USAID | RWANDA
FROM THE AMERICAN PEOPLE

IMPLEMENTATION AND OUTCOMES OF RESTRICTIONS ON AGRICULTURAL LAND SUBDIVISION: AN INVESTIGATION OF ARTICLE 30 OF THE 2013 LAND LAW

POLICY RESEARCH BRIEF NO. 8

LAND Project

PHOTO CREDIT: GWENDOLYN STANSBURY / IFPRI

June 2016
This report is made possible by the support of the American People through the United States Agency for International Development (USAID.)

CONTACT INFORMATION:

Ailey Kaiser Hughes

Chief of Party

LAND Project

Nyarutarama, Kigali

Tel: +250 784 440 896

ahughes@land-project.org

IMPLEMENTATION AND OUTCOMES OF RESTRICTIONS ON AGRICULTURAL LAND SUBDIVISION: AN INVESTIGATION OF ARTICLE 30 OF THE 2013 LAND LAW

POLICY BRIEF NO. 8

LAND Project

Recommended Citation: Kaiser Hughes, Ailey and Kamatali, Jean-Marie. 2016. *Implementation and Outcomes of Restrictions on Agricultural Land Subdivision: An Investigation of Article 30 of the 2013 Land Law.* Kigali, Rwanda: USAID LAND Project.

Contract No. AID=696-C-12-00002
LAND Project

CONTENTS

Acknowledgements **5**

1.0 Introduction **6**

1.0 Research Methodology **6**

2.0 Literature Review **7**

2.1 Land Fragmentation and Land Subdivision 7

2.2 Land Fragmentation and Agricultural Production in Rwanda 8

3.0 Legal Analysis **10**

3.1 Prohibition of Land Subdivision 10

3.2 Promotion of Land Consolidation 12

4.0 Research Findings **13**

4.1 Perceptions as to the Purpose of the Law 14

5.0 Compliance with the Law: Formal Co-Ownership of Land **15**

5.1 Challenges Associated with Compliance 18

6.0 Non-Compliance with the Law **21**

6.1 Types of Non-Compliance 21

6.2 Perceived Benefits of Non-Compliance 24

6.3 Enforcement of Article 30 25

7.0 Land Tenure Issues Related to Article 30 ..... **25**

7.1 Impacts of Article 30 on Women's Land Rights 28

8.0 Recommendations from Key Informants and FGD Participants **29**

9.0 Conclusions and Recommendations **32**

Bibliography **34**

Acknowledgements

The authors would like to thank Madina Ndangiza, Land Justice Specialist; Mireille Ikirezi, M&E and Program Adviser; and Innocent Karangwa, Communications Specialist, of the USAID | Rwanda LAND Project for their coordination, translation and facilitation of the research that informed this policy brief. We also thank Anna Knox for her review and comments, which greatly improved the brief. Last but not least, we wish to acknowledge and thank the focus group participants and the key informants for their time, openness, and insights without which this policy brief would not be possible.

1.0 Introduction

In Rwanda, it is widely believed that land fragmentation poses a challenge to agricultural productivity; however, land fragmentation also serves as a climate change adaptation and risk management strategy for farmers. Research has also found that the inverse farm size relationship holds true in Rwanda, meaning that smaller farms may be more productive than larger ones. Despite the potential benefits of land fragmentation, the Government of Rwanda has identified land fragmentation through extensive subdivision as a barrier to the realization of its development vision. As such, the Government of Rwanda has adopted and implemented policies restricting fragmentation, including land subdivision. This policy brief focuses on Article 30 of the 2013 Land Law, which provides that: "It is prohibited to subdivide plots of land reserved for agriculture and animal resources if the result of such subdivision leads to parcels of land of less than a hectare in size for each of them. Owners of lands prohibited to be subdivided shall co-own and use the land in accordance with the laws."

Through literature review, legal analysis, and primary research, this policy brief attempts to elucidate how Article 30 is implemented and the outcomes of the provision on land use practices and tenure security in Rwanda. In summary, the research finds that implementation of Article 30 has not prevented land subdivisions, but rather encouraged informal subdivisions and transfers. While well-meaning, the provision is incongruent with the needs and realities of most rural Rwandan citizens and negatively impacts land tenure security.

2.0 Research Methodology

The research team for this brief was multidisciplinary and was comprised of four LAND Project Researchers: a Social Scientist and Land Tenure Specialist, an Attorney and Land Justice Specialist, a Monitoring and Evaluation Specialist, and a Communications Specialist. The brief was informed by primary and secondary research, including Focus Group Discussions (FGDs), Key Informant Interviews (KIIs), literature review, and legal analysis.

Focus Group Discussions. Between February 22 and March 31, 2016, the research team facilitated six Focus Group Discussions (FGDs) with local leaders (2) and farmers' cooperatives (4) in Kigali, Rwamagana District in the Eastern Province, Karongi District in the Western Province, Muhanga District in the Southern Province, and Musanze District in the Northern Province. In each session, there were between eight and 10 participants, both women and men. One FGD was comprised of only women. The research team used a "constraints and opportunities matrix" to capture positive and negative impacts of the implementation of Article 30 on land use and livelihoods. The research questions for the FGDs are included in Annex 1.

Key Informant Interviews (KIIs). Over the course of two months, the research team also met with 19 key informants representing local and national government, non-governmental organizations (NGOs), and international agencies. The key informants were drawn from Kigali, Rwamagana District in the Eastern Province, Karongi District in the Western Province, Muhanga District in the

Southern Province, and Musanze District in the Northern Province. The research questions for the KIIs are included in Annex 2. The list of key informants is included in Annex 3.

3.0 Literature Review

Land Fragmentation and Land Subdivision

In countries throughout the world, land fragmentation[1] – including the extensive subdivision of agricultural land – poses a challenge to agricultural productivity and farm profitability while also providing farmers with critical benefits. While there are four identified types of land fragmentation, the two of relevance to Rwanda are *fragmentation of land ownership* and *fragmentation within a farm* (i.e. internal fragmentation). Fragmentation of land ownership refers to the number of users on a given parcel of land (Van Dijk, 2003), which is referred to herein as *land subdivision*. Internal fragmentation refers to the situation in which a landowner has numerous, non-contiguous parcels (Van Dijk, 2003; Demetriou, 2014).

Globally, the primary causes of land fragmentation are inheritance, population growth, land markets, and cultural practices (Demetriou, 2014, p. 14). Inheritance is the main cause of fragmentation, as children and heirs require the subdivision of landholdings, resulting in landholdings becoming smaller and smaller with each generation (Demetriou, 2014; Bizimana, Nieuwoudt, & Ferrer, 2008; Blarel, Hazell, & Place, 1992). Population growth leads to increasing demand for land and, along with inheritance, results in the subdivision of parcels into still smaller parcels. Land markets can also contribute to fragmentation, particularly when owners sell pieces of land that are not contiguous to the buyers' plots (Demetriou, 2014).

Land fragmentation is identified as a challenge to agricultural productivity because it "hinders mechanization, causes inefficient production and involves large costs to alleviate the adverse effects, resulting in a reduction in farmers' net incomes" (Demetriou, Swillwell, & See, 2012, p. 2). Internal fragmentation has been found to limit farmers' ability to invest in on-farm improvements, such as mechanization and irrigation systems (Ibid). In countries with less-developed agricultural systems, such as Rwanda, internal land fragmentation is also associated with challenges to farmland supervision and protection, as well as increased difficulty and cost associated with the transportation of produce (Bizimana, Nieuwoudt, & Ferrer, 2008). There is also evidence that land subdivision – in which ownership of a parcel is divided among multiple people – results in extensive boundary networks, resulting in uncultivated land at the margin of these boundaries and increased labor requirements, which was found to be the case in Cyprus (Demetriou, 2014). However, there are well-documented environmental and economic benefits associated with land fragmentation.

Internal fragmentation is an approach for agricultural adaption, risk management, and ecological variety. Through land fragmentation, farmers can cultivate parcels in different environmental zones, thereby minimizing their production risks and optimizing different cultivation schedules

[1] Land fragmentation is also referred to as "pulverization, parcellization, or scattering" (Demetriou, 2014, p. 11).

(Demetriou, 2014), evidence for which was found in Ghana and Rwanda (Blarel, Hazell, & Place, 1992) and in Japan (Kawasaki, 2010).

In regards to land subdivision, several studies have shown that there is an inverse relationship between farm size and productivity; hence, it is possible that the small land parcels resulting from land subdivision may be more productive than larger, consolidated parcels (Demetriou, 2014). Importantly, a 2009 study on the inverse size-productivity relationship in Rwanda found that small farms perform better than larger farms, and that other risk coping mechanisms such as internal fragmentation and multi-cropping also improve productivity (Ansoms, Verdoot, & Van Ranst, 2009). This was reaffirmed in a 2014 World Bank study in Rwanda, which found that land quality and yields are higher on small farms and that profits per hectare are the same across plot sizes (Ali & Deininger, 2014). This was linked to labor market imperfections, low labor costs and limited off-farm employment opportunities, whereby small farms absorb excess labor in a gainful way (Ibid). The advantages associated with land fragmentation are particularly relevant in subsistence-based agricultural communities. Until farmers have access to improved technology, such as mechanization and irrigation, and wages and non-agricultural employment opportunities increase, small farms are a means of improving rural economic well-being because they absorb excess labor (Demetriou, 2014; Ali & Deininger, 2014).

Regardless of the benefits, the challenges associated with internal fragmentation and land subdivision have given rise to land reform and land consolidation policies seeking to reduce fragmentation in countries around the world, notably in Europe (Demetriou, 2014). In Rwanda, the government has adopted policies and programs designed to limit the negative effects of both internal fragmentation and land subdivision through the consolidation of agricultural land use and legal restrictions on subdivisions of parcels among multiple owners. These policies are explored in greater detail below.

Land Fragmentation and Agricultural Production in Rwanda

In Rwanda, one of the most densely populated countries in Africa, the majority of households depend on land and subsistence agriculture for their livelihoods (Bizimana, Nieuwoudt, & Ferrer, 2008). Land fragmentation and land subdivision are common (Ibid) and households own an average 0.76 hectares of land divided between 4-5 non-contiguous parcels (Rwanda Green Growth Strategy, 2011). Traditional practices such as inheritance and the giving of *inter vivos* gifts of land (*umunani*), as well as land sales and leases, result in ongoing land subdivisions (Bizimana, Nieuwoudt, & Ferrer, 2008) (Musahara & Huggins, 2015). According to the National Land Policy, fragmentation and subdivision is a nationwide problem (Government of Rwanda, 2004) while the Economic Development and Poverty Reduction Strategy II (EDPRS-2) associates small land parcels with decreased agricultural productivity and increased poverty, though neither the policy nor the strategy provide empirical evidence to support these claims (Government of Rwanda, 2004; Ministry of Finance and Economic Planning, 2013).

Fragmentation and poor agricultural productivity are not new challenges in Rwanda. While the country has long been densely populated, in the early 1960s land resources became scarcer and

households increasingly adopted traditional agricultural intensification strategies. These strategies included reduced fallow periods, increased cultivation cycles, and the exploitation of marginal lands, such as steep slopes (Ansoms, Verdoot, & Van Ranst, 2009). These practices resulted in land degradation and the collapse of agricultural growth, as well as declining food production (Ibid). While land productivity increased after 1994, traditional agricultural intensification strategies have continued "to the point of total resource depletion" (Ibid., p. 10).

At the same time, the Rwandan population – increasing at a rate of 2.8% per year – is expected to expand from 11 million to 26 million by 2050 (Rwanda Green Growth Strategy, 2011). Pressures on land, including degradation and land-related disputes, will likely increase (Ibid).

The Government of Rwanda has identified traditional agricultural practices as unsustainable. The foundational policy for agricultural reform, Rwanda Vision 2020 states:

> "A substantial number of rural families who subsist on agriculture own less than 1 hectare, which is too small to earn a living. Available pastureland is 350,000 hectares most of which is of poor quality. This results in intense exploitation of the land, with no simultaneous application of corrective measures, most notably through fertilizer use. The net result has been a decline in land productivity and massive environmental degradation, contributing to rampant malnutrition amongst the Rwandan population. Rwandans can no longer subsist on land and ways and means need to be devised to move the economy into the secondary and tertiary sectors." (Ministry of Finance and Economic Planning, 2000)[2]

This is echoed in the National Land Policy, which refers to an unidentified FAO report to aver that "the critical threshold below which a farmer can no longer meet his family's basic nutritional requirements from agricultural activity alone is approximately 0.75 ha. According to FAO, a farming unit should have at least 0.90 ha to be economically viable. . . (It) is obvious that the Rwandan family farm unit is no longer viable" (Government of Rwanda, 2004, p. 16). According to the Economic Development and Poverty Reduction Strategy II (EDPRS-2), the scope to expand cultivable land is limited and therefore the focus must be on increasing agricultural productivity to generate income and foster rural development (Ministry of Finance and Economic Planning, 2013).

Rwanda Vision 2020 identifies a clear vision for the agricultural sector, which is to "replace subsistence farming by a fully monetized, commercial agricultural sector by 2020" (Ministry of Finance and Economic Planning, 2000, p. 18). This vision, which lays the foundation for restrictions on land subdivision and the promotion of land consolidation, is also incorporated into EDPRS-2 and the Strategy for the Transformation of Rwandan Agriculture (Ministry of Finance and Economic Planning, 2013; Ministry of Agriculture and Animal Resources, 2013).

[2] Rwanda Vision 2020 fails to cite the sources of information for the foundation of its argument that agriculture on less than one hectare is "too small to earn a living."

4.0 Legal Analysis

The legal framework governing land subdivision and land consolidation in Rwanda that is articulated in the 2013 Land Law finds its foundation in the Rwanda Vision 2020 and the National Land Policy.

Initiated in 2000, Rwanda Vision 2020 envisions a land tenure system that meets two key objectives: "increase security on ownership and improve productive land usage." With regard to the latter it recommends that land consolidation be "emphasized so as to create adequate space for modern and viable farming." This vision was reflected in the 2004 National Land Policy, in which two key policy statements on land subdivision and land consolidation were included. The first provides that "in order to ensure an economically viable development of land, the modalities for the consolidation of small family farms should be studied and encouraged." The second policy statement provides that: "to ensure rational land use in rural areas, it will be necessary to encourage the consolidation of plots."

These policy statements were adopted with the objective "to avoid the splitting up of plots and promote their consolidation in order to bring about economically viable production" (Government of Rwanda, 2004, p. 22). In order to meet this objective, the Government of Rwanda has acknowledged that it will not always be possible for every Rwandan to possess a plot of land of his own, and has used legal tools to forbid the fragmentation of land by inheritance or *umunani* (Ibid., p. 29).

The above policies and strategy were at the foundation of the 2005 Organic Land Law[3], which was amended and replaced by the 2013 Land Law.[4] Furthermore, the EDPRS-2 has reiterated Rwanda's commitment to prioritize an integrated approach to land use.

Prohibition of Land Subdivision

Article 20 of the 2005 Organic Land Law provides that: Without prejudice to provisions related to land consolidation, "it is prohibited to reduce the parcel of land reserved for agriculture of one or less than a hectar. Similarly, the land between one hectar and five hectars may be reduced if the land commission at the level of jurisdiction where the land is found authorizes the owner of the land." This provision was amended and replaced by the more restrictive Article 30 of the 2013 Land Law which provides that: "It is prohibited to subdivide plots of land reserved for agriculture and animal resources if the result of such subdivision leads to parcels of land of less than a hectare in size for each of them. Owners of lands prohibited to be subdivided shall co-own and use the land in accordance with the laws."[5] This legal change narrowed the scope for subdivision.

[3] Law N° 08/2005 of 14/07/2005 Organic Law Determining the Use and Management of Land in Rwanda
[4] Law N° 43/2013 of 16/06/2013 Governing Land in Rwanda
[5] It is important to note that, while Article 30 limits the subdivision of parcels into parcels smaller than one hectare each, it does not limit transfers of parcels that are one hectare or smaller if they have already been registered under the Land Tenure Regularization Programme. Small parcels that have already been registered can be formally transferred and the transactions registered. (FGD with Sector Executive Secretaries, Rwamagana District;

While farmers were previously not able to subdivide a parcel that was one hectare or less, under the 2013 Land Law they are not able to subdivide a parcel i*f the result of the subdivision* is one hectare or less.

Although the prohibition referred to in the previous provisions are of general application, they specifically target two categories of land subdivision.

The first is land subdivision resulting from inheritance, *umunani,* and other liberalities. In the diagnosis of the problem of land subdivision the National Land Policy has concluded that: "land parceling [i.e. fragmentation] is a direct result of the existing inheritance system. When a young man reaches the age of maturity, generally considered as the age of marriage, he receives a plot of land from his father where he builds his house with a wide enclosure. This gradually causes the fragmentation of the family land." To avoid this fragmentation, the National Land Policy recommends that: "a clause forbidding the parceling of land by inheritance or transfer inter vivos …be reflected in the land law." This was already reflected in Article 91 of the 1999 Succession Law,[6] which provides that "property which does not exceed an area of one hectare and any other undivided thing cannot be partitioned. The owners have rather to agree on the modalities of their sale or exploitation and share the fruits there from." The 2015 Bill Regarding Matrimonial Regimes, Family Donations and Successions in its Article 94 maintains this language.

The second category of land subdivision arose from polices of land sharing which sought to accommodate returning refugees forced into exile in 1959 leaving their land behind. Specifically, the 2004 Land Policy requested that the government adopt "the principle of equal sharing out of land based on community consultations…" Land sharing was carried out between 1994 and June 2012 in the former provinces of Kibungo, Cyangugu, Kigali Rural, Ruhengeri and Umutara where "many family plots were parceled out and re-distributed between the owners and the returning 1959 refugees" (Government of Rwanda, 2004, p. 27). When the refugees returned to Rwanda, they found land they previously owned occupied by other Rwandans who had remained in the country. Per the 1993 Arusha Peace Accords, refugees who had fled Rwanda over 10 years prior to the signing of the accords could not claim back their land; hence, land could not be fully restituted to the 1959 returnees and land sharing was seen to be the best alternative.

This policy was reflected in the 2005 Organic Land Law, Article 87, which provided that, "without prejudice to article 20 of this organic law in relation to land that cannot be sub-divided land sharing which was conducted from the year nineteen ninety four (1994) is recognized by this organic law. Holders of such land shall enjoy the same rights as those under customary holdings." Article 3 of the Ministerial Order Nº001/16.01 of 26/04/2010 defining the Modalities of Land Sharing reiterated this exception and defined the persons entitled to land sharing as: "any person who was denied of his right to land they used to own before the fleeing into exile due to political reasons during the various periods up to 1994, and the current holders(s) of that land." It is worth noting that this

FGD with IMBARAGA Board Members, Kigali City; FGD with IMBARAGA Board of Directors, Kigali City; FGD with IMBARAGA women's cooperative, Karongi District).

[6] Law/nº 22/99 of 12/11/1999 to supplement book one of the civil code and to institute part five regarding matrimonial regimes, liberalities and successions

provision does not apply to those who fled the country since 1994.

Although the land sharing defined above has, in principle, ended with the completion of the first systematic registration of all lands between 2012-2014, Article 68 of the 2013 Land Law which abrogated and replaced Article 87 of the 2005 Organic Land Law provides that "a person who could have qualified for land sharing when it was still ongoing, but did not, because of not being in the Country during the land sharing period, may seek for resettlement by the Government." In case this resettlement may require land sharing, the sharing will need to be done according to Article 30 of the 2013 Land Law that forbids subdivision of land reserved for agriculture and animal resources if the result of such subdivision leads to parcels of land of less than a hectare in size.

Promotion of Land Consolidation

Article 20 of the 2005 Land Law provided that:

> "In respect of public interest and in a bid to improve rural land productivity, the Minister having Agriculture in his or her attributions in conjunction with local authorities and the respective residents may approve the consolidation of small plots of land in order to improve land management and productivity. Each landholder shall be entitled to the rights over his or her parcel of land.
>
> Procedures for the land consolidation of the small plots of land shall respect the order of the Minister having Agriculture in his or her attributions, which determines the modalities of land consolidation and productivity…"

Article 30 of the 2013 Land Law abrogated and modified the above article as follows: "For purposes of optimization of productivity, an Order of the Minister in charge of Agriculture and Animal Resources shall set up procedures and modalities of land use consolidation for agricultural and livestock purposes…" It further removed from Article 20 of the 2005 Land Law the need for the Minister of Agriculture to consider "public interest" and to consult local authorities and respective residents before approving land consolidation. More significantly, however, is that it removed the consideration that in case of land consolidation each landholder is to "be entitled to the rights over his or her parcel of land."

The above changes allowed the Minister of Agriculture more flexibility and power in regulating land consolidation. The Ministerial Order N°14/11.30 Of 21/12/2010 of the Minister of Agriculture Determining the Models of Land Consolidation and its Productivity defines land consolidation as "the unification of land parcels with an estimated easier and productive farming than the fragmented plots" (Art. 2). It further defines the objective of land consolidation as the promotion of rural development and agricultural transformation that increases agricultural production and improves the lives of Rwanda's people in rural areas" (Art.3). The same Ministerial Order also defines and organizes three models of Land Consolidation: (1) Facilitated Farming Contract, which is a contract negotiated between the farmers and the buyer with the facilitation of the Minister of Agriculture. In this contract the buyer exploits the land in accordance with the terms of

the contract but the farmers retain all the reserved rights on their plots (Art. 6-7); (2) Cooperative farming; in this model land owners get together to form a cooperative of farmers according to the Rwandan laws on cooperatives (Art. 9); and (3) Farming Corporation; in this model farmers and investors become stakeholders who jointly enter into an operation agreement (Art. 10). In a farming corporation, "land-owners give land to the corporation, and the value of the land shall be considered as a share in the corporation's capital. Certain members of the corporation or all may also provide labor in the corporation agricultural activities for a wage equivalent to the labor each provides. Proceeds and profits acquired by the corporation shall be shared among the members in proportion to the share contributed to the capital by each member" (Art. 11). In the context of this research, the cooperative farming model seemed to be the most common.

5.0 Research Findings

Among key informants and FGD participants, Article 30 of the 2013 Land Law was generally known though it was not perfectly understood by all.[7][8] Despite sensitization campaigns led by local government on the provision, several key informants and FGD participants reported that knowledge of this is not universal in rural areas.[9] FGD participants in Musanze said that most farmers – and even village leaders – are not aware of Article 30.[10] This was affirmed during an FGD in Karongi District, in which only one of the women present (the cooperative spokesperson) was aware of the provision.[11]

Even if farmers know about Article 30, they might not understand why it is in place or how it might apply to them.[12] In regards to learning about Article 30, one key informant said that farmers tell him, "This doesn't concern us because we don't have that amount of land."[13] This was echoed by local leaders in Rwamagana, who stated that, "The provision is meaningless to most people because they don't have that land and they'll continue with their lives through informal transfers." This can be interpreted to mean that many people do not understand that the provision applies regardless of parcel size and whether transactions are formal or informal.

[7] The exception to this is participants in the FGD with IMBARAGA Women's Cooperative members in Karongi District. With the exception of the chairperson for the cooperative, none of the participants were aware of Article 30 and its implications on their lives.

[8] FGD with INGABO farmers' cooperative, Muhanga District

[9] KII with Agronomist, Rwamagana District; KII with Musanze OSC Coordinator; KII with Director of Land, One Stop Centre, Gasabo District; KII with OSC Coordinator, Rwamagana District; KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; KII with Government Relations Officer, Tubura; KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee; KII with Leonard Kayonga, Director of Land Use Management and Spatial Planning Unit, Department of Lands and Mapping; FGD with Sector Executive Secretaries, Rwamagana District

[10] FGD with IMBARAGA farmers' cooperative, Musanze District

[11] FGD with IMBARAGA women's cooperative, Karongi District

[12] FGDs with Sector Executive Secretaries, Rwamagana District and IMBARAGA Board of Directors, Kigali City; KII with Government Relations Officer, Tubura; KII with Leonard Kayonga, Director of Land Use Management and Spatial Planning Unit, Department of Lands and Mapping

[13] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer

While many rural people do not know about this provision, men are more informed than women.[14] FGD participants in Kigali reported that men have more time to attend community meetings during which land-related information is conveyed; women are unable to attend because they are working on the farms. As a result, women do not know the laws or understand their rights.[15] According to FGD participants in Karongi, access to information is also partially dependent on wealth. People learn about Article 30 and other land-related policies through district meetings – those who normally attend such meetings are those who can afford to pay laborers to cultivate the land. In contrast, poor people cannot take the time away from their farms to attend meetings and therefore must acquire information through other channels.[16]

For those that know about the provision, the channels for learning about it and other land-related information varied. Radio programming through Rwanda Natural Resources Authority's (RNRA) Land Week and community meetings were commonly reported sources.[17] In some communities, local authorities are sources of land-related information, sometimes through the distribution of leaflets. [18] However, most frequently, farmers learn about Article 30 when they attempt to register a transfer and are told that it is not possible. [19] When this happens, the district authorities explain the provision. [20]

Perceptions as to the Purpose of the Law

Perceptions among respondents as to the purpose of Article 30 varied, though limiting fragmentation, facilitation of efficient land use, and LUC were the most commonly cited reasons.[21] According to one key informant, "The purpose of the provision is to ensure that Rwanda has big plots of farmland where intensified agricultural activities that are geared towards professional and market-oriented farming or economy can be conducted. This is the vision of Rwanda where the country strives to move from an agrarian to an industrial economy."[22] Coordination of LUC is also

---

[14] FGD with INGABO farmers' cooperative, Muhanga District; KIIs with Agronomist, Gasabo District; Director of Land, One Stop Centre, Gasabo District; OSC Coordinator, Rwamagana District

[15] FGD with IMBARAGA Board of Directors, Kigali City

[16] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer

[17] FGDs with local leaders, Musanze District and INGABO farmers' cooperative, Muhanga District; KIIs with Director of Land, Gasabo One Stop Centre; Agronomist, Gasabo District; Acting OSC Coordinator, Karongi District; KII with Leonard Kayonga, Director of Land Use Management and Spatial Planning Unit, Department of Lands and Mapping

[18] FGDs with IMBARAGA farmers' cooperative, Musanze District and local leaders, Musanze District; KIIs with Agronomist, Gasabo District, Director of Land, One Stop Centre, Gasabo District, Muhanga District One Stop Centre Director and Agronomist

[19] FGDs with IMBARAGA farmers' cooperative, Musanze District and local leaders, Musanze District; KIIs with Agronomist, Gasabo District, Director of Land, One Stop Centre, Gasabo District, Muhanga District One Stop Centre Director and Agronomist

[20] KII with Agronomist, Gasabo District

[21] KII with Agronomist, Gasabo District; KII with Director of Land, One Stop Centre, Gasabo District; KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee; KII with Leonard Kayonga, Director of Land Use Management and Spatial Planning Unit, Department of Lands and Mapping, RNRA; KII with Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI; KII with Dr. Alfred Bizoza, Director of Research, IPAR; KII with Juvenal, Program Officer, IMBARAGA; FGDs with INGABO farmers' cooperative, Muhanga District; local leaders, Musanze District; and Sector Executive Secretaries, Rwamagana District.

[22] KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, Ministry of Natural Resources

reportedly easier when there is just one landowner, as it is harder to convince multiple landowners to participate in the program.[23]

In regards to the one hectare parcel size, Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI stated that, "One hectare was selected . . . following a cost-benefit analysis that found that one hectare yields better returns in terms of profitability of crop production compared to plots of land less than one hectare." Other key informants added that the minimum was derived from FAO literature, which stated that 0.7 hectare of land can be productive, but that land less than 0.5 hectare is not productive.[24] Unfortunately, the research team was unable to obtain a copy of the cost-benefit analysis or additional information on the FAO literature in question.

In addition to facilitating efficient land use and LUC, another key informant thought that having consolidated parcels of land rather than many small parcels with different owners would make it easier for the government to collect taxes.[25] FGD participants in Muhanga thought that the provision was introduced to reduce boundaries (like hedges) between plots because they can cause erosion.[26] One FGD participant shared an anecdote: "If you subdivide a terrace, the barrier is weakened and much soil is lost to erosion. I knew one man and his brother that had one terraced plot, but when they subdivided the plot his younger brother couldn't cultivate on his side of the terrace because it crumbled away."[27]

6.0 Compliance with the Law: Formal Co-Ownership of Land

Compliance with the law could mean (a) registering a single parcel to multiple owners (i.e. formal co-ownership), (b) the registered owner or owners of a parcel of land manage the land themselves and do not subdivide it – formally or informally – among their children, and (c) the registered owner or owners of a parcel of land that, if subdivided, would result in parcels that are each one hectare or less legally transfer the entire parcel to a new owner. Registration of multiple owners was more commonly seen in this research than maintaining individual land rights or selling entire parcels of land, possibly due to the cultural value that is still placed on subdividing land within a family, as well as rural households' dependence on land for their livelihoods. In regards to the latter, selling an entire parcel of land could pose challenges to a small farmer's livelihood.

Landowners are encouraged to co-own their land, rather than subdivide it into small, individual parcels.[28] To be in compliance with the law, a landowner who wishes to subdivide land would undertake procedures to jointly register the land, which would then be co-owned under a single

[23] KII with Agronomist, Rwamagana District
[24] KII with Dr. Alfred Bizoza, Director of Research, IPAR; KII with Juvenal, Program Officer, IMBARAGA
[25] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer
[26] FGD with INGABO farmers' cooperative, Muhanga District
[27] FGD with INBAGO Farmers' Cooperative, Muhanga District
[28] FGD with local leaders, Musanze District; KII with Agronomist, Gasabo District; KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, Ministry of Natural Resources

land title certificate and, theoretically, managed as a single entity.[29][30] In such cases, the district advises landowners who want to subdivide their land for *umunani* or inheritance to take actual measurements of the parcel, which requires a survey, and then bring the measurements to the district. If the survey reveals that subdivision of the parcel would result in parcels of land smaller than one hectare each, the plot will be co-owned by the interested parties.[31] After following these steps, landowners can acquire a single land title certificate that stipulates each co-owners' percentage of ownership in the plot, but not measurements of individuals' parcels since this would be contradictory to the intention of co-ownership and co-management.[32]

However, formal co-ownership of land is rare because the practice is not well-known and it is too expensive for many.[33] FGD participants in Rwamagana said that this procedure was for "the wealthy elite because it is costly" and most families do not formally register as co-owners on the land title certificate.[34] Furthermore, even those who register co-ownership of a single parcel often initiate traditional boundaries on the land, such that the land is fragmented in practice, though this is not reflected in the official register.[35]

Perceived Benefits of Compliance (i.e. Formal Co-Ownership)

Preventing Land Fragmentation

Multiple key informants expressed concerns about continuous land subdivisions – concerns which Article 30 is intended to prevent. Several discussed the challenge of making fragmented parcels of land productive beyond limited subsistence agriculture; these challenges were often linked to the perceived benefits of forming cooperatives and participating in LUC.[36] For example, one key informant said, "It is challenging to apply fertilizers, good seeds, and other inputs across fragmented parcels. On the other hand, the advantages of merging the small plots include the ability to grow one crop, which can increase production. Second, it is easier for them to find a market for their produce as a group."[37] On small, fragmented parcels on which landowners are cultivating different crops, it is also difficult to utilize machinery, such as tractors, and to introduce

[29] KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, Ministry of Natural Resources
[30] Local Leaders in Rwamagana also reported that, when children reach the age of 21, they can be added to the land title certificate. However, this is not usually done unless the children explicitly request it. Parents typically do not want their children on the title because they do not trust that the children will use the land in the way the parents want. This option was not reported by other informants.
[31] KII with Director of Land, Gasabo One Stop Centre
[32] KII with Director of Land, Gasabo One Stop Centre; KII with Acting OSC Coordinator, Karongi District
[33] KII with Director of Land, Gasabo One Stop Centre; FGD with Sector Executive Secretaries, Rwamagana District
[34] FGD with Sector Executive Secretaries, Rwamagana District
[35] KII Acting OSC Coordinator, Karongi District; KII with Director of Land, Gasabo One Stop Centre
[36] KII with Agronomist, Rwamagana District; KII with Director of Land, Gasabo One Stop Centre; KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee
[37] KII with Director of Land, Gasabo One Stop Centre

large-scale infrastructure like irrigation.[38] Other informants argued, however, that Rwanda's hilly terrain makes mechanized farming impractical, regardless of parcel size. [39]

There was also concern about the seemingly never-ending pattern of subdivision as a result of cultural practices, such as *umunani*, and the impact of this on the country's vision to develop a professionalized economy, which includes commercialization of agriculture.[40] According to one key informant, land subdivisions makes it difficult for investors who would "use the land more optimally" to invest in Rwandan agriculture,[41] presumably because they would have to reach agreements with multiple landowners. There are also practical challenges associated with decreasing parcel sizes. One FGD participant said*:* "Imagine having eight kids and subdividing a small amount of land between them! It's not even enough to build a house on."[42] There is a concern that if subdivisions continue unabated, parcel sizes will become too small to be useful to the owners.[43]

Facilitation of LUC

The most commonly cited and seemingly most important benefit of co-ownership was that this facilitates LUC.[44] Co-ownership, particularly on consolidated parcels, allegedly enables landowners to produce more, as opposed to smallholders who are engaged in subsistence farming.[45] According to one key informant, "It has been verified that co-ownership of consolidated parcels results in higher productivity than smaller, individually owned plots of land."[46] This is in part because co-owners are perceived as easier to convince to participate in LUC, [47] which promotes mono-cropping and links participants with government support, such as agricultural inputs (i.e. seeds, pesticides, and fertilizers), machinery, extension services, and markets.[48] The impacts of LUC have been explored in great detail in other reports and are therefore not investigated here.[49]

Co-ownership is also said to decrease land sales and gifts of land, which might otherwise be detrimental to households. [50] When land is co-owned, each co-owner must obtain the approval of

[38] KII with Agronomist, Gasabo District; KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee
[39] FGD with IMBARAGA farmers' cooperative, Musanze District
[40] KII with Dr. Charles Bucagu, Dean of Agriculture Department, University of Rwanda; KII with Emmanuel Uwizeye, Director of Lands, Environment, Water, Mining and Forests Department, MINIRENA; KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee
[41] KII with Emmanuel Uwizeye, Director of Lands, Environment, Water, Mining and Forests Department, MINIRENA
[42] FGD with IMBARAGA Board of Directors, Kigali City
[43] KII with Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI
[44] KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, Ministry of Natural Resources; KII with Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI; FGD with Sector Executive Secretaries, Rwamagana District
[45] KII with Arnaud de Vanssay, Head of Section, Rural Development, EU Delegation to Rwanda
[46] KII with Director of Land, Gasabo One Stop Centre
[47] KII with Agronomist, Rwamagana District
[48] KIIs with Agronomist, Gasabo District; Agronomist, Karongi District; INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; Muhanga District One Stop Centre Coordinator and Agronomist; FGD with IMBARAGA Board of Directors, Kigali City
[49] See, for example: Dawson, Martin, & Sikor, 2015; University of Rwanda, 2014; and Kathiresan, 2012.
[50] FGD with Sector Executive Secretaries, Rwamagana District

the other co-owners before selling their portion.[51] Furthermore, Article 30 restricts the legal subdivision of land for *umunani*, which could leave the original owners in extreme poverty and without enough land to support themselves.[52] FGD participants in Karongi explained that, giving *umunani* benefits one's children, but leads to economic hardship for the parents as they are left with very small pieces of land which are not enough to sustain them. One woman added that, in the past, "There was more land and it was easier to raise eight children, but these days it's not easy to raise eight children."[53] Several respondents reported that, after giving *umunani*, a household becomes poorer with higher food insecurity.[54]

The potential for family members to co-own land was seen as positive by some FGD participants, who argued that this strengthens family bonds and fosters a culture of social cohesion.[55] There may also be increased cohesion among women, as they are the ones who work on the land.[56] This contradicted feedback from several other informants who viewed co-ownership as a source of discord within families. An FGD participant in Muhanga stated, "There is no benefit at all [with co-ownership], since this will create more conflict. People don't work at the same rate, how can they share the produce?"[57] Co-ownership presents a challenge when one co-owner wants to sell or use the land as collateral and the other co-owners do not agree. The lack of freedom to sell when one wants is also reportedly a common issue.[58]

Challenges Associated with Compliance

While several key informants and FGD participants described the benefits of compliance with the provision, many also described the challenges. Respondents referenced the desire to distribute *umunani* to one's children and to have the freedom to sell a parcel of land when the need arises. Others reported that the provision is not practical because it is contrary to cultural practices and the realities of Rwandan agriculture. For example, households have very small parcels of land and many children. This makes it nearly impossible for people to comply with the provision, since they feel compelled to give their children *umunani*. [59] FGD participants in Muhanga averred that the hilly terrain is just not suitable for large parcels of land.[60] Several respondents reported that, in general, the perception of landowners toward this provision is negative.[61]

<u>Decision-making authority over land.</u>

---

[51] KII with Acting OSC Coordinator, Karongi District
[52] FGD with Sector Executive Secretaries, Rwamagana District
[53] FGD with IMBARAGA women's cooperative, Karongi District
[54] FGD with IMBARAGA Board of Directors, Kigali City; KII with Agronomist, Karongi District
[55] KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, MINIRENA
[56] FGD with IMBARAGA Board of Directors, Kigali City
[57] FGD with Sector Executive Secretaries, Rwamagana District
[58] KII with Agronomist, Gasabo District
[59] KII with Agronomist, Gasabo District; FGDs with IMBARAGA Board of Directors, Kigali City and INGABO farmers' cooperative, Muhanga District
[60] FGD with IMBARAGA farmers' cooperative, Musanze District
[61] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; KII with Agronomist, Karongi District; KII with Acting OSC Coordinator, Karongi District

One key informant argued that Article 30 is against Rwandan tradition, which for many centuries gave individuals decision-making authority over their lands. [62] Landowners want to be able to choose to give their children *umunani* or sell a portion of land, should the need arise.[63] However, the LUC program and restrictions on subdivisions remove landowners' decision-making authority about what they can plant and how they can use their land, which fosters resistance among landowners who view this as limiting their decision-making authority.[64]

Umunani and Inheritance

The desire to distribute land *umunani* and inheritance among one's children was the most commonly given challenge associated with implementation of Article 30.[65] Regardless of the size of their parcel and the number children they had, landowners want to subdivide land among their children.[66] For example, FGD participants in Karongi District planned to give their children *umunani*, though they had an average of seven children each and very small parcels.[67] Giving *umunani* is seen as a cultural value[68] and has economic benefits for the children, who are able to establish a household and a life of their own as a result of such gifts. [69] Subdividing land through *umunani* was also reported to mitigate intra-family conflicts.[70] Some families, however, are also beginning to recognize the value of giving education or cash in lieu of land *umunani*. [71]

Because land subdivisions for the purposes of giving *umunani* typically result in parcels smaller than one hectare each and that are not in compliance with Article 30, beneficiaries are not able to register their individual ownership over the land received as *umunani*, though they recognize the value of doing so.[72] As a result, they are not able to formally sell the land or use it as collateral to obtain loans.[73] Despite the challenge of not being able to register land *umunani* individually or use it as collateral, the practice continues, in part because people feel they have no other option.[74] One FGD participant described the challenge thus: "If you have 0.5 hectares and five children

[62] KII with Juvenal, Program Officer, IMBARAGA
[63] KII with Director of Land, District One Stop Centre, Gasabo District
[64] KII with Juvenal, Program Officer, IMBARAGA; KII with Director of Land, District One Stop Centre, Gasabo District
[65] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; KII with Agronomist, Rwamagana District; KII with Acting OSC Coordinator, Karongi District; KII with Government Relations Officer, Tubura; KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee; FGD with local leaders, Musanze District
[66] KIIs with Muhanga District One Stop Centre Director and Agronomist and One Stop Centre Coordinator, Musanze District; FGD with IMBARAGA farmers' cooperative, Musanze District
[67] FGD with IMBARAGA women's cooperative, Karongi District
[68] FGD with IMBARAGA farmers' cooperative, Musanze District
[69] FGDs with INGABO farmers' cooperative, Muhanga District and IMBARAGA women's cooperative, Karongi District
[70] FGDs with INGABO farmers' cooperative, Muhanga District and IMBARAGA farmers' cooperative, Musanze District; KII with Agronomist, Gasabo District
[71] FGD with IMBARAGA women's cooperative, Karongi District
[72] KII with Muhanga District One Stop Centre Director and Agronomist; FGDs with INGABO farmers' cooperative, Muhanga District and IMBARAGA women's cooperative, Karongi District
[73] FGDs with INGABO farmers' cooperative, Muhanga District and Sector Executive Secretaries, Rwamagana District; KII with One Stop Centre Director and Agronomist, Muhanga District
[74] FGD with INGABO farmers' cooperative, Muhanga District; KII with Agronomist, Gasabo District

what can you do? For me, I'll go ahead and subdivide my 0.5 hectares among my children. But I worry about how they will get [individual] certificates for the land."[75]

Land Sales

According to one key informant, "Land is the main capital of the poor," which farmers may need to sell in order to meet immediate needs.[76] The occasional need to sell a parcel of land was commonly cited as a challenge to compliance with Article 30.[77] At times, landowners want to sell a portion of their land to meet a household need,[78] such as to pay school fees or purchase medicine.[79] Participants in one FGD said that, if a household needs money, the landowner will negotiate with a neighbor to sell a piece of their land informally.[80]

While an entire, registered parcel that is smaller than one hectare can be legally sold, it cannot be subdivided.[81] This presents a challenge for landowners that need money, but cannot legally subdivide and sell a piece of their land. In such cases, they may have to sell their entire parcel to meet an immediate need, leaving the household landless and impoverished.[82] In contrast, if a landowner cannot sell a piece of their land, they lose access to a source of emergency funds.

Resistance to Co-Ownership

As described above, formal co-ownership is rare in Rwanda. Some people actively resist co-ownership, in part because it is difficult to reach common agreement on how the land should be used, even among siblings.[83] In addition, co-ownership complicates the ability to sell one's land or apply for a loan using the land as collateral. To take a loan, all the co-owners must first reach consensus on the matter, which is reportedly a difficult process. Then, each co-owner must co-sign for the loan,[84] such that if the one investing the proceeds of the loan defaults, the entire group is held responsible.[85] Because of the difficulty of reaching consensus, many co-owners simply opt not take a loan.[86] Similarly, when it comes to land sales, all co-owners must agree to sell the land. Only then may district authorities register the transfer.[87] As with loans, issues arise when one co-owner wishes to sell their portion and the co-owners do not agree.[88]

---

[75] FGD with INGABO farmers' cooperative, Muhanga District
[76] KII with Arnaud de Vanssay, Head of Section, Rural Development, EU Delegation to Rwanda
[77] KII with Government Relations Officer, Tubura; FGDs with IMBARAGA Board of Directors, Kigali City and Sector Executive Secretaries, Rwamagana District; KIIs with Muhanga District One Stop Centre Director and Agronomist; Gasabo District Agronomist; Agronomist Karongi District
[78] KII with Muhanga District One Stop Centre Director and Agronomist and FGD with IMBARAGA Board of Directors, Kigali City
[79] FGDs with INGABO farmers' cooperative, Muhanga District and IMBARAGA Board of Directors, Kigali City
[80] FGD with IMBARAGA Board of Directors, Kigali City
[81] KII with Agronomist, Karongi District
[82] FGD with IMBARAGA Board of Directors, Kigali City
[83] KIIs with Director of Land, Gasabo One Stop Centre and One Stop Centre Coordinator, Musanze District
[84] FGDs with INGABO farmers' cooperative, Muhanga District and IMBARAGA Board of Directors, Kigali City
[85] FGDs with Sector Executive Secretaries, Rwamagana District and INGABO farmers' cooperative, Muhanga District
[86] FGD with IMBARAGA Board of Directors, Kigali City
[87] KII with Muhanga District One Stop Centre Director and Agronomist
[88] KII with Muhanga District One Stop Centre Director and Agronomist

7.0 Non-Compliance with the Law

Land subdivisions carried out through informal transfers that are not in compliance with the law were reported by FGD participants and key informants in all research sites, and are said to be common. In some cases, rural people subdivide land because they do not know about the policy, but in other cases they know the law and ignore it "in order to survive."[89]

Types of Non-Compliance

Extra-legal subdivisions of land typically occur for purposes of giving *umunani* or inheritance to one's children and selling land. These practices result in separate effective ownership, but not separate legal ownership, of a previously contiguous parcel. Land that has been subdivided for *umunani* or inheritance is held within one family and land that has been subdivided for land sales between families. Because the land title certificate is not legally transferred, legal ownership of the subdivided parcels remains with the registered owner, posing significant risks to the parties of the transfer.

Informal co-ownership[90] within the family

As described above, formal co-ownership of land is rare in part because the practice is not well-known, but also because it is too expensive for many families.[91] Furthermore, people believe that if they buy land they should have their own land title certificate.[92] As a result, ownership of parcels subdivided for the purposes of *umunani* or inheritance is most often informal. In such cases, the land is divided among children or other family members with friends, family members, and neighbors witnessing the transfer of land rights. One FGD participant in Rwamagana said, "When you receive land in the form of *umunani* and you share it with your siblings, there's no way you're going to get that share of yours registered."[93] Though the land is typically registered to the parents under a single land title certificate,[94] it is subdivided in practice and each individual knows the traditional boundaries demarcating their individual plot.[95] While the new landholders' rights are not formally registered, the transfer is recognized by the community, providing the landowners a modicum of tenure security.[96]

---

[89] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; FGD with IMBARAGA Board of Directors, Kigali City; KII with Director of Lands, District One Stop Centre, Gasabo District

[90] For the purposes of this brief, "informal co-ownership" is a type of informal landholding in which landholders, typically within one family, informally subdivide and own parcels of land that together comprise a single, registered parcel which is registered in the legal owner's name, usually the landholders' parents or the mutually agreed head of the family.

[91] KIIs with Director of Land, Gasabo One Stop Centre and Agronomist, Karongi District; FGD with Sector Executive Secretaries, Rwamagana District

[92] KII with Acting OSC Coordinator, Karongi District

[93] FGD with Sector Executive Secretaries, Rwamagana District

[94] KII with Agronomist, Karongi District; FGDs with IMBARAGA women's cooperative, Karongi District and INGABO farmers' cooperative, Muhanga District

[95] KII with Agronomist, Karongi District; KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, MINIRENA; FGDs with IMBARAGA women's cooperative, Karongi District and INGABO farmers' cooperative, Muhanga District

[96] KII with Emmanuel Uwizeye, Director of Land, Environment, Water, Mining, and Forests Department, MINIRENA

When informally co-owned land is registered in the name of the parents, family members demarcate their subdivided parcels with traditional boundaries and use them separately. However, management of land informally subdivided among family members becomes more complicated when the parents die. In such cases, should the siblings choose to formally register their rights, they will have to do so in common for the entire parcel and pay for a surveyor to visit the property to take measurements of the boundaries of the subdivided plots within the primary parcel. Then, upon registration, the authorities will allocate percentages to each co-owner corresponding to the size of his or her plot, and the co-owners' names will appear together on the certificate for the main parcel formally in the name of the parents.[97] In other cases, informal co-owners do not want to pay for – or cannot pay for – a formal survey of the boundaries of their subdivided plots. When this happens, they may opt for one of the family members to register the land title certificate in their name and then continue to share the land informally. The new "head of the family" is agreed upon by the other informal co-owners and witnessed by neighbors.[98] This was identified as a potential source of long-term tensions, including disputes.[99]

In regards to management of a parcel subdivided among family members, much depends on whether or not the owners participate in LUC. If they participate, the crop that they will cultivate is dictated by the LUC technical team. If they do not participate in LUC, each informal co-owner typically determines what crop or crops they will cultivate on their individual plot, resulting in a number of crops grown on the main parcel. Multi-cropping was perceived as a negative by LUC technical team members interviewed for this report.[100]

Fragmented ownership through informal sales and leases

As described above, the occasional need to sell a parcel of land was commonly cited as a challenge to compliance with Article 30.[101] However, it is not universally known that land subdivisions resulting in parcels smaller than one hectare each cannot be registered. In some cases, neither the seller nor the buyer know that they will not be able to register the transaction.[102] In other cases, the seller and/or buyer know the law, but choose to transact informally,[103] possibly because they know that the subdivided parcels cannot be registered. When the parties are unaware of the law, a buyer will usually purchase land from a seller before going to the district to register the transaction. At the district, the authorities inform them that the transaction cannot be registered and might advise the buyer and seller to register as co-owners on the entire parcel.[104] If they agree, the buyer and seller pay for a survey of the parcel, then pay to register their percentage of ownership on the entire parcel.[105] More commonly, the buyer and seller will not

[97] KII with Acting OSC Coordinator, Karongi District
[98] KII with Acting OSC Coordinator, Karongi District
[99] FGD with Sector Executive Secretaries, Rwamagana District
[100] KII with Agronomist, Karongi District; KII with Agronomist, Rwamagana District
[101] KII with Government Relations Officer, Tubura; FGDs with IMBARAGA Board of Directors, Kigali City and Sector Executive Secretaries, Rwamagana District; KIIs with Muhanga District One Stop Centre Director and Agronomist; Gasabo District Agronomist; Agronomist Karongi District
[102] FGD with Sector Executive Secretaries, Rwamagana District
[103] KII with Director of Land, District One Stop Centre, Gasabo District
[104] KII with Director of Land, Gasabo One Stop Centre
[105] KII with Acting OSC Coordinator, Karongi District

agree to co-own the land. In such cases, the seller may either reimburse the buyer for the purchase, or sell the entire parcel of land to the buyer.[106] It is also possible that the buyer and seller might choose to keep their transaction informal once they learn that they cannot register the subdivided parcel; however, such practices are unreported and key informants did not know the extent to which this is done.

Sub-leases between separate families – rarely within families – can also occur on extra-legally subdivided parcels, though this was only reported in one research site.[107]

in other cases buyers and sellers do not see the need to register land transactions in the first place, including sales of extra-legally subdivided parcels,[108] possibly because the cost to register land is high and community recognition of one's land rights provides sufficient tenure security to owners. In some areas, transactions – including sales of extra-legally subdivided parcels – are always informal; this is most common in very remote areas that are distant from District One Stop Centers and where awareness of land policies and laws is low.[109] However, this practice is decreasing due to the introduction of Sector Land Managers and increasing awareness of the importance of registering transactions.[110]

To give informal transactions a modicum of legitimacy, village leaders will act as witnesses to land sales.[111] When an informal sale takes place – or even when land is extra-legally subdivided for *umunani* – village leaders may witness the laying of traditional boundaries.[112] Village leaders may also sign the informal sale agreement in return for a token payment of beer. [113] FGD participants in Kigali alleged corruption on the part of village leaders who they averred knew that their authority to sanction sales was not legal and yet accepted payment for their services.[114] However, it is also possible that many village leaders, like many ordinary citizens, are not aware of Article 30 or its implications for land subdivisions. [115] Whether village leaders are aware of the implications of Article 30 on their constituents or not, they are responding to a practical need to transfer land and a corresponding desire for tenure security within their communities. [116] According to one key informant, "It's just an administrative arrangement to facilitate urgent needs, like acquiring money for school fees for your children."[117]

---

[106] KII with Acting OSC Coordinator, Karongi District; KII with Director of Land, Gasabo One Stop Centre
[107] KII with Muhanga District One Stop Centre Director and Agronomist
[108] KII with Emmanuel Uwizeye, Director of Lands, Environment, Water, Mining and Forests Department, MINIRENA
[109] FGD with local leaders, Musanze District
[110] KII with Acting OSC Coordinator, Karongi District
[111] KII with One Stop Centre Coordinator, Musanze District; FGD with local leaders, Musanze District; FGD with Sector Executive Secretaries, Rwamagana District; FGD with local leaders, Musanze District
[112] FGD with Sector Executive Secretaries, Rwamagana District; FGD with INGABO farmers' cooperative, Muhanga District
[113] FGD with INGABO farmers' cooperative, Muhanga District; FGD with IMBARAGA women's cooperative, Karongi District
[114] FGD with IMBARAGA Board of Directors, Kigali City
[115] FGD with INGABO farmers' cooperative, Muhanga District
[116] KII with One Stop Centre Coordinator, Musanze District
[117] KII with OSC Coordinator, Rwamagana District

Perceived Benefits of Non-Compliance

There are benefits to subdividing land, including transferring land to one's children to serve as the foundation for their independent livelihoods, and selling a parcel of land to meet an immediate need. There are also benefits to cultivating small parcels of land in Rwanda, which has been documented through empirical research (Ali & Deininger, 2014; Ansoms, Verdoot, & Van Ranst, 2009; Blarel, Hazell, & Place, 1992). In two separate studies, Ali & Deininger (2014) and Ansoms, Verdoot, & Van Ranst (2009) found that the inverse size-productivity relationship holds true in Rwanda. While the former study found that small farms perform better than larger farms (Ansoms, Verdoot, & Van Ranst, 2009), the latter study found that land quality and yields are higher on small farms and profits per hectare are the same regardless of plot size (Ali & Deininger, 2014). Blarel, Hazell, & Place (1992) found that fragmentation in Rwanda may help farmers manage risk and enhance household food security.

The benefits of cultivating smaller parcels of land were also cited by several key informants. According to one key informant, managing larger parcels of land can be prohibitively expensive for a poor landowner because they require more inputs and infrastructure. Smaller parcels of land might therefore be more financially manageable for many rural Rwandans.[118] Dr. Alfred Bizoza, Director of Research at IPAR, reported that when a landowner has a smaller parcel of land, they will invest more on that parcel in terms of labor and other inputs. However, this does not mean that they will realize positive returns on their investments and some experience heavy losses.[119] In some cases, positive returns on small parcels are a result of high-intensity practices that can exhaust the soil and are not sustainable. [120] For example, FGD participants in Karongi said that they needed to apply heavy doses of fertilizers and pesticides to see a positive return on their investment.[121] To counter these challenges, Dr. Bizoza recommended grouping small landowners into cooperatives to facilitate their participation in LUC.[122] It was not made clear, however, how participation in LUC will reduce overly intensive agricultural practices on the part of smallholders.

Indeed, non-compliance with Article 30 does not equate to non-participation in LUC. Informal co-owners can and do participate in LUC. [123] If the land has been extra-legally subdivided, agents introducing LUC will consult all co-owning farmers regardless of whether their name is registered on the land certificate.[124] According to one key informant, traditional boundaries do not pose a challenge to implementation of LUC, as these can be as non-invasive as a tree or a mark. This key informant added that recognition of these boundaries in LUC is important because one farmer might have 0.5 hectare and the other might have 5 hectares; these landowners cannot claim the same harvest.[125] One agronomist reported that even if a landowner has a very tiny parcel of land

[118] KII with Dr. Charles Bucagu, Dean of Agriculture Department, University of Rwanda
[119] KII with Dr. Alfred Bizoza, Director of Research, IPAR
[120] KII with Dr. Charles Bucagu, Dean of Agriculture Department, University of Rwanda
[121] FGD with IMBARAGA women's cooperative, Karongi District
[122] KII with Dr. Alfred Bizoza, Director of Research, IPAR
[123] KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee
[124] KII with Agronomist, Rwamagana District
[125] KII with OSC Coordinator, Rwamagana District

that is not technically part of LUC, if the parcel is in close proximity to an LUC implementation site, the landowner should be able to access extension services. [126]

The challenge with many small, individually owned parcels, however, arises with having to convince many landowners to participate in LUC and then monitoring their participation, especially when each owner retains decision-making authority over his or her parcel.[127] For example, when three co-owners cultivate one hectare allocated for maize, one might start growing beans. The LUC technical team cannot destroy the crops, but must focus on encouraging all landowners to participate.[128] Still, while informal co-ownership of extra-legally subdivided parcels might encumber implementation of LUC, it does not obstruct the program.

Enforcement of Article 30

In addition to the limitations on subdivision of land under Article 30, Article 20 of the 2013 Land Law states that "Registration of land is obligatory for that landowner." However, key informants universally reported that there are no official penalties associated with extra-legally subdividing land and failing to register land transfers and transactions.[129] Additionally, there is a lack of local government involvement in implementing and enforcing the provision, as evidenced by village leaders witnessing informal land transactions.[130] Enforcement typically begins at the sector-level. Because of the recent introduction of Sector Land Managers, it may now be easier for landowners to learn about Article 30 before they attempt to register land that has been subdivided below the legal limit.[131] At the district-level, the priority is to encourage compliance.[132] Both sector and district authorities sensitize people about the importance of complying with the provision;[133] however, extra-legal subdivisions of land for the purposes of land *umunani*, inheritance, and sales persists despite sensitization.[134]

8.0 Land Tenure Issues Related to Article 30

Article 30 has negative impacts on the land tenure security of landowners in Rwanda. In the short-term, the provision curtails owners' decision-making authority to gift, bequeath or sell their land and prevents many landowners who purchase or receive subdivided plots from registering them. Landowners complain that Article 30 hinders their ability to use their land as they wish – including to distribute *umunani* and inheritance among their children, sell land to meet an immediate need,[135] or take a loan using one's land as collateral.[136] This may reduce a vulnerable household's

[126] KII with Agronomist, Rwamagana District
[127] KII with Agronomist, Rwamagana District
[128] KII with Agronomist, Rwamagana District
[129] KII with Director of Land, Gasabo One Stop Centre; KII with Agronomist, Gasabo District
[130] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; FGD with INGABO farmers' cooperative, Muhanga District
[131] FGD with INGABO farmers' cooperative, Muhanga District
[132] KII with Director of Land, Gasabo One Stop Centre
[133] KII with Agronomist, Gasabo District
[134] KII with Agronomist, Gasabo District
[135] KII with Agronomist, Karongi District; KII with Agronomist, Gasabo District
[136] KII with OSC Coordinator, Rwamagana District; KII with Agronomist, Gasabo District

ability to respond to an economic shock.[137] According to one key informant, the law "erodes the rights of individual smallholders."[138] However, extra-legal subdivisions of land and transfers of these subdivided parcels continue, albeit informally.

Informal transfers of extra-legally subdivided parcels are common because individual rights to subdivided parcels cannot be registered and: 1) The owners do not wish to formally co-own because the social and economic costs of co-owning are too high, thereby they opt for informality; 2) People do not know that formal co-ownership is an option; or 3) They do not value registration of their land rights, regardless of the transaction type.[139] The former two reasons were the most commonly given by respondents; overall, respondents seemed to value land registration. While they had obtained land through informal transfers, primarily through gifts of *umunani*, FGD participants in Karongi District wanted to acquire certificates for their land because, without registration, ownership is unclear.[140] Among FGD participants in Muhanga, one man said that he gave his children *umunani*, but now they cannot get land certificates, which was a concern. [141] Based on this information, it seems that many landowners do not prefer informality, but feel they have no other choice because of the costs and disadvantages of registering as co-owners and their lack of knowledge of the process for doing so.

As a result of the number of informal transactions taking place, the Land Administration Information System (LAIS) – the Rwandan land registry – could become obsolete with negative impacts on land tenure security.[142] Already, data on subsequent transactions is missing from the LAIS.[143] When land is transferred informally, it may change hands numerous times, but the land certificate remains in the name of the original owner and is useless to the current owner.[144] This presents a challenge when threats to tenure security arise, such as land disputes or expropriations. For example, disputes related to a seller attempting to sell land multiple times to multiple buyers are reportedly common.[145] According to FGD participants in Muhanga, "This is like a time bomb because when you subdivide the land among the children and they can't register, anything can happen."[146]

The long-term potential for disputes associated with implementation of Article 30 includes disputes related to both compliance and non-compliance with the provision.[147] For those households that comply with the law by co-owning land, disputes can arise because the co-owners cannot reach an agreement in regards to a land sale, or mortgage, or what to grow, or

---

[137] KII with Director of Land, Gasabo One Stop Centre
[138] FGD with local leaders, Musanze District
[139] KII with OSC Coordinator, Rwamagana District
[140] FGD with IMBARAGA women's cooperative, Karongi District
[141] FGD with INGABO farmers' cooperative, Muhanga District
[142] KII with Dr. Charles Bucagu, Dean of Agriculture Department, University of Rwanda; KII with Juvenal, Program Officer, IMBARAGA; KII with OSC Coordinator, Rwamagana District; Emmanuel Uwizeye, Director of Lands, Environment, Water, Mining, and Forests Department of MINIRENA
[143] KII with Dr. Alfred Bizoza, Director of Research, IPAR
[144] KII with Director of Land, District One Stop Centre, Gasabo District; FGD with IMBARAGA Board of Directors, Kigali City
[145] FGD with INGABO farmers' cooperative, Muhanga District
[146] FGD with INGABO farmers' cooperative, Muhanga District
[147] KII with Emmanuel Uwizeye, Director of Lands, Environment, Water, Mining and Forests Department, MINIRENA

even disagree on whether or not to participate in LUC.[148] According to FGD participants in Muhanga, co-ownership can lead to disputes because some people naturally cannot share with others. One participant said, "If you have children, some are more proactive than others and they can fully exploit the land, while others are lazy – so how do you merge them to co-manage the land?" They saw further challenges in sharing the harvest, since people work at different rates, but would demand an equal share of the profits.[149] Whether co-ownership is formal or informal, the next generation might not have the same common understanding as the current generation, and this will lead to conflicts.[150]

Most potential disputes, however, relate to informal transfers of land and the fact that it becomes harder and harder to identify ownership over parcels, particularly when there are no official boundaries demarcating individual plots.[151] Traditional boundaries can be easily shifted, leading to disputes among those that informally subdivide and transact in land.[152] In contrast to boundary disputes on registered parcels of land, disputes over traditional boundaries are difficult to resolve. For the former, the authorities simply reference the land certificate, but for the latter, there is not always a formal point of reference.[153]

Land disputes could also increase if prior owners, who remain with the land registered in their name, attempt to re-sell the land to another buyer. IMBARAGA board members explained that the children of a person who sold land informally might later try to reclaim the land since the land title certificate would still be in the name of their parent or parents, even though the buyer paid for it.[154] Similarly, former owners with land certificates still registered in their name could potentially use the certificate as collateral to obtain a loan, then fail to repay, leaving the consequences of foreclosure to fall on the current informal owner. In regards to informal transfers of land for *umunani* or inheritance, disputes might arise among the children (or their descendants) because their individual, informally owned parcels are not recorded in the LAIS.[155] One key informant also saw potential for intra-family disputes related to taxes. When plots are allocated to children but remain registered in the name of the parents, the tax liability will continue fall on the parents, even while their children are benefiting from the land.[156] The problems and prospects for disputes only grow as co-owners marry and their spouses become entitled to co-ownership as well, and then when the time comes to give their children *umunani* or inheritance; the number of co-owners will continue to expand, making disputes almost inevitable.

---

[148] KII with Arnaud de Vanssay, Head of Section, Rural Development, EU Delegation to Rwanda; KII with Agronomist, Karongi District; FGD with IMBARAGA farmers' cooperative, Musanze District; FGD with IMBARAGA Board of Directors, Kigali City
[149] FGD with INBAGO Farmers' Cooperative, Muhanga District
[150] KII with Acting OSC Coordinator, Karongi District
[151] KII with OSC Coordinator, Rwamagana District
[152] FGD with Sector Executive Secretaries, Rwamagana District; KII with Dr. Charles Bucagu, Dean of Agriculture Department, University of Rwanda
[153] KII with Director of Land, Gasabo One Stop Centre
[154] FGD with IMBARAGA Board of Directors, Kigali City
[155] KII with Juvenal, Program Officer, IMBARAGA
[156] KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer

Informality of ownership restricts opportunities to take a loan using one's land as collateral.[157] Even when co-ownership over land is formal, taking a loan can be difficult, as one must reach consensus with the other co-owners. According to FGD participants in Rwamagana, this restricts family growth and prosperity.[158] If the family agrees to the loan, then later the family member receiving the loan proceeds fails to repay, the bank could foreclose and take the entire parcel. FGD participants in Muhanga thought that land collateral offered to banks should correspond to the borrower's share of the parcel.[159]

Impacts of Article 30 on Women's Land Rights

According to respondents, implementation of Article 30 has both positive and negative impacts on women's rights to land. Positive elements were associated with formal co-ownership of land and participation in LUC. Whereas individual female landowners might lack the financial capacity to purchase inputs or labor, co-ownership enables vulnerable people – including women – to consolidate their assets with others in order to purchase inputs and fully exploit the land. When women co-own land and participate in LUC, they receive support through the program and see benefits in terms of profits,[160] as all farmers collectively harvest from the consolidated parcel and take an equal share regardless of sex.[161] However, participation in LUC would presumably also benefit women who informally co-own land and participate in the program.

As discussed above, the provision limits formal land sales, which can benefit or harm women depending on the prevalence of such transfers. Before adoption of the 1999 Succession Law, which requires that formal spouses must consent to the transfer of marital property, and Article 30 of the 2013 Land Law, a man could easily subdivide the household land and sell a portion without consulting his wife. Due to the restriction on subdividing land, such transfers are now often informal and thereby less attractive to buyers. As a result, the prevalence of informal land sales is decreasing and women are less likely to suffer from land transfers to which they did not consent.[162] However, a key informant in Musanze District – where informal land sales are seemingly more common than in other areas – identified Article 30 as harmful to women because sales of extra-legally subdivided land must happen informally and, as such, women are not required to give their consent.[163] Additionally, when a transaction is informal, the buyer does not need to include their spouse as a co-owners, which could have negative implications for a woman's rights to that land.

Implementation of the provision also has negative implications for women's ability to use and benefit from *umunani.* When a woman marries, she may move to another village or even province, making it difficult or impossible for her to exploit her land. [164] Though it might be more practical for her to sell the land, she may not be able to do so formally because her individual parcel cannot

[157] KII with One Stop Centre Coordinator and Agronomist, Muhanga District; KII with Agronomist, Gasabo District
[158] FGD with Sector Executive Secretaries, Rwamagana District
[159] FGD with INGABO farmers' cooperative, Muhanga District
[160] KII with One Stop Centre Coordinator and Agronomist, Muhanga District; KII with Agronomist, Gasabo District
[161] KII with Agronomist, Rwamagana District
[162] FGD with Sector Executive Secretaries, Rwamagana District
[163] KII with One Stop Centre Coordinator, Musanze District
[164] FGD with INGABO farmers' cooperative, Muhanga District

be registered.[165] FGD participants in Muhanga shared an anecdote related to the giving of *umunani:* A man distributed *umunani* on a single parcel of land among his children. The time came when one of the children, a daughter, wanted to sell her share of the land, but the law prohibited the subdivision. Rather than sell a portion of the land informally, the informal co-owners all agreed to sell the entire parcel and then shared the proceeds to maintain family harmony.[166] In some cases, married women request equivalent compensation of their share of *umunani* from their brothers, though the compensation might not be equal to market value. [167] More often, women recognize the impracticality of exploiting or selling their land and simply leave the land to their brothers.[168] While women could feasibly sub-lease their portion of land *umunani*, this was not reported in any of the research sites. FGD participants in Musanze argued that the limitations imposed by Article 30 on women's ability to sell land erodes women's economic independence.[169]

The provision might also have negative impacts on women's ability to purchase land. According to interviewed members of farmer cooperatives, few women can afford to purchase land, and most who are able to do so purchase small parcels.[170] It is possible that the restrictions on subdividing land parcels will diminish the number of small parcels on the land market and thereby further limit the number of women able to purchase land. At a minimum, it diminishes the number of women with formally registered parcels.

Finally, in cases of divorce, implementation of Article 30 complicates the division of property between the spouses. Before a court issues a judgment on subdivision of land between spouses, the court needs to know the specific size of the parcel to ensure that the judgment does not violate the provision.[171] However, this is not always applied. FGD participants in Rwamagana said that, when the property is split equally between the spouses, one or both of the subdivided parcels are typically less than a hectare, such that neither party will be able to register their ownership. In some cases, the district authorities will subdivide a parcel based on a court judgment and guidance from the land registrar, though it contradicts the law.[172] In other cases, decisions by the court to subdivide the land are appealed, leading to forced sales of the property. In such cases, the parties share the money equally. [173]

9.0 Recommendations from Key Informants and FGD Participants

The challenges associated with implementation of Article 30 stem from extreme land pressure in Rwanda and a well-meaning policy that is nevertheless incongruent with the needs and realities

[165] KII with Acting OSC Coordinator, Karongi District; KII with Director of Land, Gasabo One Stop Centre; FGD with INGABO farmers' cooperative, Muhanga District; FGD with Sector Executive Secretaries, Rwamagana District
[166] FGD with INGABO farmers' cooperative, Muhanga District
[167] KII with Acting OSC Coordinator, Karongi District; FGD with INGABO farmers' cooperative, Muhanga District
[168] KII with Acting OSC Coordinator, Karongi District; KII with INGABO Executive Secretary, Monitoring and Evaluation Specialist, and Farmer; FGD with IMBARAGA farmers' cooperative, Musanze District; FGD with Sector Executive Secretaries, Rwamagana District
[169] FGD with local leaders, Musanze District
[170] FGD with IMBARAGA women's cooperative, Karongi District; FGD with INGABO farmers' cooperative, Muhanga District
[171] FGD with local leaders, Musanze District
[172] KII with OSC Coordinator, Rwamagana District.
[173] FGD with Sector Executive Secretaries, Rwamagana District

of most rural citizens. The following recommendations are derived from key informants and FGD participants, and are focused on opportunities to relieve pressure on land and to raise awareness of the law among ordinary people.

Reduce Pressure on Land

The population of Rwanda is rapidly increasing and the economy remains primarily agriculture-based, yet land resources are finite. To address pressure on land:

> Change norms around family size and *umunani.* In some rural areas, large families remain the norm. Government- and civil society-led social change communications campaigns could focus on reducing pressure on land by encouraging the younger generations to have fewer children. With investments in education, it is also possible that younger generations might not ask for *umunani* because they will be pursuing alternate livelihoods.[174] To foster this, campaigns could also encourage parents to give education in lieu of land *umunani.* However, the success of such campaigns will depend on the development of off-farm employment opportunities.
>
> Develop Off-Farm Employment Opportunities. The Government of Rwanda could focus on developing off-farm employment opportunities to reduce pressure on land.[175] Opportunities could also focus on economic empowerment for women to reduce their dependence on men and encourage them to engage in off-farm activities to improve their livelihoods.[176] The development of such opportunities will take time. However, Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI, reported that there is already a focus on promoting alternative forms of employment. The Government of Rwanda is aiming to create off-farm opportunities to absorb smallholders (those with less than 1 hectare of land).[177] According to one key-informant, "If people cannot afford the land, then they can sell it to the investors who can, and then be laborers of that land or shift to other off-farm activities."[178] While this may seem like an attractive solution to alleviate pressures on land, it should be approached with great caution. Developing a large class of landless laborers with low paying or unstable employment opportunities could lead to great economic and political instability.

Raise Awareness of Article 30

Given that Article 30 is not universally known or understood, there should be a large-scale focus on sensitization.[179] The focus should be on the benefits and modalities of compliance with the law

---

[174] KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee
[175] KII with Honorable Desire Nyandwi, Former Chair of the Lands and Environment Committee; KII with Leonard Kayonga, Director of Land Use Management and Spatial Planning Unite, Department of Lands and Mapping
[176] FGD with local leaders, Musanze District
[177] KII with Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI
[178] KII with Emmanuel Uwizeye, Director of Lands, Environment, Water, Mining and Forests Department, MINIRENA
[179] FGD with IMBARAGA women's cooperative, Karongi District; FGD with Sector Executive Secretaries, Rwamagana District

(i.e. how and why to register as formal co-owners of the land).[180] One key informant recommended that current and future landowners should be encouraged to think beyond themselves and their immediate need for land to the development of their country.[181] Local leaders would be instrumental to this effort as communicators within the community, which could also serve to dissuade them from facilitating informal transactions. As such, leaflets and other communications materials could primarily target them. [182]

Reduce Barriers to Formal Registration

In addition to lack of awareness of the law, the cost of registering formal co-ownership is prohibitively expensive for many rural Rwandans. [183] In addition to paying land registration fees, registration as co-owners requires hiring a professional surveyor to demarcate plots and identify share portions. [184] The Government of Rwanda could reduce registration fees, as well as consider less expensive alternatives to surveying co-owners' shares. One lesson might be taken from Zambia, where low-cost, open-source technology has been used to document customary land rights (Brooks, 2015).

Changes to Article 30

Key informants and FGD participants were divided on whether or not Article 30 should be revised. Those that wanted the provision to be revised recommended the following:

> <u>Reduce the minimum parcel size.</u> Several respondents felt that the minimum parcel size should be reduced to 0.5 hectare or 0.25 hectare to better reflect the average landholding of rural Rwandans. This would enable more landowners to comply with the law.[185] One key informant recommended that there be no minimum parcel size, as long as the co-owners agree to participate in LUC.[186]
>
> <u>Allow subdivided parcels to be sold in certain circumstances.</u> To reduce the negative impacts on women, allow married women who move away from their home towns to sell their parcels[187] and divorced couples who have been ordered by the Court to subdivide their property to sell their land. [188] It was also recommended that informally married women be able to register their share of matrimonial property separately even if it's less than one

[180] FGD with IMBARAGA Board of Directors, Kigali City; KII with Director of Land, Gasabo District One Stop Centre
[181] KII with Dr. Charles Bucagu, Dean of Agriculture Department, University of Rwanda
[182] FGD with IMBARAGA farmers' cooperative, Musanze District
[183] KII with Acting OSC Coordinator, Karongi District
[184] When this report was written, it cost RWF 27,000 to register a land transaction. The cost of hiring a surveyor would be additional.
[185] FGD with Sector Executive Secretaries, Rwamagana District; KII with Agronomist, Karongi District; KII with Acting OSC Coordinator, Karongi District; FGD with INGABO farmers' cooperative, Muhanga District; KII with Agronomist, Karongi District; KII with One Stop Centre Coordinator, Musanze District
[186] KII with OSC Coordinator, Rwamagana District
[187] FGD with Sector Executive Secretaries, Rwamagana District
[188] FGD with Sector Executive Secretaries, Rwamagana District

hectare; otherwise, in the even t of separation from her husband, she might end up with nothing.[189]

In contrast, those that recommended that the provision not be revised focused on the unsustainability of continued subdivisions,[190] as well as potentially negative impacts on the LUC,[191] possibly because subdivisions make controlling land use difficult.[192] Two key informants even recommended increasing the minimum parcel size not subject to the restriction to make the provision more stringent. [193]

10.0 Conclusions and Recommendations

Adoption and implementation of Article 30 of the 2013 Land Law is based on the widely-held belief that small farms in Rwanda are unproductive, yet empirical evidence to support this belief is lacking. While there are certainly practical challenges associated with land fragmentation, research has also shown that the inverse farm size relationship holds true in Rwanda, meaning that continued investment in small farmers – including through programs such as LUC – could be more beneficial to rural well-being than restricting land subdivisions (Ali & Deininger, 2014). Furthermore, land subdivision does not appear to obstruct implementation of and participation in LUC.

Based on research undertaken for this brief, it seems that implementation of Article 30 of the 2013 Land Law has not prevented land subdivisions. The provision is at odds with rural citizens' traditional practices and needs, which fosters informality and negatively impacts farmers' land tenure security. It is important to reiterate that this initial investigation of the impacts of restricting land subdivision is based on the perspectives of key informants and a handful of farmers who provided divergent opinions in regards to revising Article 30, underscoring the complexity of this issue and the need for deeper investigation.

Article 30 should be reviewed based on empirical research that assesses the impacts of land fragmentation, land subdivision, and implementation of the provision on ordinary Rwandans, including their ability to adapt to economic, social, and environmental changes. In order to gather adequate data to robustly assess these issues, research should include the following:

- A comparative productivity analyses of small, fragmented plots as compared to larger, consolidated plots, holding other factors constant.
- Case study analyses of co-owned plots to better understand the costs and benefits of these arrangements, including identification of prevalence, types and severity of disputes arising from such arrangements.

[189] KII with Director of Land, Gasabo One Stop Centre
[190] KII with One Stop Centre Director and Agronomist, Muhanga District; KII with Government Relations Officer, Tubura; KII with Agronomist, Rwamagana District
[191] KII with Agronomist, Rwamagana District
[192] KII with One Stop Centre Director and Agronomist, Muhanga District
[193] KII with Dr. Charles Murekezi, Director of Intensive Agriculture, MINAGRI

- Investigation of the extent of informal transactions prompted by restrictions on subdivision and their resulting impacts on the integrity of the land registry, tenure security, women's land rights, rural prosperity and social harmony.
- Pilot projects (e.g. in select sectors) in which people are given the opportunity to register subdivided plots. These should be accompanied by impact assessment research to assess the impact of alleviating the Article 30 constraint on maintaining the registry, agricultural productivity, disputes, and other livelihood outcomes.

Research may take some time. To discourage informal land transfers due to Article 30 in the near term, the Government of Rwanda could consider raising awareness and lowering the cost of formal co-ownership, which was also recommended by key informants and FGD participants. Added to this, the Government of Rwanda could consider promoting land sub-leases as an alternative to informal land subdivision and sales, as the 2013 Land Law does not restrict sub-leases based on parcel size.

Implementation of Article 30 of the 2013 Land Law has seemingly not limited land subdivisions in practice and has encouraged informality, with negative impacts on land tenure security. With this in mind, Article 30 should be reviewed based on robust research and analysis that assesses the impacts of land fragmentation, land subdivision, and implementation of the provision on Rwandan citizens.

Bibliography

Ali, D. A. (2011). *Environmental and Gender Impacts of Land Tenure Regularization in Africa: Pilot Evidence from Rwanda.* World Bank.

Ali, D. A., & Deininger, K. (2014). *Is There a Farm-Size Productivity Relationship in African Agriculture? Evidence from Rwanda.* World Bank.

Ansoms, A., Verdoot, A., & Van Ranst, E. (2009). *The Inverse Relationship between Farm Size and Productivity in Rural Rwanda.* Antwerp: Institute of Development Policy and Management.

Apata, T., Sanusi, A., & Olajorin, V. (2016). *Small Farms and Agricultural productivity in Nigeria: Empirical Analysis of the Effects of land tenure,.* Paper prepared for presentation at the 2016 World Bank Conference on Land and Poverty.

Bizimana, C., Nieuwoudt, W., & Ferrer, S. (2008). Farm Size, Land Fragmentation, and Economic Efficiency in Southern Rwanda. *Agrekon, 43*(2), 244-262.

Blarel, B., Hazell, P., & Place, F. (1992). *The economics of farm fragmentation: evidence from Ghana and Rwanda.* World Bank.

Brooks, S. (2015, December 4). Property rights and miracle trees: Growing climate-smart agriculture in Zambia. Devex. Retrieved April 28, 2016, from https://www.devex.com/news/property-rights-and-miracle-trees-growing-climate-smart-agriculture-in-zambia-87430

Byamugisha, F. (1999). *How Land Registration Affects Financial Development and Economic Growth in Thailand.* Washington, DC: World Bank.

Christiansen, L. L. (2012). The (evolving) role of agriculture in poverty reduction: An empirical perspective. *Journal of Development Economics*, 239-254.

Dawson, N., Martin, A., & Sikor, T. (2015). Green Revolution in Sub-Saharan Africa: Implications of Imposed Innovation for the Wellbeing of Rural Smallholders. *World Development, 78*, 204-218.

Demetriou, D. (2014). *The Development of An Integration and Planning Support System (IPDSS) for Land Consolidation.* Springer International Publishing.

Demetriou, D., Swillwell, J., & See, L. (2012). *LandFragmentS: A New Model for Measuring Land Fragmentation.* Rome, Italy: FIG Working Week 2012, 6-10 May 2012.

Di Falco, S., Penov, I., Alekseiv, A., & van Rensburg, T. M. (2010). Agrobiodiversity, farm profits and land fragmentation: Evidence from Bulgaria. *Land Use Policy, 27*(3), 763-771.

Government of Rwanda. (2004, February). National Land Policy. Rwanda.

Government of Rwanda. (2005). Organic Law No 08/2005 of 14/07/2005 Determining the Use and Management of Land in Rwanda. Rwanda.

Government of Rwanda. (2013). Law No 43/2013 of 16/06/2013 Governing Land in Rwanda. Rwanda.

IFAD. (2013). *Smallholders, food security, and the environment.*

Kathiresan, A. (2012). *Farm Land Use Consolidation in Rwanda: Assessment from the Perspectives of Agriculture Sector.* Ministry of Agriculture and Animal Resources.

Kawasaki, K. (2010, October). The costs and benefits of rice farms in Japan. *The Australian Journal of Agricultural and Resource Economics, 54*(4), 509-526.

Ministry of Agriculture and Animal Resources. (2013). Strategic Plan for the Transformation of Agriculture in Rwanda: Phase III.

Ministry of Finance and Economic Planning. (2000, July). Rwanda Vision 2020. Rwanda.

Ministry of Finance and Economic Planning. (2013, May). Economic Development and Poverty Reduction Strategy II (EDPRS2). Rwanda.

Musahara, H. (2006). *Improving Tenure Security for the Rural Poor: Rwanda Country Study.* Food and Agricultural Organization of the United Nations (FAO).

Musahara, H., & Huggins, C. (2015). *Land reform, land scarcity and post-conflict reconstruction: A case study of Rwanda.*

University of Rwanda. (2014). *Assessment of the Economic, Social, and Environmental Impacts of the Land Use Consolidation Component of the Crop Intensification Program in Rwanda.* USAID | Rwanda LAND Project.

Van Dijk, T. (2003). *Dealing with Central European land fragmentation.* Delft.

Van Hung, P., Macauley, T., & Marsh, S. (2007). The economics of land fragmentation in the north of Vietnam. *Australian Journal of Agricultural and Resource Economics, 51*(2), 195-211.

Annex 1: FGD Question Guide

Terms of Reference
Prohibition of Farm Land Subdivision under 1 hectare

With the aim of improving efficient land use and agricultural productivity, Article 30 of the 2013 Land Law stipulates that it is “prohibited to subdivide plots of land reserved for agriculture and animal resources if the result of such subdivision leads to parcels of land of less than a hectare in size for each of them”. LAND Project is conducting FGDs with IMBARAGA farmers to learn about their perceptions and experiences with the provision and its implementation.

KEY QUESTIONS:

1. Warm-Up Questions: What is your name, and what is your role?

2. Are you aware of the legal prohibition on land subdivision?

- If yes, please explain your understanding of the provision.
- How did you learn about the legal prohibition on land subdivision?
- To your knowledge, what were the influencing factors for adopting the prohibition of agricultural land subdivision under 1 ha?

3. To what extent are farmers and those in rural areas aware of this provision? Is there a difference in men’s and women’s knowledge of this provision?

- How did they learn about this provision?

Implement constraints and opportunities matrix

Community / Individual-level Experiences						
Theme	**Benefits**	**Constraints**	**Underlying Cause(s)**	**Coping Strategy**	**Impact(s), incl. on women**	**Recommendations**
4. Compliance with the provision				(ask about co-management for land umunani and inheritance)	(ask about impacts of co-management – how is it managed?)	
5. Enforcement of the provision by local authorities				(ask about penalties)		
6. Occurrence of land subdivisions resulting in parcels < 1 ha, incl. sales, leases, umunani, inheritance						
7. Registration of subdivided plots (< 1 ha)				(ask about registration with local authorities)		

8. Transfers (sales and leases) of subdivided plots (< 1 ha)						
9. Land productivity of parcels < 1 ha				(ask about potential benefits of consolidating properties)		
10. Land-based investments on parcels < 1 ha						
13. Impacts of provision on women		(ask about access to umunani and inheritance, ability to purchase land)				

Follow-up Questions

1. Do disputes arise when land is subdivided in contradiction to the law? What is the nature of these disputes?

2. Do disputes arise as a result of compliance with the legal provision? What is the nature of these disputes?

3. What channels are used to manage conflicts or disputes arising from: (1) land subdivision in contradiction to the law, and (2) disputes arising from compliance with the law?

4. What are the **benefits** of prohibiting farm land subdivision under 1 ha on the farmers'? (open-ended)

    - If not already addressed, what about impact on: Livelihoods; Land Tenure security; Transfer of Rights through Umunani, Inheritance, Sell, Lease, etc; Registration of land transactions; Agricultural Productivity; Etc.
    - Do the benefits differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

5. What are the **challenges** of prohibiting farm land subdivision under 1 ha on the farmers'? (open-ended)

    - If not already addressed, what about impact on: Livelihoods; Land Tenure security; Transfer of Rights through Umunani, Inheritance, Sell, Lease, etc; Registration of land transactions; Agricultural Productivity; Etc.
    - Do the benefits differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

6. Would you recommend any changes to the legal provision prohibiting land subdivisions if the resulting parcels are less than 1 hectare?

    - If yes, what changes would you propose? Explain.
    - If no, does this indicate that you are satisfied with the policy as is? Explain.

7. Any other thoughts or recommendations? Is there anything else we should know?

END

Annex 2: KII Question Guide

Key Informant Interview

Terms of Reference: Prohibition of Farm Land Subdivision under 1 hectare

With the aim of improving efficient land use and agricultural productivity, Article 30 of the 2013 Land Law stipulates that it is "prohibited to subdivide plots of land reserved for agriculture and animal resources if the result of such subdivision leads to parcels of land of less than a hectare in size for each of them". LAND Project is conducting FGDs with IMBARAGA farmers to learn about their perceptions and experiences with the provision and its implementation.

KEY QUESTIONS:

1. Warm-Up Questions: What is your name, and what is your role?

2. Are you aware of the legal prohibition on land subdivision?

- If yes, please explain your understanding of the provision.
- How did you learn about the legal prohibition on land subdivision?
- To your knowledge, what were the influencing factors for adopting the prohibition of agricultural land subdivision under 1 ha?

3. To what extent are farmers and those in rural areas aware of this provision? Is there a difference in men's and women's knowledge of this provision?

- How did they learn about this provision?

4. To what extent do farmers and those in rural areas comply with this provision?

- If many or all people comply with this provision, why? If few or no people comply with the provision, why? What challenges do they face in complying with the provision?
- Do any of the following occur in your community:

    a. Are there any cases of parents gifting land to their children as a single plot in order to comply with the law?

    - Are there any case of children inheriting land jointly?
- If yes to either of the above, are the children able to manage the land jointly and, if so, how do they do it? If they face challenges, what are they?

5. To what extent do local authorities enforce the prohibition on land subdivisions if the result of the subdivision results on land parcels that are less than 1 ha? What are the penalties of subdividing the land under 1 ha, if any?

6. Does subdivision of land into parcels under 1 hectare occur in your communities?

- If so, why? What is the nature of these subdivisions? (inheritance, umunani, sales, leases, etc.)

6. Do those who purchase, inherit or are “gifted” land that has been subdivided and is less than one hectare formally register their land?

   - If so, how and with whom?
   - Do they experience any challenges in registering land that has been subdivided and is less than one hectare? Explain.

   - Does this differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

8. Do people who want to sell parcels resulting from illegal subdivisions face any challenges selling them when they are less than one hectare? If so, what are these challenges?

   - Does this differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

9. Do people with land parcels that are each less than one hectare face any challenges in making their land productive? Would there be any advantages to farmers if they could consolidate all their small parcels into one larger parcel? Would there be any disadvantages to doing so?

   - Does this differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

10. In your experience, do investments made on land under 1 ha differ from investments made on larger parcels of land?

    - Who determines the types of investments made on land under 1 ha? What are the outcomes of these decisions?

11. In your experience, does agricultural productivity of land under 1 ha differ from agricultural productivity of larger parcels of land? Why or why not?
12. Do disputes arise when land is subdivided in contradiction to the law? What is the nature of these disputes?

13. Do disputes arise as a result of compliance with the legal provision? What is the nature of these disputes?

14. What channels are used to manage conflicts or disputes arising from: (1) land subdivision in contradiction to the law, and (2) disputes arising from compliance with the law?

15. Does the provision have any particular positive or negative impacts on women? (open-ended)

    - What about access to umunani and land inheritance?
    - What about ability to purchase land?

16. What are the **benefits** of prohibiting farm land subdivision under 1 ha on the farmers'? (open-ended)

    - If not already addressed, what about impact on: Livelihoods; Land Tenure security; Transfer of Rights through Umunani, Inheritance, Sell, Lease, etc; Registration of land transactions; Agricultural Productivity; Etc.
    - Do the benefits differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

17. What are the **challenges** of prohibiting farm land subdivision under 1 ha on the farmers'? (open-ended)

    - If not already addressed, what about impact on: Livelihoods; Land Tenure security; Transfer of Rights through Umunani, Inheritance, Sell, Lease, etc; Registration of land transactions; Agricultural Productivity; Etc.
    - Do the benefits differ for particular groups, such as vulnerable peoples, women, informally married couples, other?

18. Would you recommend any changes to the legal provision prohibiting land subdivisions if the resulting parcels are less than 1 hectare?

    - If yes, what changes would you propose? Explain.
    - If no, does this indicate that you are satisfied with the policy as is? Explain.

19. Any other thoughts or recommendations? Is there anything else we should know?

END

Annex 3: Key Informant List

LAND SUBDIVISION
Key Informants – Focus Group Discussions List
FEBRUARY 22 - MARCH 31, 2016

No.	Name & Position	Organization
Key Informants		
1	Jonas Muzigura, Coordinator	Gasabo District One Stop Center
2	Faustin Ntiyamira, Agronomist	Gasabo District
3	INGABO S.E.	Muhanga
4	Paci Ngumyembarebe, Agronomist	Muhanga District
5	Onesphore Nzabonimpa, Coordinator	Muhanga District One Stop Centre
6	Javan Sebasore, Coordinator	Musanze District One Stop Center
7	Anselme Rubangutsangabo	Rwamagana One Stop Center
8	Agronomist	Rwamagana District
9	Safari, Agronomist	Karongi District
10	Jeanette, Coordinator	Karongi District One Stop Centre
11	Uwizeyimana Emmanuel, Director of Land, Environment, Water and Forests Management Department	MINIRENA
12	Leonard Kayonga, Director of Land Use Management and Spatial Planning Unit, Department of Land and Mapping	RNRA
13	Dr. Charles Murekezi, Director General of Crop Production Department	MINAGRI
14	Dr. Charles Bucagu, Dean of Agriculture Department	UR Rubilizi
15	Hon. Nyandwi Desire, MP	Parliament
16	Dr. Alfred Bizoza, Head of Research	IPAR
17	Arnaud de Vanssay, Chef de secteur Développement Rural, EU Delegation to Rwanda	EU
18	Juvenal, Program Officer	IMBARAGA

19	Vicky Ndatamahoro, Coordinator of Local Government Relations	One Acre Fund
Focus Group Discussions		
20	INGABO Farmers (8)	Muhanga
21	IMBARAGA Farmers (8)	Musanze
22	Local Cell Leaders (8)	Musanze
23	Local Cell Leaders (8)	Rwamagana
24	IMBARAGA Women Farmers' Cooperative	Karongi