



USAID | LAND PROJECT

STARTING FROM THE GROUND: DRAWING THE LINKS BETWEEN LAND, AGRICULTURE, FOOD SECURITY AND NUTRITION

POLICY RESEARCH BRIEF NO. 6



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CONTENTS

1.0	Background	3
2.0	Evidence of the Links – Globally and in Rwanda	4
2.1	Smallholder Agriculture Better Supports Food Security and Nutrition	4
2.2	Tenure Security Supports Agricultural Investment	4
2.3	Land Rental Markets Require Secure Owner Rights.....	5
2.5	Stability is Fundamental to Maximizing Agriculture’s Potential	7
2.6	Pro-poor Agricultural and Economic Transformation.....	7
2.7	Farmer-driven Decisions on Land Use Enhance Planning and Prosperity	8
3.0	LAND Project Contributions to Feed the Future (FTF)	8
3.1	Policy research	8
3.2	Legal Reviews and Drafting of Land-related Legislation	11
3.3	Training	12
3.4	Communications.....	12
4.0	Upcoming Project Contributions to FTF	14
5.0	Bibliography	18

1.0 Background

Rwanda is a USAID Feed the Future (FTF) target country with a strategy covering 2011-2015. Rwanda has a strong rural agricultural profile, but is cited as having high levels of malnutrition with a need to increase agricultural production to feed a population that is the densest in Africa (405 people/km²). Virtually all arable land is already under cultivation – 40 percent of it on slopes steeper than 28 degrees. Soil fertility has rapidly declined due to erosion and severe soil nutrient mining, with between 39 and 51 percent of agricultural land already degraded. Despite recent increases in agricultural production, Rwanda still has many cases of acute malnutrition.

In Africa, 70% of the population depends on land and natural resources for their livelihoods. Access to land and security of tenure are the main means through which food security and sustainable development can be realized (Economic Commission for Africa, 2009). In Rwanda, 70% of the population derive their primary source of livelihood from agricultural production (NISR, 2015) and rely extensively on land for their survival and food security.

Although land is understood to be a fundamental source of natural capital when it comes to food production, the connections between access to secure land rights and sustainable land use on the one hand and agricultural productivity, food security and nutrition on the other are frequently overlooked. This brief aims to draw out the various links and point to sources of empirical evidence to support them. Specifically, it demonstrates that:

- Access to land is fundamental to smallholder food production, which is the primary source of food and nutrition for low income, rural families.
- Secure land rights incentivize agricultural investments and improved agricultural practices, leading to improved productivity and food production.
- When land rights are secure, land rental markets can flourish, resulting in improved allocations of land to more productive farmers while providing land owners with a reliable source of income and livelihood security.
- When women have increased control over land and rights to make decisions over land, investments, and production, their productivity is enhanced and food is directed to their families with better nutrition outcomes.
- Secure land rights reduce land disputes and conflicts, thereby facilitating improved land use and productivity.
- Tenure security facilitates a more prosperous economic and agricultural transformation, thereby curbing trends toward rampant urban poverty and other social ills.
- Inclusive land use planning approaches enable farmers – women and men – to have a say in how to utilize land so that it is more productive.
- By strengthening the capacity of land sector service providers, improved services that enhance land use and land rights are created, leading to improved agricultural productivity and food security.

Evidence supporting these links is presented in the next section, followed by explanations of how the USAID LAND Project contributes to fueling them, both through past and current activities. In the final section, planned activities and their relationship to FTF objectives are presented together with examples of how the project could even further strengthen its contribution to FTF programming.

2.0 Evidence of the Links – Globally and in Rwanda

2.1 Smallholder Agriculture Better Supports Food Security and Nutrition

Effective institutions to allocate and protect land rights are critical to ensuring sustainable and productive smallholder agriculture (Wiggins, 2009). Globally, smallholders manage 500 million small farms (those less than 10 hectares of land) and produce over 80 percent of the food consumed in much of the developing world, particularly in sub-Saharan Africa and Asia (UNEP, 2013). Secure tenure not only increases farmer incentives to make investments in food crop production, but also contributes to an efficient, stable, and growing agricultural sector that is better poised to attract external and domestic investment necessary for broad-based economic growth.

Increasing agricultural productivity has positive impacts on overall economic growth and food security. According to USAID (2013, p 8), “Gains in agricultural productivity and sector growth can subsequently have large multiplier effects on economic growth in both the rural non-farm and urban sectors.” In fact, studies have shown that expansion in the farm economy generates resources that households can invest in both higher-value, rural non-farm activities and urban enterprise development, thereby positively impacting overall economic growth and food security. This is particularly relevant in countries where the agricultural sector continues to be an important source of income for the poor (USAID, 2013 citing Diao et al., 2010; Gollin, 2010; and Haggblade and Hazell, 1989). According to the World Bank (2008), growth in agriculture is at least twice as effective in reducing poverty as growth in other sectors because agricultural growth directly raises farm incomes, and as a result has an indirect, positive impact on all other sectors of the economy. Access to land and secure rights to cultivate and improve land are fundamental to fueling smallholder food production.

2.2 Tenure Security Supports Agricultural Investment

Programming to promote more secure land rights for smallholders – whether through improved land policy, land administration, registration and titling, or other approaches – has been primarily driven by the belief that when landholders perceive they have long-term rights to land and low probability of losing those rights, they will invest in the land to make it more productive and to protect it from degradation. This is especially the case for long-term, high value agricultural investments, including climate change adaption practices like terracing, constructing run off ditches, improved irrigation systems, tree planting, experimentation with improved seed varieties, improved crop storage facilities, rain water harvesting. According to FAO (2013), smallholder farmers require security of tenure to implement sustainable agricultural practices and make investments that will enable them to adapt to climate change.

Empirical evidence supporting the links is widespread

Studies by the World Bank on the impacts of the Land Tenure Regularization program in Rwanda revealed that households whose land was regularized were more likely to make or maintain soil conservation investments in structures such as bunds, terraces, and check dams than those that do not have registered land rights (Ali, 2011). The effect was nearly double the change in investment in the control group. The impact of registration on women’s investments in land was twice as high as the effect on men with female headed households exhibiting roughly a 19% increase in their likelihood to construct or maintain soil conservation structures following registration (Ali, 2011).

Considerable research has been carried out in Ethiopia to assess the linkages. In a study covering four regions of Ethiopia, Deininger and Jin (2006) found that land transfer rights and tenure security were associated with higher investments in land improvements, such as trees and terracing (Deininger and Jin, 2006). Subsequently, research in four regions of Ethiopia by Deininger et al. (2008) found a positive association between land certification and investment. Using household-plot baseline data from just before land certification and panel data gathered seven to eight years after certification in the Tigray region, Holden, Deininger, and Ghebru (2009) found low-cost land certification had significant, positive effects on investment in trees and maintenance of soil conservation structures. The same research revealed that land productivity had increased by about 40 percent on farm plots having a land certificate compared with plots without a certificate (Hagos, 2013). A study in three villages under customary tenure in the Gambia found that the probability of long-term investments in fences, wells, and trees were positively correlated with rights to both use and sell land. In turn, these investments were found to enhance yields (Hayes, 1997).

Because smallholders produce mainly food crops, these investments affect food production and therefore contribute to greater food security, especially for low income families. Analysis of data from household surveys carried out in five Asian countries found that among groups of households experiencing four levels of food security, the food secure group had the largest percentage of landowner-cultivators at 70% (Miggiano, 2010). In China, agricultural reforms that strengthened land rights resulted in increased agricultural output and rural incomes, and have been linked to a dramatic reduction in the number of undernourished people from 387 million in 1969-1971 to 150 million in the mid-2000s (FAO 2006).

2.3 Land Rental Markets Require Secure Owner Rights

Secure land rights facilitate land transactions, such as land rentals, that enable efficiency – enhancing transfers of land to more productive users (Ali, 2011). Additionally, land rental markets are potentially important means for enabling land-poor households to improve agricultural production efficiency when labor markets fail to function perfectly (Muraoka, 2014).

Rural smallholders typically regard land as the most valuable asset they possess. It is not only a means of production, but serves as the foundation of their long-term social security. This explains why so many disputes in rural areas are centered around land, especially when competition for access to land is on the rise. Yet, not every smallholder can make their land highly productive. They may be old, disabled, have a debilitating illness, lack a sufficient supply of able family labor, have insufficient incomes to invest in their land, or simply not have the skills for productive farming. Yet, selling or mortgaging their land would be the equivalent of forfeiting or risking their retirement pension and even their survival since the majority of developing

countries are not able to provide universal social security. In the process, however, efficient land allocation and agricultural production is undermined.

This dynamic can be reversed with provision of secure land rights, which unlock rental markets and enable land to be transferred to more productive farmers. When land owners have backing from the state or other legitimate authority able to enforce their rights, they are more willing to rent out their land because they avoid the risk that the renter will assume permanent rights to the land through adverse possession. In the Eastern Cape of South Africa, studies have shown that fears of adverse possession have prevented owners from renting-out under-utilized land to productive small farmers wishing to expand their cultivated

areas, thereby decreasing the area of productive land under cultivation (Economic Commission for Africa, 2009).

Not only is agricultural production and efficiency improved through transferring land to more capable producers, but rental incomes earned by less productive owners endow them with the purchasing power to cater to the food security and nutrition of them and their families. For land rental markets to work best, secure ownership rights also need to be accompanied by enforceable rental contracts and functioning avenues for recourse when one party defaults on their obligations.

In rural Kenya, poor farmers primarily access additional land for cultivation through land rental markets. A 2014 study suggests that, with improved policies around land rental markets, increasing cultivated land sizes through such markets would “increase household total food consumption per capita, cereal consumption per capita, non-cereal consumption and self-produced food consumption by 1.1%, 1.8%, 0.8% and 1.9%, respectively” (Muraoka, 2014). This highlights the importance of secure land rental markets to incentivize long-term investments by tenants.

In Ethiopia, improved tenure security was found to increase participation in land rental markets, which in turn had a positive effect on agricultural productivity, calorie availability and Body Mass Indices (BMI) of children (Hagos, 2013). Likewise, research by Holden (2014) revealed that sharecropping arrangements in Ethiopia expanded following land certification, and contributed to improved food security of female-headed landlord households who faced difficulties in farming the land efficiently.

Land rental market stimulation can also have positive equity effects. Studies in Kenya, Malawi, and Uganda point to how reallocation through rental markets actually tended to transfer land from land-rich to land-poor households (Holden, 2014).

2.4 Women’s Control over Land and Crops Yield Better Nutrition Outcomes

The linkages between women’s land rights and food security are well-documented. Secure rights to land for women are critical to food security (USAID, 2013), while gender-based inequalities in control over and access to productive resources (including land) inhibit agricultural productivity and reduce food security (UN WOMEN, UNEP, UNDP, and the World Bank Group, 2015). This is particularly relevant for Rwanda, where poverty and food insecurity remain concentrated in rural areas, predominantly among female-headed households and other vulnerable groups (Concern Worldwide, 2007). When women have land rights, their status and bargaining power in the household increase. Since women are more likely to make decisions that improve household welfare, including decisions on food and nutrition needs (FAO, 2012), when they have more robust decision-making power, household food security and nutrition stand to benefit. According to the World Bank (2007), women with direct control over land are more likely than men to make decisions about expenditures that improve their household’s food security and their children’s nutritional status.

Data from Africa, Asia, and Latin America show that women are more likely than men to spend their income on food for their families, and that a woman’s capacity to earn income and make decisions is linked to her land rights. Compared to men’s income, women’s income has been found to have a greater effect on household calorie consumption, on the share of the family budget allocated to staples, on food expenditures, on children’s weight for height, and on preschoolers’ weight for age (Quisumbing, 1995). A study in Nicaragua and Honduras found that the amount of land

owned by the woman in the household has a positive impact on household food expenditures (Katz, 2002). In Ghana, research by Doss (2006) revealed that when women own farmland, households spend more on food. Research in Nepal demonstrated that women who own land have more decision-making authority in the household, and their children are less likely to be severely underweight (Allendorf, 2007).

In contrast, countries in which women do not have control rights over land have, on average, 60% more malnourished children than countries in which women have some or equal rights to land (OECD Development Centre, 2012). When women's agricultural productivity and decision-making power is augmented, food is directed more to their families and ensuring better nutrition for their children and themselves. Improved food security and nutrition leads to virtuous cycles of improved agricultural productivity, incomes and rural livelihoods for all. It is estimated that if the gender gap in agricultural productivity were addressed through gender-equal land rights and other criteria, annual crop output could increase by 2.1 percent in Tanzania, 2.8 percent in Uganda, and 7.3 percent in Malawi, with resultant impacts on poverty reduction and improved nutrition (UN WOMEN, UNEP, UNDP, and the World Bank Group, 2015).

2.5 Stability is Fundamental to Maximizing Agriculture's Potential

When land ownership is unclear, land encroachment occurs, or land is arbitrarily confiscated by a more powerful actor, land conflicts typically erupt. By reducing the potential for land disputes and conflicts, secure land rights make it safe for farmers to invest in their land, knowing that they will be able to reap the benefits of those investments. As a result, gains in agricultural production and food security can be expected to follow. A quantitative study of 899 farming households in Kenya found that land conflicts negatively impact crop choices, investments on the land, and agricultural productivity. Farmers utilizing contested plots of land are less likely to plant perennial crops. In addition, farmers with current disputes and future concerns related to inheritance issues were found to apply less manure to their farm plots. Overall, actual disputes were found to reduce land productivity by about 13%, while concerns about future disputes were found reduce land productivity by about 9% (Centre for Environmental Economics and Policy in Africa, 2011).

Tenure security also reduces risk and the need to defend one's land rights through continuous occupation. With greater mobility, farmers and their families are able to diversify their sources of income with off-farm alternatives, lessening their vulnerability and potentially increasing their income levels, thereby enhancing food security. It can also free up rural labor to contribute to value-added industries, augmenting rural incomes and prosperity. A study carried out in Peru found that possession of a property title gave rise to a 17% increase in total household work hours, a 47% decrease in the probability of working inside the home, and a 28% reduction in the probability of child labor (Field 2002).

2.6 Pro-poor Agricultural and Economic Transformation

It is well known that Rwanda is a country with considerable ambition to grow and modernize. Rwanda's Vision 2020 calls for mobilizing 35% of its population to reside in urban areas, an astounding leap from 2012 urban population estimates of 16.5% (NISR, 2014). Although "interactions between migration and poverty -- both at migrant origins and destinations -- are among the least researched and understood topics in economics," (FAO, 2001), it stands to hold that economic transformation characterized by a more gradual and voluntary movement of rural families to urban centers in response to attractive and more certain employment

opportunities is essential to preventing high urban unemployment, urban poverty, expansion of urban slums, separation of families, violence, crime and other social ills. Urban poverty is often characterized by higher rates of food insecurity and malnutrition than rural poverty (Mohiddin et al., 2012).

When rural families are secure in their land rights, they face lower risks of losing access to their land and being forced to migrate in search of urban employment. When tenure security also enables greater agricultural productivity and improved livelihoods, push factors for migration are also attenuated and families can choose to migrate in response to genuine opportunities, rather than out of desperation. Secure tenure can also act as a buffer against the risks associated with urban migration, giving migrants a source of livelihood to return to if their pursuits are unsuccessful. In China, insecure land tenure was found to constrain migration decisions due to the threat of expropriation for migrating individuals. Tenure insecure individuals migrated less often, and for shorter periods of time, with women's land rights more frequently challenged than men's (De La Rupelle, 2008).

2.7 Farmer-driven Decisions on Land Use Enhance Planning and Prosperity

Land use planning is a priority tool of the GOR to enable optimal use of scarce land resources. Yet, smallholder participation in these processes is considerably lacking (Munt, 2015). When female and male smallholders are engaged in official land use planning, these processes can draw on their knowledge, enabling land to be more productive. Farmer engagement in land use planning can guide planners in identifying opportunities to support value-added agriculture, strategically locate markets, and improve infrastructure. The link between land use planning and food security is illustrated by accounts given by the Permanent Secretary of the Ministry of Local Government in Rwanda as well as District Land Officers from Musanze and Nyagatare. They informed the project that due to poor land use planning in some areas, fertile parcels were allocated to recently expropriated individuals not engaged in farming, whereas unproductive lands were allocated for agricultural activities. Consequently, this exacerbated food insecurity. All three sources maintained that if land use planning were participatory, such mistakes would not happen (Ikirezi, 2015).

3.0 LAND Project Contributions to Feed the Future (FTF)

The Rwanda LAND Project is working to inform the development and adaptation of policies and laws governing land tenure and land use in Rwanda in order to foster an environment for greater investment in agricultural productivity, increased farmer participation in land use planning, and stronger decision-making and empowerment for women and families to increase nutrition outcomes. The project has also led capacity development of service providers in land administration, legal assistance, and agricultural support, plus launched a high profile communications campaign which succeeded in shifting attitudes in favor of gender equality in land rights.

During its first three year of implementation, the project contributed to the realization of FTF objectives in the following ways:

3.1 Policy research

Each year, the project has held a multi-stakeholder workshop to select high priority research topics designed inform land-related policies. Research and policy advocacy projects are

competitively tendered to Rwandan organizations, and successful offerors are teamed with external capacity building partners. Research has succeeded in identifying avenues for strengthening tenure security, women's empowerment, and food security. Advocacy efforts have ensured recommendations emerging from the research have reached government decision-makers, civil society organizations, the international community and the general public. Capacity building endeavors have contributed a cadre of Rwandan institutions that are equipped to carry out rigorous empirical research that can reliably inform policy.

Highlights of findings and recommendations from specific research project include:

- *Assessment of the Outcomes of the Land Use Consolidation (LUC) and Crop Intensification Program (CIP).* While both satisfaction with the Program and agricultural productivity of land are high, **study findings showed that food insecurity, vulnerability to shocks, and poverty remain a serious problem for LUC/CIP farmers.** Two-thirds of the farmers reported their household did not have enough to eat in the past week. In addition, over half the respondents in the survey had experienced some kind of shock in the previous three years that affected their household's ability to eat or changed their asset ownership, and farmers exhibited low levels of per capita expenditures consistent with high rates of poverty. The research also revealed that **farmers lack access to storage and post-harvest processing for crops.** Only 22% of farmers had access to storage and only 12% processed crops post-harvest. Moreover, **challenges in access to markets and good prices for CIP crops persist** with just over 59% of total output sold on average. Recommendations point to strategies that support greater crop diversification, investment in storage and post-harvest processing facilities, provision of market information services, establishing crop collection points, linking farmers to contract farming opportunities, and forming cooperatives where they have not been established in order to strengthen farmer bargaining power.
- *Gender and Land Assessment.* This study sought to assess women's land rights in practice *vis a vis* their rights under the law. Findings demonstrated that **female spouses lack bargaining power within the household, including the ability to influence decisions on management, use and control of land.** Whereas married couples often make decisions together, women are typically not part of the full decision-making process and their role is restricted to "veto" power if they do not agree with the husband's decision. The research particularly pointed to the vulnerability of women who are not formally married and have no legal right to land in the case of separation or widowhood. Couples married under customary rites or religious rites or residing in a consensual union are still very common in Rwanda. Yet women in these arrangements face eviction upon separation or widowhood, and their decision-making power within the household regarding the land's use, management and control tends to be extremely weak. Recommendations stressed sensitizing communities on shared decision-making and joint control rights over land between couples, a recommendation that the LAND Project took forward via a communications campaign. Advocacy materials also called for inclusion of a provision recognizing the property rights of informally married couples (those married in a traditional or religious ceremony or those in co-habitation arrangements) on-par with civilly married couples in the draft Succession Bill. Enhanced decision-making power by women over land and in the household generally is expected to reap considerable dividends for family food security and nutrition.
- *Analysis of the Inter-relation between Gendered Legal Rights to Land and Land Disputes.* The study found that **over half of past and current land-related disputes involve a women or girl,** which included disputes concerning inter-vivos gifts of land

from parents and transfers of land without the wife's consent. Among disputes involving females, 25.3% were reported to result in some form of **gender-based violence**. While the vast majority of respondents reported favoring giving land gifts to both sons and daughters, one third of respondents reported their belief that daughters should receive a smaller portion than sons. The desire to avoid disputes with their family and ignorance of their right to make such a claim are the two main reasons some women do not claim their rights to *inter-vivos* parental gifts of land. This study demonstrated the vulnerability of women to land-related disputes and violence, and how this can deter them from claiming their legal rights; it points to the **need to combine interventions that empower women with those that shift societal norms and cultivate respect for empowered women**.

- *Assessment of Compliance with the Expropriation Law and the Impacts of Expropriation*. An estimated 30,050 households have experienced expropriation of their land since enactment of the 2007 expropriation law. Contrary to common perceptions, most of these have occurred in rural areas, rather than urban. Also, the majority of those who lose land through expropriation do not lose residential land such that they are required to relocate. Nevertheless, approximately 50% of expropriated households lost over two-thirds of their land. Surveyed households reported an average loss of one-third of their income as a result of expropriation. **Over 50% of expropriated households reported losing annual and perennial crops and trees as a result of expropriation, and over 30% lost feed for livestock—all productive assets for most rural households.**

Approximately 21% of households report losing their residences due to expropriation. Insufficient and delayed compensation for expropriated property also render negative impacts on expropriated individuals, especially those who lose a large percentage of their property or who must relocate to a distant location due to the expropriation. 80% of expropriated individuals report their property valuations to have been below market value, many substantially so. **While asset, crop and income losses associated with expropriation have obvious impacts on expropriated households, these effects combined with procedural irregularities surrounding expropriation can have widespread impacts on the tenure security of agricultural producers, squashing farmer incentives to make high-value, productivity enhancing investments.** This is corroborated by other research carried out by the project on sources of vulnerability; it shows that the number one source of land tenure insecurity among rural households is fear of land acquisition by the government. Narrowing the scope for projects to qualify as being in the 'public interest' is one recommendation that would temper the pace of expropriation, diminish negative outcomes, and have positive effects on tenure and food security.

- *Assessment of Access to the Land Administration System and Outcomes of Land Certificates on Ordinary Citizens*. The study found that access to the formal system for land administration continues to be a challenge for many ordinary citizens in terms of distance to register a land transaction and the high cost of transaction fees. Very few surveyed respondents had utilized their land certificates as collateral to access credit, suggesting that they may be reluctant to place their most valuable asset at risk. In terms of **effects of land certificates on investments, they were positively related to investment in cultivated annual crops, built new residential structures, farm structures and built new business structures while there was a negative relationship between land certificate and other investments like land improvement, improving farm structures and improving business structures.** However, none of the effects was statistically significant at the 5% level. Where land certificates appear to have their greatest impact is on land disputes. 89% of

respondents reported that disputes over land had decreased since land tenure regularization.

This study has important implications for policy. It suggests that while formal land registration and titles may help clarify who owns what and serve as important evidence in the event of disputes, they do not necessarily render adequate tenure security to trigger long-term land investments. It seems likely that other factors, such as risk of land expropriation, may undermine the capacity of titles to offer sufficient assurance of long-term, undisturbed occupation necessary to spur investment.

In addition to pairing each local research team with international expertise in conducting rigorous empirical research, the project also offered a week-long course on research methods, engaging 46 participants from universities, research institutions and CSOs. As a result of these endeavors, the project has documented dramatic improvements in local research capacity that underscores realization of a central project goal: bolstering the pool of Rwandan institutions and individuals able to supply robust policy research to decision-makers whether on land or other subject matter. **FTF programming is poised to substantially benefit from research and advocacy capacities strengthened through the LAND Project.**

3.2 Legal Reviews and Drafting of Land-related Legislation

As a result of the LAND Project's reputation for high quality analysis of land policy, during Year 2 the GOR requested project support to review and draft several pieces of legislation, which have important implications for tenure security, agricultural productivity and food security. They include:

Reviewed Instruments:

- Ministerial Order Establishing Procedures and Modalities of Land Use Consolidation for Crop and Livestock Farming Purposes
- Prime Minister's Order on Establishing the List, Classification and Boundaries of Swamps and Setting up Modalities for Use, Development and Management Thereof
- Draft Law relating to Expropriation in the Public Interest
- Law governing Succession, Matrimonial Property Rights; draft bill
- Draft Prime Ministerial Order determining the Organization, Operation, Responsibilities and Composition of the Committees in Charge of Supervision of Expropriation Projects
- Draft Law relating to the Surveying Profession
- Draft Ministerial Order relating to Land Registration in Rwanda

Drafted Instruments:

- Presidential Order on Land Allocation and Leasing;
- Ministerial Order on Land Assignment;
- Prime Ministerial Order on Modalities for the Use, Development and Management of Swamp Land in Rwanda.

Critical elements considered in the review and drafting exercises were: 1) the types of decisions to be made on land use and allocation and the processes and authorities involved in making them; 2) authorities and legal mechanisms governing land use; 3) whether legislation supported the national vision and strategy regarding economic development and support for commercial investment, poverty alleviation, environmental protection, gender

equality and social justice. Whereas all instruments have implications for land tenure and use, and therefore food security and nutrition, those related to land use consolidation, swamps, land allocation and leasing, and land assignment bear special relevance for the agricultural sector and management of productive ecosystems. The drafts of the latter two orders were shared by LAND with the Private Sector Driven Agricultural Growth (PSDAG) Project to guide their efforts to facilitate private investor access land based on principles of good governance. These instruments are important contributors to FTF objectives of increasing private investment in agriculture.

3.3 Training

LAND Project has developed and led multiple training courses designed to strengthen the capacity of legal assistance, land administration, land use planning, and agricultural sector service providers. Trainings targeting Haguruka lawyers and paralegals, National Women’s Council community-based volunteers, District Land Officers, Land Use Planners, and members of the farmer’s federation IMBARAGA have equipped hundreds of beneficiaries (the majority women) to understand and appropriately apply the legal framework governing land (including gendered land rights and expropriation), identify climate change risks, and integrate climate change adaptation measures into land use planning and farming practices. Improved capacities in these domains contribute to women’s empowerment in the agricultural sector, increased climate resilience, and therefore higher agricultural productivity, improved management of ecosystems, and food security.

3.4 Communications

Outreach has been a fundamental component of LAND Project’s success and impact. Early on in the project, the **Rwanda Land website** was established to serve as one-stop resource on land-related laws, research, and news *specific to Rwanda*. It also features the project’s major accomplishments, such as research reports, policy briefs, training tools, videos, radio dramas, etc.. The project has held several **multi-stakeholder workshops** to share and discuss policy research findings and recommendations, and undertakes **targeted distributions of policy advocacy materials** to relevant decision-makers in addition to disseminating them via its **mailing list** of over 200 land sector partners, including leadership and staff of the Ministry of Agriculture and Rwanda Agricultural Board (RAB). During the workshop to share the findings of the research on the Land Use Consolidation Program, RAB representatives acknowledged the need to incorporate crop rotation and other diversification approaches into the program together with more support for crop storage, processing and markets. Most recently, the project has produced a set of six colorful and engaging two-page **infographics** that distill the most salient findings and policy recommendations emerging from the project’s recent research. They cover: gendered land rights, climate change adaptation and wetlands, expropriation, land use planning, land

Communications Approaches Employed by Radio Ishingiro to Influence Men and Boys on Gender-Equal Land Rights

- Radio dramas targeting older adults
- Radio dramas targeting young adults
- Dance, music and poetry competitions targeting youth
- Street drama performances
- Color brochures
- Posters
- Dedicated news and information website
- Co-communicator trainings for youth
- Radio quiz shows
- Radio talent shows
- Jingles; “stop and think” short radio messages
- Call-in radio interview/talk shows
- Radio shows featuring testimonials of ordinary persons and their experiences

administration, and land-based public revenues. These are now being translated to Kinyarwanda before being distributed to targeted groups of decision-makers, civil society representatives, and other stakeholders.

Development project efforts to raise awareness about equal land rights between women and men have substantially targeted women. As important as it is to educate women about their rights, this approach may lack sufficient impact in altering power structures that hinder women from being able to own and control land on par with men.

This understanding motivated the project to tender the implementation of a **communications campaign on gender-equal land rights** that would first seek to better understand the awareness and attitudes of men and boys about women's and men's relative entitlements to land and then develop an array of communications approaches that would lead men and boys to embrace norms of gender justice. As the successful offeror, Radio Ishingiro carried out an assessment that deepened their understanding of men's and boys' feelings about gender equality in the land sphere. The results positioned Radio Ishingiro to develop highly focused communication products in partnership with two other community radio stations, and channel them through the most appropriate media.

Commenting on the community-level poetry, music and dance competitions held by the project, one participant observed, *"This is improving discussions among married couples on issues pertaining to land transactions. Especially, making a decision to sell family land is now a mutual decision contrary to the past. This is becoming a culture in Nyamasheke."*

As part of the campaign, the terminology "gender-equal land rights" was deliberately invoked instead of "women's land rights." This was designed to overcome common misperceptions that internationally-financed advocacy efforts are pushing for women to have greater entitlements than men and that these would come at the expense of men's entitlements. The campaign was implemented with substantial capacity building support from LAND Project staff and short-term technical assistance to ensure Radio Ishingiro's messages were accurate, well-targeted and effective in manifesting new beliefs and behaviors.

In order to inform the campaign and measure its impact, the project carried out a before-and-after assessment of men's awareness and attitudes about gender-equal land rights. The baseline survey served to inform the messages of the project's communications campaign on gender-equal land rights, while the endline survey enabled the project to assess the impact of the campaign. The endline survey demonstrated extraordinary positive changes. Whereas in the baseline survey, only 43.6% of male respondents believed that a widow of an informal union should inherit land owned by her husband/partner, the endline survey found 61.2% holding this belief. Even more astonishing was the increase from 25.1% to 63.5% of sampled men believing that wives of informal unions should have equal rights to the marital land in the event of separation. Attitudes about women's decision-making likewise witnessed positive changes pre- and post-campaign. Baseline results showed 65.2% of men believing women have an equal say in land transaction decisions and 69.6% believing they have an equal say in land use decisions. In the endline survey, results were 81.9% and 81.3%, respectively. **Results suggest that the campaign had a profound effect on enhancing men's support for gender-equal land rights**, a change essential for women's capacity to assume those rights in practice and to exercise greater control over household food security and nutrition.

In close collaboration with the Government of Rwanda and with able technical support from Esri Rwanda, the project launched the much acclaimed **National Land Use Planning Portal**, which for the first time makes the national land use master plan and district land use

plans available to the public. The project also produced and disseminated **over 1,500 cell-level land use maps**, layered with parcel boundaries to enable easy identification of designated land uses associated with individual land holdings. These maps are now being displayed in cell executive secretary offices for land owners to consult. Together, the portal and the maps represent the first tools to acquaint ordinary citizens with local land use plans. These tools are expected to enhance compliance with official land use plans, while also increasing civic engagement in the land use planning process. The project also carried out a comprehensive assessment of Rwanda's land use planning process which identified weaknesses related to institutional coordination, the legal framework, integration of climate change risk assessment, and lack of citizen participation in the land use planning process. **When farmers are engaged in land use planning and decision-making, they are in a position to articulate and make known their priorities so that local government authorities are better able to respond with the most appropriate extension, input, infrastructure, storage, processing, marketing and other services.**

4.0 Upcoming Project Contributions to FTF

Through its Year 4 work plan, the project is poised to embark on a number of additional activities that will support FTF objectives. These are laid out below.

Policy research. During the last National Land Research Agenda workshop, participants selected two priority topics for LAND Project support:

1. *The land-based effects of climate change on smallholder farmers and the capacity of farmers to successfully adapt to climate change*
2. *Outcomes emerging from the implementation of settlement policies in rural and urban areas of Rwanda*

Both topics are central to FTF objectives of increasing agricultural productivity and improved management of ecosystems.

The first research project intends to analyze the **socioeconomic impacts of climate change effects on smallholder farmers in Rwanda, their capacity to adapt to climate change impacts, and the types and effectiveness of adaptation strategies employed by farmers.** This includes examining the effects of climate change phenomena on level and variability of **agricultural production, crop diversity**, level and variability of net income, **food security**, and other welfare measures; identifying the strategies smallholder farmers employ to adapt to climate change effects; and evaluating the effectiveness of these approaches on risk reduction, agricultural production and variability, crop diversity, net income levels and variability, food security, and other welfare measures.

The second research project will assess **citizen responses to and livelihood outcomes emerging from implementation of group settlement policies in rural areas.** Specifically, the terms of reference call for examining outcomes associated with relocation to group settlements, including residents' income and employment, **access to services, access to adequate land for farming and livestock raising**, access to family and community networks, safety and security, tenure security, **food security and nutrition**, satisfaction with lifestyle, and other welfare outcomes. Furthermore, the research will evaluate the distribution of benefits and costs among different groups and social classes with particular emphasis on the poorest, the vulnerable, and women and girls.

The project intends to compete both research and policy advocacy projects to Rwandan organizations once future project funding is secured.

In addition, the project has embarked on research to produce two policy briefs on the following topics:

1. *Outcomes of failures to protect the matrimonial property rights of women in de facto unions*
2. *Analysis of the implementation of Article 20 of the Land Law prohibiting subdivisions of agricultural land, and its effects on rural families*

Both briefs will incorporate analysis and critical policy recommendations for agriculture, food security and nutrition. The fact that the matrimonial property rights of women who are not married in civil unions are virtually unprotected under the law has **significant potential to undermine women’s decision-making in the household with regard to land use, farming inputs and practices, crop choice, and family diet and nutrition**. The brief will recommend ways that the land rights of women in *de facto* unions can be upheld both in law and practice.

Article 20 of the 2013 Land Law prohibits agricultural land to be subdivided if the subdivision results in parcels that are less than one hectare. While this policy is motivated by the belief that land below one hectare is farmed less productively and cannot provide for a family’s food security, the empirical evidence to support this conjecture is thin. Recent research carried out by the project indicates that these **restrictions are actually acting to hinder land markets and registration of land transfers, which could compromise more efficient allocations of land and tenure security, resulting in productivity losses**. Research for the brief will undertake a preliminary **comparative analysis of food security and nutrition outcomes based on land size**, and also delve further into the outcomes associated with this legal provision, including on inter-generational transfers of land and land disputes.

Land Policy Review, Legal Reviews, Drafting of Land-related Legislation- The LAND Project’s reputation for excellence in all domains, including carrying out objective, high quality research on priority land issues has earned it substantial confidence and trust by the Government of Rwanda and other development partners. As a result, the GOR requested project leadership in working with the Ministry of Natural Resources and the Rwanda Natural Resources Authority (RNRA) to spearhead revision of the 2004 Land Policy, ensuring the new land policy responds to present day realities and challenges. This represents an unprecedented opportunity for the project to contribute to the guiding principles that will inform development of all land-related laws and regulations in Rwanda over the next decade or more. The LAND Project is currently collaborating with the Ministry in agreeing on the team composition and TORs as well as the norms and mechanisms for collaboration with our GOR partners to ensure they drive the policy review and revision process. The process will involve distilling critical policy recommendations from recent research, much of it generated by the project, followed by two rounds of extensive local citizen consultations – one to provide input to the initial draft policy and a second to validate the draft. The project also intends to supply highly experienced policy analysis and drafting support, drawing on both international and Rwandan expertise.

Additionally, the project plans to engage in further legal reviews and drafting exercises, based on priorities set forth by our RNRA and Ministry counterparts. In doing so, the project will continue to lay emphasis on incorporating provisions that give support to agricultural productivity, gender equality, and food security objectives.

Other planned project interventions that promise to contribute to FTF objectives of agricultural productivity, improved capacity of service providers, food security, and nutrition are the following:

Training:

- Train Haguruka paralegals, NWC volunteers and CSO lawyers on key provisions of the new law governing succession and matrimonial property rights;
- In coordination with RNRA and other capacity building providers, implement trainings for district and sector land officials that contribute to improved service delivery.

Communications

- Carry out two major communications campaigns implemented by CSOs selected through a competitive bidding process
 - ✓ Campaign targeting village leaders to educate them about the importance and requirements of citizens registering land transactions through district and sector land authorities to ensure village leaders convey these messages to citizens, especially when the latter seek to informally transact; and
 - ✓ Campaign sensitizing Rwandan citizens on the provisions of the new law governing expropriation.

Land Use Planning

- Building on the land use planning assessment carried out by the project and corresponding recommendations, support improved coordination and capacity among key government actors responsible for land use planning through organization of a workshop that will map actor roles and responsibilities as well as agree on actions to include farmers and other citizens in the land use planning process and apply a climate change adaptation lens.

Land Governance Monitoring System

- Collaborate with the World Bank and RNRA to establish a land governance monitoring system through provision of capacity building support to a local research institute to analyze indicator data on land generated by the Land Administration and Information System (LAIS), and assess policy implications.
- Support assessment of the status and types of land disputes recorded during the Land Tenure Regularization program through a competitive tender for a local research institution to collect and analyze the data, and provide recommendations to update the LAIS and inform policy.
- Carry out a feasibility assessment to determine the extent and types of data collected on land disputes and by which entities, and provide recommendations to streamline and institutionalize data collection and reporting.

CRAFT

- Provide organizational development support to the Rwanda Coalition for Women's Access to Land (CRAFT)
 - ✓ Provide CRAFT ongoing technical assistance on organizational development, including preparation of a full funding proposal to support implementation of a robust set of activities to strengthen women's land rights.
 - ✓ Once activity funding is secured from another donor partner, provide organizational development support to CRAFT to implement operational protocols that will inclusively leverage CRAFT member capabilities.

Review of Court Judgments

- Provide support to Haguruka to review court judgments and legal guidance of the *Maison d'Access a la Justice* (MAJ) on women's property rights cases in order to assess their compliance with laws on land, property, succession, inheritance, legal procedures etc.
- Utilize the findings from the review to develop a training program and accompanying educational materials for judges to guide implementation of legal provisions on gender and property rights.

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