context of the program design by the UN women for 'Accelerating the economic resilience of women and girls in rural areas most affected by drought and climate change in the G5-Sahel countries'. During this period of data gathering, a number of issues and solutions to enforce economic resilience of rural women were proposed to inform on the programme objectives and activities. In addition, a detailed situation analysis preceded these consultations was conducted to understand the current situation and respective contexts in the G5-Sahel countries with regard to land rights and tenure.

This paper adapts the livelihood approach model for the analysis of the information gathered to validate this study's objectives. The analysis focuses mostly on the five capitals or assets to assess people's livelihood (see Figure 1): human capital, social capital, physical capital, natural capital, and financial capital (DFID, 1999). In terms of human capital, the interest is on education, health, social protection, social support, and the wellbeing. For the social capital (here the focus can be on both hard and soft social capital such as trust and collective action). The Natural capital involves land, labour, animals, inputs, and water. While the financial capital is interested on the cash income, wages, savings, and access to credits. The physical capital comprises the basic infrastructure and produce goods needed to support livelihoods. The following components are of interest when analyzing the physical capital in this framework: affordable transport, secure shelter and buildings, adequate water supply and sanitation, clean and affordable energy; access to

information (DFID, 1999). This framework has been used to understand the socio-economic factors constraining female's economic empowerment with focus to land rights which in turn may influence their level of economic resilience to climate change and other disasters in the research area.

4. RESULTS AND DISCUSSION

4.1. Poor access and control of production resources including land

Access and control of land by women in the Sahel remain a challenge to face by the public, private and civil society. Efforts for land tenure regularization process remain constrained by social, cultural and religious pressures. The land remains the property of men, customary chiefs, male members of the family who have the full control of land use; women continue to serve as servants of their husbands in the farming activities. Land being the main production factor and economic asset in rural areas, actions towards enabling rural women to have full rights over land use is extremely needed to justify the need for rural women's economic empowerment and resilience.

The existing land tenure systems facilitating land rights for women in terms of access and access and use yield to more of collective or group land rights rather than individual or private land rights that have received considerable attention in other African countries such as Rwanda, Ethiopia, and Botswana (Ali et al. 2014, Bizoza, 2015). Findings of this study shows that there are more models of land tenure systems already initiated by the respective countries to allow women have access and use of land. The common evidence across all the above countries is the possibility of access and use of land by women when they are regrouped in different organizations and cooperatives. Subsequently, collective land ownership is possible if women can request these lands from the customary or traditional chiefs, the state, and head of families

through their cooperatives or other organizations. In addition, it has been observed in some of the above countries such as Mauritania how access to land depends on people or community's ability to use the same land for economic purposes rather than considering this for social and prestige purposes. Despite the on-going efforts to facilitate women access land but the situation is far from expectation. For example, estimates obtained during the consultations indicate that in Burkina Faso only 2% of women own land titles across the 46 communes. In Mali 54% of women cultivate less than one (01) hectare also 15% of land prepared for cultivation is given to women groups, in Mauritania and Burkina Faso women have access to land through collective demand after they have proven the economic rationale of the requested land use.

Women in the study area lack access to other productive assets such as agricultural inputs, financing, water and energy, appropriate infrastructure, technologies, and extension services due to a number of key structural barriers. Notably, access to long-term affordable financing may be the greatest stumbling block for women farmers, both to pursue climate-resilient agriculture and to participate in green value chains and markets. Women farmers' access to financial services is constrained by a number of factors. Even when their land rights will be secured, their plots tend to be size insufficient in size and of poor quality to qualify as collateral for loans or credits. In addition, discriminatory social norms, lack of appropriate financial products and low financial literacy further constrain their ability to access financing.

4.2. Poor access to finance

Incompatible bank services that respond to the socio-economic conditions faced by the majority of women, especially in rural areas, were highlighted as a major constraint for accessing the finances needed to carry out their income generating activities. This implies that

most existing banks have their loan products that are not customized to agriculture as the main source of income for the majority of the population. The World Bank global finance index report (Demirguc-Kunt et al. 2015) shows that only 22% of 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 value chains. The same paper estimates the gender gap in account ownership of 9% points in developing countries. If women have difficulties to access loans or credits this implies that they are not financially resilient since the level of resilience depend on the security of the savings as well as the ability to have a loan when needed (Demirguc-Kunt et al. 2015).

While agricultural loans are limited, they are also supposed to finance the production, processing and marketing of enterprises specialized in agriculture. Banks are also reluctant to provide credits due to the difficulties faced by some farmers to reimburse their loans and bad historical experience of non-reimbursement of credit. Lack of identity registration documents can also hamper access to credit. Consequently during consultations, farmers and mostly women emphasized the high interest rates and lack of collateral. For both the formal banking system and microfinance, the interest rate remains high. This makes it difficult for women to access finance for their farming and business activities. The interest rate varies between 8% and 25%. For instance the “Banque Populaire” in Burkina Faso offers loans for an interest rate between 8% and 10%. In Mali the interest rate varies between 10 and 15% compared to 23% in Chad. The highest interest rate is observed in Niger with a rate between 20 and 25%. In addition, women generally lack collateral due to the fact that men mainly own land, and women do not have land titles that they can use as bank guarantees to apply for loans.

Furthermore, it was observed that the loans rural women receive are insufficient to use for

large-scale investments both in agriculture and for other income generating activities. There is also limited awareness of the existing bank and micro-finance products that can be used for women to access finance. The bank products or loans are also not adapted to the nature of activities in which women are involved; these are mainly in agriculture and livestock. The payback period for the banks or micro-finance do not consider the best period for women farmers to sell their produce and have the ability to pay back the loan. Furthermore, due to the need of women’s access to finance a Women’s Equity Bank was proposed as part of the Declaration of 23 July 2015, by the Regional Forum held in Ndjamena, Chad calling for women’s contributions (as innovative financing) with support from the government and partners.

4.3. Lack of processing and transformation units

Despite the overall challenge of food insecurity in the Sahel region there is some food surplus for the markets especially legumes, fruits, and other marshland crops. The issues raised around crop processing and transformation are linked to the lack of processing units, lack of storage facilities, limited skills in processing, lack of packaging materials, and lack of maintenance capacity (both skills and financial resources) of the equipment and materials for those with some processing units. It was also observed that some of the products from processing being taken to markets before obtaining the standardization certificate by the entity responsible. It is important that products from processing are certified for their quality by the entity responsible before they are taken to markets for consumption to avoid any health or nutritious deficiency. On the supply side, some inconsistencies were noticed in the supply of products needed for processing especially for those already in the processing area. These issues call for a detailed assessment along the

post-harvest handling process to inform on possible gaps that require interventions in the context of this program. Interventions in promoting agro-processing are likely to translate into more job creation and diversified incomes for women and girls in the rural area along different value chains.

4.4. Poor access and use of market opportunities

The position of women in the agricultural value chain (crops, livestock and fisheries) remains a major challenge, especially in terms of access to productive resources, processing and marketing (inside and outside the country). Women and girls suffer more shocks related to food insecurity because of their limited access to production factors suited to more hostile environments, as is the case in the Sahel. According to the World Bank, women's access to factors of production and reduction of inequalities in rural areas could increase between 10-20% of food production in sub-Saharan Africa.

Adequate use of market opportunities has also been identified as a major constraining factor for women's economic resilience. During the harvest period women sell their products at lower prices as they cannot conserve these until the peak period when the prices are equitable and can cover the production costs with a margin of benefit. For example 1 kg of tomatoes can cost 300 CFA Francs after the harvest and the same kilo may cost 2000 CFA Francs during the dry period, making this more a gap of price information, production and commercialization strategy regarding the existing. Other issues identified include lack of access to market information, limited capacity to identify profitable value chains, lack of entrepreneurial skills, and limited capacity to linking their cooperatives to potential agro-dealers and export markets. In Chad for instance, one of the women's organization visited has some market links to the US for the Shea Butter "Beurre de karité" although the supply is now exceeding the

demand. This is a potential value chain that can benefit most of the rural women in the Sahel region since the "karité fruit / tree" can still be found in most of the G5 Sahel countries. The Shea Butter can be used for multiple purposes and more actions can be done to link women's organizations to more regular markets so that the production is absorbed by the markets.

In other countries like Mauritania most of agriculture produce are competed with those imported mainly from Morocco and this discourages local production. It was indicated that some farmers sell their products in a form of "Swap Meet Markets" where their goods are exchanged against other goods.

Furthermore, women are participating in the commercialization parts of the different value chains in agriculture, livestock, and fisheries. For example in Mali, women are the mostly involved in selling fish and small livestock. Subsequently supporting women needs to be done in the value chains in which they are mostly involved in. Some of the existing women's organizations also need training and capacity development in areas of entrepreneurship and marketing, organizational skills, leadership and management.

In addition, there is a need to see how/where government gets supply for food security reserves and how to position women into this market through public procurement. There is also lots of market opportunity for women in seed production. Another opportunity is how to position women in all these programmes on school feeding, food fortification, etc.

A main constraining factor on development of sustainable and appropriate market-based solutions for women is the lack of gender-sensitive data and systemic information collection on such issues in the region. As noted, land ownership, access to agricultural equipment, financial services, the increase in domestic workloads for women in the Sahel, and

other related challenges are limiting factors on women's capacity to cope with effects of climate change and food and nutrition security. However, to what extent and in what ways such factors impact women's participation in markets and economic resilience generally is not sufficiently understood, in spite of the fact that such detail is important in devising appropriate and market-based programmatic responses.

The WFP West Africa Regional Bureau Vulnerability Analysis & Mapping team (VAM) is undergoing a study to investigate the information gaps on gender roles and challenges in markets, and accordingly respond with programmatic solutions. Following the study, data collection activities should expand in order to respond to identified gaps and strengthen WFP and partner market-based programme activities. In partnership with the responsible team, information on gender-specific roles and challenges in markets will be collected, analyzed and fed into continued implementation of programme activities. The WFP Market analysis country teams in Chad, Mali and Niger will also be included to provide country-specific gender and markets data using a combination of primary data collection tools including surveys, key informant interviews and focus groups, as well as potentially applying WFP remote data collection techniques previously tested in the region.

4.5. Limited Gender Mainstreaming in Disaster response organizations

In addition to the gender gap in agriculture and the increased effect of climate change on women and girls in the Sahel, both humanitarian assistance and disaster risk management (DRM) tend to be considered gender neutral. However, considering them so inadvertently discriminates against women and girls. Where humanitarian and DRM interventions are not planned through

a gender lens, the needs of those most under threat may not be adequately met, and an opportunity to support positive change will be lost. If women are not prioritized in such efforts, they will not be able to mitigate, recover, and absorb these shocks.

However, governments and humanitarian agencies tackling this problem in all G5 countries have faced different challenges in integrating a gender dimension in their responses and development frameworks. Most of the countries have national gender policy documents that portray challenges related to gender equality and equity in different spheres of activities and proposed actions. There are some gender focal points in different ministries but have limited capacity in gender mainstreaming in other sectors. A review of national development plans, investment plans for the agriculture sector, national plans for climate change adaptation, and national program for natural resource management shows that gender mainstreaming still requires further effort and resources. Despite the progress made in the above countries in gender equality and equity mainstreaming; social, cultural and religious pressures undermine the productive capacity of rural women and so their economic resilience against climate change effects and food insecurity.

4.6. Resilience Options and Associated Livelihood Assets

Various issues affecting women's economic resilience including limited land rights (both use and control) have been identified in the perspective of the livelihood options. The following Table presents some of the issues identified during the consultations, their associated livelihoods assets and possible solutions for increased economic resilience of women in the Sahel region.

5. CONCLUSION AND POLICY IMPLICATION

There is an extensive theory that predicts that women's land rights can boost their ability to

use and control land for agriculture purposes and earn more income. Despite the fact that the empirical results are still mixed with regard to productive and investment effects of private land rights for the case of Africa (Melesse and Bulte, 2015, Bizoza, 2011, Place and Hazell, 1993), another body of scholars establishes the expected role of private land rights in addressing inequality in land access and female's empowerment in use and control of land resources. This paper stretches this theory to establish the linkage between land rights of women and their economic resilience for their improved livelihoods in the G5-Sahel countries Chad, Niger, Burkina Faso, Mali, and Mauritania.

Consistent with many other research products in the study area, we conclude in this paper that that land remains the property of men, customary chiefs, and male members of the family who have the full control of land use. Women continue to serve majorly as servants of their husbands in the farming activities. With respect to land access and security of tenure, the findings show a common trend of collective land access by women through their groups or cooperatives. Yet this does not mean full and sustainable land rights over collective lands since these are not in most cases instituted by any land registration or titling. The government and the customary chiefs remain with powers over the lands allocated to the women through their organizations.

In the Sahel, land is the main production factor and becoming scarce because of the prolonged drought. Agriculture equipment is no longer accessible to all farmers because of the growing poverty, limited access to finance especially for women and girls. In addition, the increase of domestic workload for women in the Sahel due to the scarcity of resources such as wood, water for household survival, reduced time can be spent on economic activities by women and girls. All these factors limit women's capacity to deal with effects of climate change and food insecurity.

The paper also shows that economic resilience of rural women strongly depends on land access as the main asset and other factors beyond access and use of land. Limited access to production resources such as agricultural inputs, small scale irrigation and agricultural mechanization, and lack of post-harvest handling facilities; all restrain women's economic capacity for economic resilience to climate change and other natural disasters. While these results emanate from qualitative data collected through individual and group consultations, more research is needed to establish empirical relationships between women's land rights and their economic resilience. The paper concludes with a policy recommendation for innovative models of land tenure regularization systems in the G5-Sahel countries; models that will take into account current social, cultural and religious barriers for women's land access and use for their economic activities.

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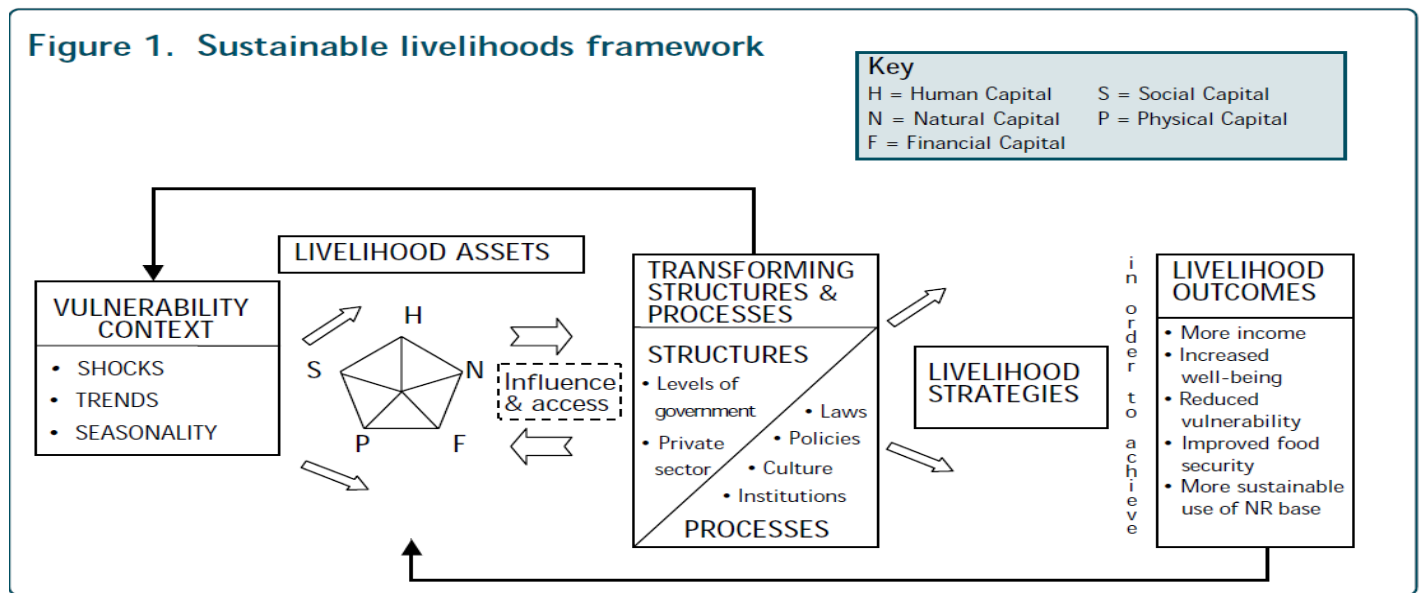
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8. Appendix



Source: DFID (1999).

Fig. 1. Sustainable livelihoods framework

Table 1. Issues affecting women’s economic resilience in the G5-Sahel and applicable solutions

Issue affecting Women’s Economic Resilience	Associated Livelihood Assets	Applicable Solutions for economic resilience
<i>Limited access and control over land and productive resources</i>		Both public and private paternerships can help to improve access to land and other productive resources which in turn will increase production and subsequent farm income.
Limited access to agricultural inputs-new crop varieties and crop protection against diseases (most are developed in the drought period)	N	
Limited Agricultural techniques and equipment	N	
Expensive Irrigation	P	
High costly Ag. Mechanization	P	
<i>Lack of Access to Finance</i>		Identify resources to incentivize economic disaster
Lack of collateral or guaranty – due to lack of land control	S	

Small size of loan limiting large scale investment	F	mitigation for public and private sector services.
Bank Products not adapted to the farming business of which the majority is involved	F	Identify all existing strategies for financing resilience initiatives.
Limited number of Micro- Finance entities	F	Identify local funding or grant-making mechanisms for post disaster small business financing and financial program management.
Lack of Insurance and Guaranty Fund	F	
Lack of women's equity bank	S	
High interest rate (10-25%)	F	
<i>Access to Crop Processing and Transformation Units</i>		
Lack of Processing Units	P	Local investment and locally owned investments in agribusiness can help access processing and transformation units, more training in agro-processing, and standardization process of transformed products.
Lack of appropriate storage facilities	P	
Limited skills in small-scale processing	H	
Lack of maintenance capacity	H	
Lack of appropriate packaging materials	P	
Weak standardization process of processed products	S	This is likely to increase access to more market opportunities and increase the income from value added due to crop transformation and processing. Economic resilience may result from increased income.
<i>Limited access and use of market opportunities</i>		
Limited use of markets for existing produces	F	Programs to encourage local investing and entrepreneurship can improve access to markets and explore more market opportunities. On the supply side, more capacities in post- harvest handling processes can help diversify the products needed at the market. have been helpful in building both employment and production capacity
Limited capacity to identify profitable value chains	H	
Limited entrepreneurship skills for women and Girls	H	
Appropriate Packaging materials	P	
Limited Organizational Capacities to access markets	H	
<i>Gender Mainstreaming in Disaster response institutions</i>		
Limited integration of gender in national plans and developments	S	Identify institutions and organizations responsible to lead a disaster recovery for them to integrate gender dimensions in disaster response options.
Lack capacities to integrate gender dimensions in sectorial strategic plans	H	
Lack of sufficient knowledge and capacity in response to early warning	H	Improve the ability of rural community organizations to

systems both at national and decentralized entities		manage and contribute to post-disaster recovery programmes.
Lack of capacities to integrate gender in disaster response and management programmes.	H	
Limited Institutional and Technical Capacities for entities in charge of disaster management	S/H	
Limited participation of women in decision-making at national and decentralized entities.	S	

Notes: S: Social; H: Human; P: Physical; N: Natural; F: Financial capital