

University of Richmond UR Scholarship Repository

Sociology and Anthropology Faculty Publications

Sociology and Anthropology

2015

The political economy of agriculture in Southern Africa

Elizabeth Ransom University of Richmond, eransom@richmond.edu

Follow this and additional works at: http://scholarship.richmond.edu/socanth-faculty-publications Part of the <u>Food Studies Commons</u>, and the <u>Sociology Commons</u>

Recommended Citation

Ransom, Elizabeth . "The Political Economy of Agriculture in Southern Africa." In *The Handbook of International Political Economy of Agriculture and Food*, edited by Alessandro Bonanno and Lawrence Busch, 19-39. Northampton, MA: Edward Elgar Press, 2015.

This Book Chapter is brought to you for free and open access by the Sociology and Anthropology at UR Scholarship Repository. It has been accepted for inclusion in Sociology and Anthropology Faculty Publications by an authorized administrator of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

1. The political economy of agriculture in Southern Africa *Elizabeth Ransom*

INTRODUCTION

Agriculture remains the primary source of employment and income for most of the rural populations of Southern Africa (Hachigonta et al. 2013). When focusing on the political economy of agriculture and food in the region, Europe and European legislation have played a dominant role in both the past and the present. All the countries under discussion were impacted by colonial rule, and at present there is a significant disparity between commercial and smallholder agriculture. While the disparity is one of the consequences of colonialism and South African apartheid policies in the region, this disparity is exacerbated by current European Union (EU) trade policies. With future challenges related to climate change, combined with declining EU market access and struggles to better integrate smallholders into income generating activities, the Southern African region is in need of a new map with which to navigate towards a future that ensures a vibrant agricultural sector.

Defining the Scope

Depending upon the year and political organization one references, the Southern Africa community consists of anywhere from five to fifteen countries. For example, the Southern African Development Community (SADC) now considers fifteen countries as falling within the region. However, the United Nations (UN) defines Southern Africa as consisting of five countries: Botswana, Lesotho, Namibia, South Africa, and Swaziland (see Figure 1.1). For the purposes of this overview the following discussion will largely be limited to the UN defined countries, although with occasional references to other SADC countries.



Source: http://www.CustomDigitalMaps.com/.

Figure 1.1 Map of Southern African countries

AGRICULTURE IN SOUTHERN AFRICA IN THE PAST AND THE PRESENT: COMMON LINKAGES

Geography and climate play critical roles in shaping the agricultural landscape of the region. The average rainfall in Southern Africa is low, with the least amount of rainfall occurring in the west (Namibia) and increasing incrementally as one moves east (the eastern coast of South Africa and portions of Swaziland and Lesotho receive the most). However, rainfall is episodic and vast regions of Southern Africa experience regular droughts (Hachigonta et al. 2013).

Rainfall is important because of the prevalence of rain-fed crops and the role that livestock, particularly cattle, play in the region's agricultural system. For the vast majority of Africa, irrigation does not play a significant role in agriculture. A 2010 International Food Policy Research Institute (IFPRI) report notes that "irrigated area as a share of total cultivated area is estimated at only 6 percent for Africa, compared with 37 percent for Asia and 14 percent for Latin America" (You et al. 2010: 1). Within Africa, the bulk of irrigation is actually located in Northern Africa, whereas the only country in Southern Africa with approximately 1 million hectares irrigated is South Africa, and this represents less than 10 percent of agricultural lands within the country (You et al. 2010). In sum, Southern African producers are highly dependent on rainfall for growing crops. This dependency, when combined with weather patterns that are expected to become more erratic due to climate change and increasing water needs for other economic sectors, will significantly impact agricultural productivity in the future.

Rainfall also impacts the amount of grasses available for grazing cattle. Historically, cattle populations have increased or declined based on the amount of rainfall. For example, in Botswana the peak cattle population, due to the availability of grass, has hovered around 3 million (in 1979 and 2002), with dramatic declines in cattle populations during periods of drought (BIDPA 2006). Rainfall also affects the ability for farmers to rear cattle using more intensive methods of production (feedlots as opposed to pasture) due to limited availability of water for cattle and for growing the crops used for cattle feed. Water constraints, in combination with cultural traditions, have limited the number of producers in Southern Africa that have adopted the industrial model of cattle farming.

In the past, and into the present, cattle have played a critical role in Southern African agriculture. Scholars of Southern Africa history have long been interested in exactly when domesticated livestock began to appear in Southern Africa, because their appearance would signify a shift from hunter-gathering societies to food producing societies. Cattle are thought to have appeared in Southern Africa approximately 2,000 years ago (Sadr 2013). Sadr (2013: 171) summarizes that many, including the popular author Jarrod Diamond (1998), view this shift to food production as a "first step towards the rise of economically, socially, and politically more complex societies, and ultimately of civilization." However, Sadr counters that the archeological evidence is far from conclusive about such grand results. He argues that the introduction of domesticated cattle approximately 2,000 years ago does not correlate with significant changes in other domains of material culture (Sadr 2013: 179). Regardless of when hunters transitioned to pastoralists, the historical record does reveal that cattle were crucial for obtaining wives among the Early Iron Age Bantuspeaking farmers and herders (Sadr 2013). The multi-dimensional importance of cattle continues to this day for many indigenous ethnic groups in Southern Africa.

Cattle as "a bank on hooves" is a phrase often used to describe the use

of cattle by indigenous populations in Southern Africa. This phrase refers to the fact that many smallholders view cattle as their investment, which can be turned into cash as needed, in addition to providing fresh milk for home consumption (see Schwalbach, Groenewald, and Marfo 2001; Ferguson 1990). There is also the view that cattle ownership lends status or prestige (i.e., the more cattle one owns the higher one's status) and, as previously mentioned, is important for lobola (the negotiated number of cattle a groom's family gives to the bride's family). The degree to which various indigenous smallholders subscribe to the use of cattle as prestige, and for the purposes of *lobola*, varies by ethnic group, geographical location (e.g., urban versus rural), and, based on the author's own observations, socioeconomic status among people within the same community (e.g., those with higher socio-economic status having the ability to purchase cattle; also see, Schwalbach et al. 2001). However, the practice of keeping cattle for cash-related reasons generally persists among most of the indigenous ethnic groups in Southern Africa. A consequence of this is that while there are large commercial cattle operations in South Africa, and to a lesser extent Namibia and Botswana, the vast majority of cattle in Southern Africa are located in smallholder, subsistence agricultural systems.

Despite the rather long history of cattle ownership and the social, cultural, and economic significance associated with cattle, the rise of colonialism in Southern Africa marked a period of removal of indigenous people and their cattle from their lands. Indigenous Southern Africans were confined to a limited amount of land, also known as reserves, beginning in the colonial period, which contributed to overcrowding. Depending upon the government in power and the time period, little to no government support for developing infrastructure or facilitating appropriate land management occurred in the reserves,¹ which when combined with overcrowded conditions further contributed to highly degraded soils.

As the region under discussion is diverse and involves different colonial and post-colonial histories, it is beneficial to briefly review each country's agrifood sector. Common concerns across the five countries are then examined. Finally, the challenges for the future are discussed in the conclusion.

INDIVIDUAL COUNTRY AGRICULTURAL OVERVIEWS

South Africa

Due to the sheer size of the economy, South Africa plays a dominant role on the continent and in shaping the agricultural economies of the other countries in Southern Africa. South Africa is a major producer of sugar, maize, dairy, chicken, grapes, apples, and beef among many other commodities. South Africa is the only country in this region that is currently capable of producing all its own basic foodstuffs (Agritrade 2011). The country also has a large food processing sector and a number of well-developed export markets, with agriculture accounting for 4.5 percent of GDP and the food processing sector accounting for an additional 10 percent of GDP (Agritrade 2011). The size of both South Africa's economy and their population relative to the other nations means that regional agricultural production and policy debates "take place in the shadow" of South African dominance (Agritrade 2011: 1). South Africa's population represents 35 percent of the entire SADC region and 73 percent of GDP for the region (Hachigonta et al. 2013). In addition, there are many historical linkages between South Africa and the larger region, in particular in policies that encourage economic interdependency and a demand for migrant laborers, especially for mining (Botha 2013; O'Laughlin et al. 2013). Thus, all four of the other countries under consideration in this discussion are dependent on South Africa as an export market for specific commodities (in the case of Lesotho, a primary export to South Africa is water) and for imports of basic foodstuffs. Despite the seemingly "successful" agricultural sector of South Africa, the sector has been critiqued for the degree to which it has imitated the United States and Canada in terms of its resource intensiveness and environmental degradation (Mather 1996). In addition, South Africa and Namibia share a postcolonial agricultural history which contributes to both countries having dual economies within the sector (see Lipton and Simkins 1993).

South Africa and Namibia each have a well-developed, predominantly white commercial agricultural sector alongside an indigenous smallholder, subsistence agriculture sector. The dual economies found within the agricultural sector are directly linked to past colonial and apartheid policies, which among other things included removal of indigenous people from much of the better agricultural lands and policies that "encouraged" indigenous populations to seek work in formal, white-controlled, labor markets. At present, reducing the dual economies to a minimum requires land reform, as most smallholders suffer from insecure land tenure and/ or access to land that is inadequate in size or soil quality to allow them a competitive advantage.

In the case of South Africa, land reform has largely been unsuccessful. The lack of success is beyond the scope of this discussion, but it is important to note that in general, along with the significant social and political changes that South Africans have experienced in the past two decades, farmers were significantly impacted by economic liberalization policies. State support to farmers was dismantled and import tariffs reduced in the 1990s, which left many farmers unable to compete with farmers from developed countries in specific commodity markets, like those for milk and wheat, but increased opportunities for some farmers in other sectors, particularly high-value export markets, like citrus and game meat (Goldblatt 2004). The social, cultural, and economic changes have contributed to a significant decline in the number of farmers (31 percent decrease, or 40,000 fewer farmers from 1993 to 2008) and farmworkers in South Africa (1.6 million in 1971 to approximately 800,000 in 2007) and an increase in concentration within the commercial agricultural sector (Goldblatt 2004; O'Laughlin et al. 2013). Ultimately, larger, commercial South African agricultural production may feed much of Southern Africa, but it does so using industrial agricultural techniques that are resource intensive (especially in terms of water) and without employing large tracts of rural labor and, therefore, without providing an income source for the large number of rural inhabitants in the region (O'Laughlin et al. 2013).

Namibia

The dual agricultural economy in Namibia is directly linked to the decimation of the indigenous populations under German rule and the imposition of South Africa's governance, particularly apartheid policies. The indigenous people of what is now known as Namibia, were first brutally colonized by the Germans (1885-1915), and then controlled by South Africa for more than 70 years, finally achieving independence in 1990. Botha (2013) recounts that from the 1920s to the 1950s the South African government was especially preoccupied with resettling whites onto lands, which expanded upon resettlement practices that Germans had begun prior to 1915. After the end of German rule, Botha claims that indigenous Africans briefly hoped for the opportunity to become pastoralists again, by restoring their herds and reclaiming access to land. However, South Africa viewed indigenous African men as a ready labor supply for the mines, thus local Africans' hopes were short lived (Ibid.: 236). In addition, after 1950 South Africa began to counter previous German initiatives of mixed-farming operations and equitable water supplies (with the goal of food self-sufficiency) and instead moved to the narrow pursuit of "karakul or meat monocultures - heavily capitalised industrial ranches" among white, commercial producers (Botha 2013: 234 citing Lau and Reiner 1993: 58). Despite Namibia gaining independence in 1990, Botha (2013: 249) observes that most indigenous communal farmers "continue to be hamstrung by limited stock numbers, lack of quality grazing land, inadequate support services and recurrent drought."

As of 2010 Namibian agriculture represented 7.4 percent of the overall GDP, which includes fishing and hunting (AfDB 2012). Cattle remain one of the most important sub-sectors within agriculture, but other significant exports include fish, karakul sheep pelts, and live sheep to South Africa (although the government regulates live sheep sales). Despite a few welldeveloped commercial agricultural sub-sectors, the majority of population in Namibia is rural and relies upon subsistence agriculture. The dual agricultural economy reflects, at least in part, the fact that Namibia, despite being considered an upper middle-income country, is among the most inequitable societies in the world in terms of income distribution (World Bank 2014). In fact, along with Namibia, South Africa and Botswana rank among the highest countries for average levels of development on the African continent, but all three also have some of the highest rates of inequality (McKeever 2008).² Thus, the Namibian government is interested in trying to expand formal labor market opportunities in all sub-sectors of the economy. In the case of agriculture, the government has focused on the fishing industry (e.g., improved resource management) and redistribution of lands for the purposes of resettling smallholders.

Botswana

Botswana, Lesotho, and Swaziland, in contrast to South Africa and Namibia, can all be characterized as having primarily smallholder agriculture, and they all share the unique status of having been considered British protectorates up until they gained independence from the British in the 1960s (thereby evading formal rule by South Africa and the imposition of apartheid policies). However, similar to Namibia, a large percentage of young indigenous men in all three countries have migrated out of rural areas to find work in mining. Many of those mines are located in South Africa, although mines exist throughout the region. Thus, rural areas often became repositories of women, children, and the elderly, who lacked steady incomes. Ferguson (1990), in his detailed study of Lesotho, also argues that the cattle economy stayed strong in many of these rural spaces because men working in the mines could buy cattle with their mine wages and keep the cattle in their home spaces as a mechanism for securing their money (ensuring it would not be spent while they were away) and as a way of maintaining connections to their homes.

Botswana's agricultural sector as a portion of GDP is quite small (2.94 percent in 2012), but agriculture, particularly livestock farming, remains an important activity for the purposes of diversifying the economy (the bulk of Botswana's GDP comes from mining). The agricultural sector is also a source of jobs and food security in rural areas, and livestock

ownership is culturally highly valued. The dominant Tswana group (comprising 79 percent of the population) is one of the ethnic groups in Southern Africa that value cattle for social, cultural, and economic reasons.

Due to climate, Botswana is very limited in terms of the amount of land that is suitable for crop production. At present crop production is limited to 1 percent of a possible 5 percent of land suitable for cultivation (Zhou et al. 2013). This means that the vast majority of commodities (e.g., maize, wheat, sorghum) are imported primarily from South Africa. Cattle production is the only significant agricultural export commodity for the country (Zhou et al. 2013: 52). In recent years the amount of beef exported to Europe has steadily declined, and since 2010 it has experienced periods of interruption due to European concerns over disease control and lax enforcement of traceability requirements (Ransom 2011). Botswana is unique in that the vast majority of cattle are reared on communal lands (85 percent), and cattle reared in both communal and commercial production are exported (whereas in most Southern African countries only cattle reared on commercial farms qualify for export). This unique aspect of the industry has to do with longstanding government support for communal production and an elaborate system of fences and traceability technology put in place (with government funding) to meet the export criteria set by European governments.

Lesotho

Agriculture accounts for about 10 percent of Lesotho's GDP and is the main source of employment in rural areas (Gwimbi et al. 2013). The majority of the country lives in rural areas (82 percent), and 58 percent of the population engaged in agriculture are female (World Bank 2013). The majority of the population remains dependent on subsistence agriculture, and there has been an uptick in droughts, which has increased food insecurity. It is estimated that Lesotho grows approximately 30 percent of its own food (Gwimbi et al. 2013). The amount produced has declined over the past several years, which is attributed to increasing number of people settling on arable land near cities, erratic weather patterns, soil degradation, and declining productivity (e.g., due to lack of fertilizer) (Frenken 2005; Gwimbi et al. 2013). Part of the declining productivity has to do with declining remittances from mine workers. Historically, people living in rural areas have relied on remittances from men working in South African mines to purchase inputs for farming (World Bank 2013). However, in the past few decades remittances have declined due to a decline in mine employment.

Cultivable land is limited to approximately 11 percent of the total area

of the country, of which the most common crops are maize (60 percent), sorghum (10–20 percent), wheat (10 percent) and beans (6 percent) (Frenken 2005). Despite the popularity of growing maize, Lesotho must import an estimated 65 percent of the population's maize requirement and 80 percent of the population's annual wheat requirements (Frenken 2005). Livestock, particularly cattle, sheep, and goats, are prevalent, although they primarily exist as part of subsistence agriculture, and cattle are considered a major contributor to land degradation in the country (Gwimbi et al. 2013).

Water is considered Lesotho's most important natural resource, but the amount of rain received is erratic and scientists predict that water resources will be increasingly scarce with climate change. Irrigation projects in Lesotho have long been a priority, but most projects over the past 40 years have not been successful. The lack of success has been attributed to a "top-down and supply-driven approach on the part of government and donors and little consultation with, or participation by, farmers" (Frenken 2005: 303). Supposedly, the government is now pursuing irrigation projects that are "farmer- and market-led" and "based on small-scale schemes provided for and managed by the farmers themselves" (Frenken 2005: 308).

Swaziland

Agriculture accounts for approximately 8.4 percent of Swaziland's GDP (Thwala 2011), with 70 percent of the labor force engaged in agriculture. Unofficial unemployment is estimated at approximately 40 percent, and it is even higher in rural areas (Manyatsi et al. 2013). Similar to Lesotho, some of the rising unemployment is due to retrenchment in South African labor mines.

Swaziland's agricultural sector is bifurcated into a commercial, largely export sector focused on sugarcane, citrus, and forestry and a large subsistence sector marked by declining productivity. As such the country imports approximately 60 percent of all its food requirements, with almost all the imports coming from South Africa (Manyatsi et al. 2013). Sugarcane is the main export crop (95 percent of all sugarcane produced is exported). Moreover, 85 percent of irrigated lands are dedicated to sugarcane (Manyatsi et al. 2013). The African Growth and Opportunity Act (AGOA)³ has been important for bolstering Swaziland's apparel industry and cotton production, which supplies the apparel industry. However, cotton production declined significantly during the drought from 2002 to 2007, and currently not enough cotton is grown to support the apparel sector – so cotton is imported (Manyatsi et al. 2013).

Within subsistence agriculture, livestock is an important sub-sector. Similar to Lesotho, Botswana, and portions of Namibia and South Africa, cattle as a sub-sector is often associated with high stocking density, overgrazing, and soil erosion (Thwala 2011). Unlike cattle, poultry are viewed as primarily a women's domain and they are viewed as providing a much needed source of food.⁴ According to a report by Thwala (2011), Swaziland does not import any broiler meat and eggs as the local production meets demand.

ISSUES FOR FURTHER CONSIDERATION: MARKET ACCESS, SMALLHOLDERS, LAND TENURE, AND GENDER

Market Access: Economic Partnership Agreement Negotiations and the EU Market

Since the advent of the World Trade Organization (WTO) in 1995, Africa has increasingly lost market share in Europe for their agrifood products (Daviron 2008). Gibbon and Ponte (2005) argue that with the advent of the WTO, developing countries lost some of their autonomy in trade negotiations. Whereas previously developing countries were able to ask for concessions in recognition of the qualitatively different challenges they faced, current trade agreements do not allow for a recognition of qualitative differences between countries. Instead there is an assumption that developing countries are simply at a "lower" stage of development and need more time to implement the new requirements.

Part of the impact of the WTO on Southern Africa has been long-term loss of preferential market access for specific goods (e.g., beef, sugar) that was assured under the Lomé Convention, which was negotiated in 1975 between the European Community and 46 African, Caribbean, and Pacific countries (Hurt 2012). Preferential access was deemed as not in compliance with the WTO's "no special and differential treatment" stipulation⁵ and the EU has moved to negotiating free trade agreements, or what are called Economic Partnership Agreements (EPAs). Initially the EU pursued regional EPA negotiations, but overtime more negotiations have been occurring between individual countries. This approach has been problematic for Southern Africa countries, in part because the EU is attempting to negotiate for what are considered "behind the border" issues, like "transparency in government procurement, national treatment for foreign investors, and trade facilitation measures" (Hurt 2012: 502)⁶ – all items that developing countries resisted at the WTO Doha Rounds.

In addition, Hurt (2012: 496) argues that the EPA negotiations in Southern Africa are a means for the EU to "lock in" the neoliberal development model and thus advance the EU's hegemonic position within the region. This is taking place by limiting the policy options available to developing countries' governments for pursuing their own development. Finally, the EPA negotiations are said to be potentially undermining the political legitimacy of several Southern African political and economic organizations, including SADC and the Southern Africa Customs Union (SACU). This is because many of the EPA negotiations between individual African countries and the EU are contradictory to existing SADC and SACU agreements, thereby challenging the continuing legitimacy of these organizations (Hurt 2012). Many leaders in the Southern African region believe a regional approach is needed to tackle complex social and economic problems that are beyond the abilities of any one nation-state (e.g., increasing food security, reducing unemployment through the promotion of wildlife tourism, tackling HIV/AIDS) (McKeever 2008). It is within this framework that the potentially negative consequences of EU EPA negotiations which directly contradict regional institutional agreements must be understood.

Increasingly, some "behind the borders" issues built into the EPAs that shape agricultural production in Southern Africa focus on technical specifications, for example related to animal welfare and traceability policies. The increasing focus on technical specifications has contributed to mounting pressure on smallholder agriculture. The pressure on smallholders occurs because many technical specifications favor systems of production already in place among larger, commercial producers, and/or due to economies of scale, smallholder agriculturalists cannot afford to implement new specifications as dictated by the EU (see Ransom 2011). In combination with economic policies that have pushed for market deregulation in the region, smallholders exist in a production environment that is extremely competitive, and those wishing to expand generally exist in a hostile environment (Lahiff and Cousins 2005: 127).⁷

Smallholders

In all five countries under examination here, there is a preponderance of smallholder agriculture. The percentage of the population that can be identified as smallholders varies widely between countries, with an estimated 61 percent of producers being smallholders within the broader SADC community (SADC 2008). Despite significant efforts on the part of governments and technical experts (e.g., economists, agricultural scientists) to reduce smallholder agriculture and encourage more market integration, smallholders remain important throughout the region in that they provide household food security and rural employment, and more generally provide buffers against periods of economic downturns (Bayer, von Lossau, and Feldmann 2003). Many studies have focused on smallholder agriculture in Africa (Collier and Dercon 2014; Jayne, Mather, and Mghenyi 2010), though not all have focused on the countries in this analysis. Nonetheless, the themes and issues that emerge inform debates and policies for this region.

First, despite the label, smallholders represent a diverse group, with some evidence of growing disparities between smallholders in terms of land and asset holdings (see Jayne et al. 2010). In the case of Botswana, it appears that cattle ownership is increasingly concentrated among a small number of communal farmers (Ransom 2011).8 Second, the productivity levels of smallholders are highly variable. In all five countries under consideration, smallholders are usually dependent on other forms of income (e.g., remittances, state welfare). Thus, if these forms of income decline, there is generally a decline in the inputs smallholders are able to purchase (e.g., fertilizer), which can impact productivity. All smallholders throughout the region are also highly vulnerable to climatic shocks, particularly drought. In the case of livestock ownership, this usually means many cattle are sold off at lower prices during periods of drought. Finally, smallholders are increasingly vulnerable to what Jayne et al. (2010) refer to as governance issues. This includes declining donor support for smallholders, as well as economic trade agreements that disadvantage smallholders, and land tenure policies. In conclusion, Jayne et al. (2010: 1394) argue, "most small farms in Africa are becoming increasingly unviable as sustainable economic and social units. Unless government policy is changed radically, the world may see increasingly frequent and severe economic and social crises in Sub-Saharan Africa."

Land Tenure and Reform

As previously noted, land tenure issues tend to go hand-in-hand with smallholder agriculture. South Africa and Namibia are both countries formally grappling with the issue of land redistribution. In South Africa, as of 2000, Black South Africans comprised 75 percent of the population, but were limited to 13 percent of the land, which comprised the former homelands. As of 2004, land reform in South Africa had managed to only transfer an additional 2.9 percent of total agricultural land outside of the former homelands (Lahiff and Cousins 2005). Similarly, in Namibia land reform has been slow and heavily criticized. For example, in 2013 the Namibian government announced that 345 farms have been acquired since 1991 for a grand total of 2.4 million hectares, and 5,000 families have

	Individual tenure	Communal lands	Other public lands
Botswana	5	70	25
Lesotho	5	90	5
Namibia	44	41	15
South Africa	72	14	14
Swaziland	40	60	0

 Table 1.1
 Land distribution in Southern Africa as a percentage of total land

Source: Adapted from Garcia (2004).

been resettled on these farms (Immanuel 2013). While the government viewed these efforts as a sign of progress, many question the likelihood of agricultural success in the context of increasingly competitive and concentrated global agricultural markets. The questionable likelihood of success is due to the small farm size relative to the harsh environment that these families are being settled upon. The dry environment means that the number of animals that can be supported on approximately 450 hectares is low. In addition, the amount of technological support and agricultural extension many of these newly resettled farmers will need to farm successfully is viewed as largely lacking.

Botswana, Lesotho, and Swaziland have to contend with issues of land reform, but for significantly different reasons. These three countries have an abundance of smallholders situated on communal lands, as opposed to land owned privately. Table 1.1 provides a comparison of communally owned lands in contrast to privately owned lands. All five of the countries in this analysis have debated the role of communal lands, but Botswana, Lesotho, and Swaziland's governments have received significantly more pressure (by outside donor agencies and development experts) to consider privatizing communal lands. For example, there is growing pressure from outside experts for Swaziland to implement land reform. Population pressures, increasing water scarcity, and rising poverty rates are all contributing to academics and donor institutions, like the International Monetary Fund (IMF), recommending privatization so that smallholders have incentives for improving the land (e.g., installing irrigation systems) (see IRIN 2013). Generally, there are many reasons for encouraging privatization of communal lands across the region, but the most common reasons include arguments for increasing the productivity of agriculture and the belief that communal lands suffer from higher rates of land degradation relative to privately held lands.

Land reform and redistribution is a complex topic, which demands contextual specificity within Southern Africa. Nonetheless, a few overarching points can be made. First, reform of communal lands needs to pay special attention to the legal status and economic activities of women and the poor, as they are the ones who disproportionally depend upon the commons (Adams 2003; Wily 2011). Moreover, in this era of global land grabs and corporate consolidation of agriculture, Wily (2011) argues that the weak legal status of communal rights allows national governments to take undue liberties with their citizens' lands, which is another reason that government land reform activities demand scrutiny.

Finally, low agricultural productivity and environmental concerns are very real for many in Southern Africa, but land reform has often been used as a means to try and insert pastoralists into formal legal systems of land tenure. Specifically, support for land reform often rests on an assumption that pastoralists do not fit within the dominant economic, legal, and scientific paradigms of global agriculture. Building on the work of Douglas North (1990), Galaty (2013: 477) observes that communal "systems of tenure are undergoing formalization, with various parties gaining legal rights to land long held by pastoral societies, whether the state, local elites, foreign companies, conservation entities or communities themselves." Many economists, public policy officials, and scholars believe formalization of land tenure arrangements is a prerequisite for increasing economic efficiency (Galaty 2013), though this belief is not fully supported by the existing data. For example, Feenv et al. (1990) argue that evidence gathered over a 22 year period (1968-1990) reveals that private, state, or communal property are all potentially viable resource management options. Rather, a more complete theory of land tenure should incorporate institutional arrangements and cultural factors to provide for better analysis and prediction of effective resource management. Despite the counterevidence, the dominant belief of economic efficiency being gained through privatization means that land tenure reform that targets communal lands should simultaneously be viewed as a political and economic project within the current globalizing agrifood system.

Of course, land reform in South Africa and Namibia rightly has a substantial amount of political currency among the vast majority of the population due to the persistence of extremely inequitable landholdings. However, land reform alone will not solve some of the bigger issues facing Southern Africa. Tackling increasing inequality, especially in Botswana, Namibia, and South Africa, and the problem of rural and urban poverty throughout the region will require a much more integrated approach than simply focusing on land reform and land tenure (O'Laughlin et al. 2013). Nor should it be assumed that improved land tenure equates

with increased agricultural production, as Ferguson (2013) argues rural people use lands in a variety of ways only one of which is for agricultural production.

Gender

Women form a substantial percentage of smallholders in Southern Africa. They tend to face constraints similar to the larger smallholder population in terms of maintaining food security and incomes (FAO 2013). Constraints include lack of: secure land tenure, access to adequate financing, extension services, production inputs (e.g., genetic diversity, fertilizer), and up-to-date technology and training (see Ransom and Bain 2011). However, women tend to experience these constraints more deeply and "as a result it is far more difficult for rural women than for rural men to reach their full potential as farmers and livestock keepers" (FAO 2013: 9). In addition, poverty continues to be concentrated within rural areas, with the poorest and most vulnerable disproportionally being "young, female and black" (O'Laughlin et al. 2013: 2).

Small ruminants (goats and sheep) are an important source of livelihoods for smallholders throughout the developing world (FAO 2013), and women tend to be the people charged with managing them. The Food and Agriculture Organization of the United Nations (FAO) estimates that in Africa as a whole, goats represent about 30 percent of the ruminant livestock and contribute about 17 percent of the continent's meat and 12 percent of the continent's milk (*Ibid.*). Among the countries in this analysis, sheep and/or goat meat rank in the top ten agricultural commodities produced by value for all five countries (FAOSTAT 2012). However, similar to the slaughter of cattle, men tend to oversee the slaughter and sale of small ruminants, thereby reducing some of the potential earnings of women. In general, there continues to be a need to focus on gender inequality within agriculture in Southern Africa.

ALTERNATIVE PATHS FORWARD

Noticeably absent from this discussion is HIV/AIDS, especially since the countries in this discussion have among the highest infection rates in Southern Africa and the world. For example, Swaziland is considered to have the highest prevalence rate, 26 percent of the population, while South Africa is considered to have the most HIV infected people in the world, with 5.6 million people infected, which is 17.3 percent of the population (UNICEF 2009). While earlier studies argued that the loss of an adult would be devastating to smallholder production, more recent studies suggests HIV/AIDS has not impacted smallholders as much as previously predicted (Jayne et al. 2010; McKeever 2008). Deaths of adults are occurring, but households for the most part appear to be able to offset the loss of the family member (see Jayne et al. 2010; McKeever 2008 for references to recent research). Jayne et al. (2010: 1392) suggest that a better approach might be to acknowledge that many African countries are "facing a serious development crisis, driven by various trends – of which HIV/AIDS is but one – which together are making smallholder livelihoods and welfare more and more tenuous, particularly for the large percentage of smallholders with highly constrained access to land and education."

Sustainability of the agrifood system of Southern Africa will become increasingly urgent due to climate change. However, adopting sustainable approaches to agrifood production is not a foregone conclusion. For many in Southern Africa, including producers, processors, and government officials, the current economic system encourages the pursuit of industrial production methods, which tend to be resource, particularly water, intensive. It cannot simply be assumed that sustainable approaches to food production will be adopted.

At present, the commercial producers in Botswana, Namibia, Swaziland, and especially South Africa all utilize industrialized, resource intensive agricultural models of production. Changing these models of production will prove difficult. The combination of a food insecure region and a neoliberal global trade environment that increases uncertainty for producers can stall policy makers and producers' willingness to experiment with more sustainable approaches (Mather 1996). Moreover, the ongoing negotiations between the EU and individual Southern African countries, do not privilege more sustainable production techniques. Rather, many of the "behind the border" issues being negotiated either maintain the status quo, or further instantiate more industrial modes of production, with little attention to long-term environmental suitability or the impact on smallholders.

Furthermore, it should not be assumed that commercial or smallholder producers are aware of or thinking strategically about the impact of climate change on agriculture in Southern Africa. At present, there is a lack of data about producers' attitudes towards and knowledge about climate change in Southern Africa. Antidotal evidence from the author's own research suggests that there are a range of attitudes among commercial livestock producers in Botswana, Namibia, and South Africa. While some are aware of likely changes, at least a few do not believe in climate change, and few of the commercial livestock producers interviewed in these three countries appear to have a strategy for dealing with drier and more sporadic weather patterns in the future. This lack of knowledge or adaption strategies suggests the need for more institutional engagement, particularly among the government ministries of agriculture and private sector or non-governmental trade associations.

There are clearly also opportunities for working with smallholders to pursue more sustainable production techniques. As smallholders continue to be a sizeable portion of the population in all five countries, this would not be an insignificant accomplishment. However, successful engagement with smallholders will require an increased recognition of the heterogeneity of smallholders in the region. Specifically, recognizing smallholders better positioned to adopt capital intensive projects or consider adopting more collaborative approaches, such as hybrid models where smallholders work with larger farmers and vertically integrated enterprises (Collier and Dercon 2014; Mather 1996; Javne et al. 2010). Such efforts will require not only a renewed investment in resources, but also increases in knowledge co-construction (e.g., Newsham and Thomas 2011), where techniques for sustainable production are informed by the actual practices of smallholders. The institutional support for such measures will likely need to come from collaborative arrangements between national governments, nongovernmental organizations, international donors, and smallholders.

Finally, there are opportunities for increasing urban and peri-urban agriculture. One study conducted in Namibia found that with the increasing migration of rural people to major cities in search of work there has been a significant increase in gardening (Dima, Ogunmokun, and Nantanga 2002). Rural to urban migration will continue to occur in the coming decades. Facilitating the growth of urban gardens could be one mechanism for decreasing food insecurity in urban spaces. Some of the challenges that would need to be dealt with in order to promote urban and peri-urban gardening include limited access to water; a lack of regulatory oversight, such as access to land and reporting of problems such as theft; and a lack of extension service personnel in urban spaces. Extension personnel could assist in improving urban gardens through increased knowl-edge related to types of plants grown and improved growing techniques.

In sum, there are many challenges facing Southern African agriculture. Climate change, international trade agreements, particularly with the EU, and a large percentage of subsistence smallholders are some of the principal issues shaping agricultural development at present. Pursuing solutions that are sensitive to the needs and cultures of smallholders, including women, who largely rely on communal lands, will take ingenuity and perseverance. However, without a sustained effort to engage with the issues reviewed here, the rural populations of Southern Africa will increasingly be vulnerable to political, economic, and climatic shocks to

the agricultural system, and these shocks will likely have unique spillover effects for the Southern African region (e.g., increased rural to urban migration, added pressure on the existing welfare safety nets, growing environmental degradation).

NOTES

- 1. Botha (2013: 247) claims Rhodesia (present day Zimbabwe) and South Africa both had interventionist strategies in homelands, the lands upon which indigenous communities were confined, before 1960.
- 2. The reasons for the high rates of inequality across the three countries are diverse, but McKeever (2008) argues that one common reason is the reliance of each country on mineral wealth. He argues that while mineral wealth increases the overall size of an economy, "only a few people reap the benefits of these industries, as most workers in most of these countries work in agriculture" (McKeever 2008: 460).
- 3. The AGOA was signed into law on May 18, 2000 by the US government, and initially 34 Sub-Saharan African countries were identified as eligible for the trade benefits from AGOA. Swaziland's AGOA status was revoked by the Obama administration in June 2014 due to concerns over governance in Swaziland. Swaziland officials are currently appealing to the Obama administration to reconsider the revocation, scheduled to go into effect in January 2015 (AGOA.info 2014).
- 4. This was also the case for women in the United States prior to the industrialization of the poultry industry prior to World War II (Neth 1994; Sachs 1996).
- 5. See WTO, http://www.wto.org/english/tratop_e/devel_e/dev_special_differential_provi sions_e.htm.
- 6. Botswana, Lesotho, and Swaziland signed an interim EPA on June 4, 2009, while Namibia initiated negotiations, but has not signed; South Africa does not qualify for an EPA and it has its own trade agreement with the EU (see Hurt 2012).
- 7. This is particularly true in South Africa, where extensive deregulation of the agriculture sector has occurred and current policies tend to favor more capital intensive operations.
- 8. As the next section explains, communal farmers are usually considered smallholders.

REFERENCES

- Adams, Martin. 2003. "Land Tenure Policy and Practice in Botswana: Governance Lessons for Southern Africa." *Austrian Journal of Development Studies* XIX (1): 55–74. Retrieved November 2, 2003 (http://www.mokoro.co.uk/files/13/file/lria/land_tenure_policy_and_ practice_botswana.pdf).
- AfDB (African Development Bank). 2012. "Namibia." African Economic Outlook 2012. Retrieved October 10, 2013 (http://www.afdb.org/fileadmin/uploads/afdb/Documents/ Publications/Namibia%20Full%20PDF%20Country%20Note.pdf).
- AGOA.info. 2014. "AGOA.info: African Growth and Opportunity Act." Retrieved June 25, 2014 (http://agoa.info/).
- Agritrade. 2011. "SADC: Agricultural Trade Policy Debates and Developments." Technical Centre for Agricultural and Rural Cooperation (ACP-EU). Retrieved December 6, 2013 (http://agritrade.cta.int/en/layout/set/print/Agriculture/Topics/EPAs/ SADC-Agricultural-trade-policy-debates-and-developments).
- Bayer, W.A., A. von Lossau, and A. Feldmann. 2003. "Smallholders and Community-Based Management of Farm Animal Genetic Resources." Pp. 1–12 in *Proceedings of*

the Workshop on Community-Based Management of Animal Genetic Resources: A Tool for Rural Development and Food Security. Mbabane, Swaziland, May 7–11, 2001. Rome: FAO.

- BIDPA (Botswana Institute for Development Policy Analysis). 2006. "Consultancy on the Viability and Long Term Development Strategy for the Livestock (Beef) Subsector in Botswana." Final report submitted to the Government of Botswana, March 2006, internal document.
- Botha, Christo. 2013. "Pastoralism, Commercial Ranching and the State in Namibia." Pp. 230–255 in *Pastoralism in Africa Past, Present and Future*, edited by Michael Bollig, Michael Schnegg, and Hans-Peter Wotzka. New York: Berghahn Books.
- Collier, Paul and Stefan Dercon. 2014. "African Agriculture in 50 Years: Smallholders in a Rapidly Changing World?" *World Development* 63: 92–101.
- Daviron, Benoit. 2008. "The Historical Integration of Africa in the International Food Trade: A Food Regime Perspective." Pp. 44–78 in *Globalization and Restructuring* of African Commodity Flows, edited by N. Fold and M.N. Uppsala. Nordic Africa Institute.
- Diamond, Jared. 1998. Guns, Germs and Steel: A Short History of Everybody for the Last 13,000 Years. London: Vintage.
- Dima, S.J., A.A. Ogunmokun, and T. Nantanga. 2002. "The Status of Urban and Peri-urban Agriculture in Windhoek and Oshakati, Namibia." Windhoek, Namibia: University of Namibia and the Ministry of Agriculture, Water and Rural Development. Retrieved May 12, 2014 (http://www.fao.org/fileadmin/templates/esw/esw_new/documents/IP/5b_The_ status_of_urban_and_peri.pdf).
- FAO. 2013. "Understanding and Integrating Gender Issues into Livestock Projects and Programmes: A Checklist for Practitioners." Rome: FAO. Retrieved October 13, 2013 (http://www.fao.org/docrep/018/i3216e/i3216e.pdf).
- FAOSTAT. 2012. "FAOSTAT." Rome, Italy: Food and Agricultural Organization.
- Feeny, David, Fikret Berkes, Bonnie J. McCay, and James M. Acheson. 1990. "The Tragedy of the Commons: Twenty-Two Years Later." *Human Ecology* 18 (1): 1–19.
- Ferguson, James. 1990. The Anti-Politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho. Cambridge: Cambridge University Press.
- Ferguson, James. 2013. "How to Do Things with Land: A Distributive Perspective on Rural Livelihoods in Southern Africa." *Journal of Agrarian Change* 13 (1): 166–174.
- Frenken, Karen. 2005. "Irrigation in Africa in Figures: AQUASTAT Survey 2005." FAO Water Reports No. 29. Rome, Italy: FAO.
- Galaty, John G. 2013. "The Indigenisation of Pastoral Modernity: Territoriality, Mobility and Poverty in Dryland Africa." Pp. 473–510 in *Pastoralism in Africa Past, Present and Future*, edited by Michael Bollig, Michael Schnegg, and Hans-Peter Wotzka. New York: Berghahn Books.
- Garcia, C.T. 2004. "Land Reform in Namibia: Economic versus Socio-economic Rationale." Pp. 40–53 in Land Reform, Land Settlement and Cooperatives, edited by P. Groppo. Rome, Italy: FAO.
- Gibbon, Peter and Stepfano Ponte. 2005. Trading Down: Africa, Value Chains, and the Global Economy. Philadelphia: Temple University Press.
- Goldblatt, Amy. 2004. "Agriculture: Facts and Trends South Africa." South Africa: WWF. Retrieved November 11, 2013 (http://awsassets.wwf.org.za/downloads/facts_brochure_ mockup_04_b.pdf).
- Gwimbi, Patrick, Timothy S. Thomas, Sepo Hachigonta, and Lindiwe Majele Sibanda. 2013. "Lesotho." Chapter 4 in Southern African Agriculture and Climate Change: A Comprehensive Analysis, edited by Sepo Hachigonta, Gerald C. Nelson, Timothy S. Thomas, and Lindiwe Majele Sibanda. Washington, DC: International Food Policy Research Institute.
- Hachigonta, Sepo, Gerald C. Nelson, Timothy S. Thomas, and Lindiwe Majele Sibanda.
 2013. "Overview." Chapter 1 in Southern African Agriculture and Climate Change: A Comprehensive Analysis, edited by Sepo Hachigonta, Gerald C. Nelson, Timothy

S. Thomas, and Lindiwe Majele Sibanda. Washington, DC: International Food Policy Research Institute.

- Hurt, Stephen. 2012. "The EU–SADC Economic Partnership Agreement Negotiations: 'Locking in' the Neoliberal Development Model in Southern Africa." *Third World Quarterly* 33 (3): 495–510.
- Immanuel, Shinovene. 2013. "5,000 People Have Benefitted from Land Reform since 1991." *The Namibian.* Retrieved November 18, 2013 (http://www.namibian.com.na/indexx. php?archive_id=115133&page_type=archive_story_detail&page=1).
- IRIN. 2013. "Swaziland: IMF Recommends Land Reforms." Irinnews.org. Retrieved April 15, 2014 (http://www.irinnews.org/report/96742/swaziland-imf-recommends-land-reforms).
- Jayne, T.S., David Mather, and Elliot Mghenyi. 2010. "Principal Challenges Confronting Smallholder Agriculture in Sub-Saharan Africa." World Development 38 (10): 1384–1398.
- Lahiff, Edward and Ben Cousins. 2005. "Smallholder Agriculture and Land Reform in South Africa." *IDS Bulletin* 36 (2): 127–131.
- Lau, Brigitte and Peter Reiner. 1993. "100 Years of Agricultural Development in Colonial Namibia." Archeia 17. National Archives of Namibia, Windhoek.
- Lipton, Michael and Charles Simkins, eds. 1993. State and Market in Post Apartheid South Africa. Boulder, CO: Westview Press.
- Manyatsi, Absalom M., Timothy S. Thomas, Michael T. Masarirambi, Sepo Hachigonta, and Lindiwe Majele Sibanda. 2013. "Swaziland." Chapter 8 in Southern African Agriculture and Climate Change: A Comprehensive Analysis, edited by Sepo Hachigonta, Gerald C. Nelson, Timothy S. Thomas, and Lindiwe Majele Sibanda. Washington, DC: International Food Policy Research Institute.
- Mather, Charles. 1996. "Towards Sustainable Agriculture in Post-Apartheid South Africa." GeoJournal 39 (1): 41–49.
- McKeever, Matthew. 2008. "Regional Institutions and Social Development in Southern Africa." *Annual Review of Sociology* 34 (1): 453–473.
- Neth, Mary. 1994. "Gender and the Family Labor System: Defining Work in the Rural Midwest." *Journal of Social History* 27 (3): 563–577.
- Newsham, Andrew J. and David S.G. Thomas. 2011. "Knowing, Farming and Climate Change Adaptation in North-Central Namibia." *Global Environmental Change* 21 (2): 761–770.
- North, Douglas. 1990. Institutions, Institutional Change, and Economic Performance. Cambridge: Cambridge University Press.
- O'Laughlin, Bridget, Henry Bernstein, Ben Cousins, and Pauline E. Peters. 2013. "Introduction: Agrarian Change, Rural Poverty and Land Reform in South Africa since 1994." *Journal of Agrarian Change* 13 (1): 1–15.
- Ransom, Elizabeth. 2011. "Botswana's Beef Global Commodity Chain: Explaining the Resistance to Change." Journal of Rural Studies 27 (4): 431–439.
- Ransom, Elizabeth and Carmen Bain. 2011. "Gendering Agricultural Aid: An Analysis of whether International Development Assistance Targets Women and Gender." *Gender and Society* 25 (1): 48–74.
- Sachs, Carolyn. 1996. Gendered Fields: Rural Women, Agriculture, and Environment. Boulder, CO: Westview.
- SADC. 2008. "SADC Multi-country Agricultural Productivity Programme" (Ref: SADC/ MAPP/2007/D). Gaborone, Botswana: Southern African Development Community. Retrieved April 26, 2014 (http://www.sadc.int/files/3913/5851/0000/SADC_MAPP_ Programme_Document-_April_08.pdf).
- Sadr, Karim. 2013. "A Short History of Early Herding in Southern Africa." Pp. 171–197 in Pastoralism in Africa Past, Present and Future, edited by Michael Bollig, Michael Schnegg, and Hans-Peter Wotzka. New York: Berghahn Books.
- Schwalbach, L.M., I.B. Groenewald, and C.B. Marfo. 2001. "A Survey of Small-Scale Cattle Farming Systems in the North West Province of South Africa." South African Journal of Animal Sciences 31: 200–204.
- Thwala, Maxwell. 2011. "Analyzing the Value Chain of the Family Poultry Sub Sector in the

Lower Usuthu Project Area in Swaziland." IFAD. Retrieved April 1, 2014 (http://www.fao.org/docrep/018/aq625e/aq625e.pdf).

- UNICEF. 2009. "Eastern and Southern Africa: HIV and AIDS Overview." Retrieved April 16, 2014 (http://www.unicef.org/esaro/5482_HIV_AIDS.html).
- Wily, Liz Alden. 2011. "The Law is to Blame": The Vulnerable Status of Common Property Rights in Sub-Saharan Africa." *Development and Change* 42 (3): 733–757.
- World Bank. 2013. "Lesotho Overview." Retrieved May 12, 2014 (http://www.worldbank. org/en/country/lesotho/overview).
- World Bank. 2014. "Namibia Overview." Retrieved May 16, 2014 (http://www.worldbank. org/en/country/namibia/overview).
- You, Liangzhi, Claudia Ringler, Gerald Nelson, Ulrike Wood-Sichra, Richard Robertson, Stanley Wood, Zhe Guo, Tingju Zhu, and Yan Sun. 2010. "What is the Irrigation Potential for Southern Africa? A Combined Biophysical and Socioeconomic Approach." IFPRI Discussion Paper 00993, June 2010. Washington, DC: International Food Policy Research Institute.
- Zhou, Peter P., Tichakunda Simbini, Gorata Ramokgotlwane, Timothy S. Thomas, Sepo Hachigonta, and Lindiwe M. Sibanda. 2013. "Botswana." Pp. 41–70 in Southern African Agriculture and Climate Change: A Comprehensive Analysis, edited by Sepo Hachigonta, Gerald C. Nelson, Timothy S. Thomas, and Lindiwe M. Sibanda. Washington, DC: International Food Policy Research Institute.