

GOT NEOLIBERALISM? : A POLITICAL ECOLOGY OF POWER IN SENEGAL'S MILK  
MARKET

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## **Abstract**

This research tries to understand how power dynamics between states and institutions control consumable commodities and dynamic sectors of the economy. Through political ecology, an idea that demonstrates that politics are inevitably ecological and ecology is inherently political, both institutional power and resistance must be considered. This can be understood through a case study of Senegal's milk market which has been in competition with powdered milk from Europe since the mid-20th century, around the same time Senegal became an independent state from French colonization. The methodology includes historical analysis, economic models, and an examination of past efforts of resistance. This paper will argue that powerful institutions such as multinational food corporations, transnational economic organizations, and neocolonialism capitalize on Senegal's dairy market by creating more liberalized and preferential trade agreements, steering the supply of incoming powdered milk, and advertising this product as both a representation of modernism and traditional Senegalese values. Discourse is used to resist this institutional power at the state level through government acts and administrative declarations, at the civil society level through media and scholarship, and at the private level through interpersonal conversation. While the institutional control of milk in Senegal can be seen as a microcosm of neoliberal control that "core" countries hold over "peripheral" countries, the resistance to this control can be seen as a successful example of transnational and collective power.

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## Abbreviations

ACP	African, Caribbean, and Pacific Group of States
CAP	Common Agricultural Policy
ECOWAS	Economic Community of West African States
EEC	European Economic Community
EPAs	Economic Partnership Agreements
FAO	Food and Agriculture Organization
GATT	General Agreements of Tariffs and Trade
GDP	Gross Domestic Product
GNI	Gross National Income
IMF	International Monetary Fund
LBD	La Laiterie Du Berger
$MB_p$	Private Marginal Benefit
$MC_{Ext}$	Marginal Cost of Externalities
$MC_p$	Private Marginal Cost
$MC_s$	Social Marginal Cost
MNCs	Multinational Corporations
NAFTA	North American Free Trade Agreement
OECD	Organization for Economic Co-Operation and Development
SAPs	Structural Adjustment Programs
SMP	Skimmed Milk Powder
WB	World Bank
WMP	Whole Milk Powder
WTO	World Trade Organization

## Preface

I came upon this topic in the fall of 2016 when I began work on an independent study. This course was applied towards my Environmental Studies degree, and helped me learn something of interest about the country in which I studied abroad in spring of 2017: Senegal. In this thesis I will make claims about the political, economic, and social state of the world through the study of Senegal's milk market. Here, I am an outsider looking in. If there is one message I would like to relay, it is the presence of structural power in our world system. Many of the definitions, data, and resources I use most likely reinforce this structural power, however, many of them challenge it as well. I haven't lived the experiences I am writing about, but I have been examining this topic for quite a while, and stand by my belief that it is important area of study and one that needs more research; I am humbled to contribute even a negligible amount.

### 1. Background

*“He who signs it accepts his death ... you will kill your people, you will kill the poor. Sign the EPAs and you will kill the peasants, ... the farmers, ... the fishermen, ... he who signs it will be responsible for the consequences of his country”* (Awadi 2007. Translated from French and Wolof).

Didier Awadi is a Senegalese hip hop artist whose songs are highly political and socially critical. This excerpt from ‘On Ne Signe Pas’ is the last song on Awadi's *Sunugaal* album. He is advising the Senegalese government to not sign the Economic Partnership Agreements (EPAs) with the European Union. The EPAs were an extension of the Cotonou Agreement which complied with World Trade Organization (WTO) regulations of international free trade (Trommer 2014).

In late March of 2017 I spent four days in the Village of Nguille, Senegal on a dairy farm. I was participating in a semester abroad in Dakar on a Lewis & Clark College and African Consultants International program, and one of our research projects was to study a type of commerce in rural Senegal. During those four days, I lived with Pap Ndiay and his family who reared roughly one hundred cattle for meat and milk, and grew peanuts, cashews, and various vegetables to sell. Although I barely spoke Wolof, Pap Ndiay and his son Mohammed and I were able to communicate quite a bit about the difficulties and rewards of operating such an enterprise.

Pap Ndiay and Mohammed stressed two things while I stayed at their farm. First, they told me that this was the wrong time of year for me to be there. During the wet season (June-October), their milk yields are about five times what they are during the dry season, and they grew tons of produce on their 100 acre, highly abundant field, which was covered in only manure while I was

there. The second point that they made clear was their competition: powdered milk from France. Pap Ndaiy's family were the only cow herders in the Village of Nguille, and sold their milk at the market in Sokone, about three kilometers away. The prices of their milk went down during the wet season when the supply was much greater, but their prices were always greater than the price of packaged powdered milk. Pap Ndaiy said that the presence of powdered milk in the market made it difficult for him to grow his dairy operation, but his family still relied on the powdered milk during the dry season so that they could sell their fresh milk and still have some for cooking. Showing me the package, Pap Ndaiy told me that he specifically bought Vitalait powdered milk because it was packaged in Senegal rather than in Europe, which brought capital to Senegal.

### *1.1 Power in a Neoliberal System*

In 1999 the WTO Ministerial Conference was scheduled to take place in Seattle, Washington to discuss how to further liberalize trade of goods between developed and developing nations. After a long history of international trade regulations, the WTO was formed in order to place global regulations and promote international trade liberalization (Talton 2014). On November 30th, over 50,000 people gathered in downtown Seattle to protest the WTO, focusing on workers rights and ecological and social issues that stemmed from trade expansion (Seattle Municipal Archives 2017). The benefits of free trade are not created equal, and protestors were intent on making this known. One of the successes of these protests was that large-scale media coverage questioned the merit and equities of international free trade. The 1999 WTO protests became an international symbol of the social and political unrest caused by trade policies (Trommer 2014).

The act of Awadi writing a song, of Pap Ndaiy's selling fresh and purchasing powdered milk that adds to Senegal's economy, and of the thousands of people attending and protesting in Seattle are all examples of resistance - or ways of exerting power - in a neoliberal age. This kind of resistance differs from resistance in an earlier age because of the international scope and the politicization of the act:

This involves not only a hierarchy of states but also new forms of power and authority linked to the globalization of capital and the globalization of resistance (both passive resistance and direct action). It involves struggles over issues of war and peace ... of political economy, culture, and civilization ... contradictions cannot simply be resolved at the level of theory: this requires the movement of social and historical forces in collective action (Gill 2008, xvii-xviii).

Furthermore, all three of these examples are intricately connected to the WTO and many modern liberalization policies that began post Bretton-Woods System. When the WTO finally formed in

1995, multilateral trade liberalization had a platform for regulation and negotiation that was more absolute than previous agreements. If states are members of the WTO, they must comply with these regulations if they want to participate in international trade of commodities and services. By “leveling out the playing field”, the WTO “reinforced the neoliberal approach to *diminishing* policy spaces for national governments” (Drache et al 2014, 9) that already held less international power. In other words, in a neoliberal system, both political control and resistance must adapt in order to exert power.

This paper will argue that powerful institutions such as multinational food corporations, transnational economic organizations, and neocolonialism capitalize on Senegal’s dairy market by creating more liberalized and preferential trade agreements, steering the supply of incoming powdered milk, and advertising this product as both a representation of modernism *and* traditional Senegalese values. Discourse is used to resist this institutional power at the state level through government acts and administrative declarations, at the civil society level through media and scholarship, and at the private level through interpersonal conversation. While the institutional control of milk in Senegal can be seen as a microcosm of neoliberal control that “core” countries hold over “peripheral” countries, the resistance to this control can be seen as a successful example of transnational and collective power. Before I dive deeper into the context of milk and Senegal, I will introduce the theories I use and the role of commodities.

## ***1.2 Theories***

My framework for this paper asks the following: *How do power relations influence the control of consumable commodities within a neoliberal system?* Because “neoliberalism” has many meanings and uses, I define it as purely a period of time within economic liberalism, situated in the late 1980s with the rise of the third wave of globalization. Neoliberalism represents a new economic order in which global institutions like the International Monetary Fund (IMF), WTO, and World Bank control the international economic system. Globalization during this time was driven by policy recommendations brought about by the Washington Consensus, which highly liberalized and privatized sectors of the economy (see Gill 2008, Stiglitz 2003). I will use three theories to address this framework: Modern World Systems and Dependency as methods of analysis, the idea of Transnational Advocacy Networks, and Political Ecology as a global framework. These theories are interrelated because they all recognize a connected system which relies on many unique actors; while each is a global understanding, they identify the distinct demands, characters, and abilities of different actors and places - within neoliberalism, these differences are largely ignored.

Modern world systems theory argues that capitalist-fueled expansion of trade networks, beginning with colonization, ultimately created what we consider today as “core,” “periphery,”

and “semiperiphery” states. In this understanding, “core” countries are identified by high skill labor and capitalist economies. Peripheral countries, on the other hand, are identified by low skill labor and the extraction and exportation of raw materials used primarily by the core (Drache et al 2014; Hall 2000). This economically dependent relationship is justified by the core countries’ historic mission to “develop” the peripheral countries, which is exploitative in nature (Balaam and Dillman 2015). Therefore, within neoliberal WTO based trade, the periphery governments are further positioned so their policy control is diminished; “peripheral countries, instead of developing along the same paths [as] core countries in earlier periods, are structurally *constrained* by trade relations and geopolitical pressures ... while the countries in the core are *enabled* by those same coercive structures to benefit from the surplus received from the periphery” (Hall 2000, 30).

States battle for power by exerting control over the international trading system, monetary system, or economic development (Oatley 2015). Dependency Theory, which draws from world systems theory, argues that the marginal position of periphery governments are a direct result of the terms of trade established during the colonial period (Hall 2000). Contemporary dependency thus shows itself through international ownership of a country’s most dynamic sectors - agriculture, oil, or any other commodity - and unequal position in global trade. This theory can also be applied to western multinational corporations moving into peripheral nations, or aid from core countries that was often tied with the guarantee that the recipient country would buy goods from the sending country (Kiely 2017). In a neoliberal system, institutions like the WTO play a part in diminishing the control periphery governments have over commodities because of declining domestic economies and uniform trade regulations that can disproportionately benefit core countries (Dratch et al 2015).

Inherently, using the terms periphery, semiperiphery, or core are complicated, because out of context they reinforce a hierarchical narrative. Kiely (2017) argues that world systems and dependency *theories* are problematic because they fail to adequately explain the origins of a capitalist economy and mechanisms that sustain inequity and hierarchy in the world order. Kiely goes on to say, however, that world systems and dependency both have strengths as *methods of analysis* because they recognize these five things:

- (1) capitalism can in some respects be regarded as a world-system;
- (2) the capitalist world economy is not a level playing field, and the process of market promotion in recent years has reinforced hierarchies, not undermined them;
- (3) this is true despite the rise of manufacturing in the developing world associated with the globalization of production;
- (4) neoliberalism reinforces hierarchies by undermining the capacities of states to shift out of low value production into higher value sectors;
- (5) this is reinforced by historical patterns of manufacturing, which suggest that the capacity of this sector to promote dynamic spinoffs to the rest of the economy, and to



generate substantial improvements in living standards for all, is increasingly being eroded. (Keily 2017)

It is useful to acknowledge these theories' inherent biases and question which structures they are born from. Analyzing acts of exploitation through different lenses is also useful because it acknowledges how interconnected and structural power dynamics are.

Next, I am interested in ways that actors exert power by resisting capitalist domination and exploitation. Keck and Sikkink's (2014) idea of Transnational Advocacy Networks demonstrates that activists across borders can have similar ideas or values that motivate their resistance; these values may address human rights, climate change, or politics. Advocacy networks "[build] new links among actors in civil societies, states, and international organizations, multiply the channels of access to the international system ... [and] make international resources available to new actors in domestic political and social struggles" (Keck and Sikkink 2014, 1). The crossing of borders makes this idea neoliberal, and therefore challenges exploitive neoliberal institutions that are also trans-or-multinational. Examples of transnational advocacy groups include, "trade unions, religious groups, non-governmental organizations, various anarchist or socialist groups, celebrities, or others" (Micheletti et al 2004, 26). While individual actors can have little power in a global setting, collective advocacy through formal or informal groups gives actors the resources to resist and gain leverage over powerful organizations and governments (Hobson and Seabrooke, 2007). While these groups are not always successful, their presence becomes increasingly relevant in policy decisions (Keck and Sikkink 2014). Scholars who discuss transnational advocacy networks make it clear that they are neither undermining the power of dominant elites or reifying the power of "weak" individuals. Rather, they are analyzing the way weaker individual power affects and responds to the dominant powers and this relationship in the global economy. In this framework, everyday actions of groups of individuals are significant on an international scale (Hobson and Seabrooke 2007).

Finally, I use the framework of Political Ecology to bring both worlds systems theory and transnational advocacy networks together. Political ecology demonstrates that politics are inevitably ecological, and ecology is inherently political. It does not focus on a separable human/non-human dynamic, but rather on all social, political, economic, ecological, and cultural dynamics that are intricately connected. The overlap and politicizing of these factors explains each component's role in a world system (Robbins 2012; Hall 2000). Within a neoliberal capitalist society, political ecology challenges the idea that merely altering small parts of the global system will significantly prevent human induced climate change, poverty, or hierarchical prejudices; rather, structural changes must be made (Peet et al 2010). It is clear that individual nations do not lack ability or agency. Rather, state power is structurally and historically defined. Questions of domination, colonization, and extermination are needed to understand the full scope of these power dynamics. Ignoring these questions removes the politics of power, which in turn

ignores the structural framework of inequity; political ecology strives to acknowledge this in order to understand areas of possible change (Robbins 2012). Still, political ecology argues that every decision made, whether at the private, civil society, or public level, influences politics, economies, and ecologies at some level; this may perpetuate the status quo or challenge it.

### ***1.3 Commodities***

Political ecology of consumption recognizes the multiple chains and networks that consumption relies on. Commodities take on many forms, uses, and meanings. In this context, I consider consumable commodities to be those which can be physically consumed by the individual as the product that it is traded as. Food and drink, beauty and health products, and medicines and pharmaceuticals are all consumable commodities and are all inherently political: “Consumption, although often considered an individual choice, is deeply ingrained in behaviors, cultures, and institutions, and is driven and supported by corporate and government practices” (O’Rourke and Lollo 2015, 233). By complicating commodities through their political, economic, and social roles, the original function of the commodity is often forgotten.

In his ethnography on British soap in Zimbabwe, Burke (1996) uses neo-Marxist theories of commodity fetishism to argue that while commodities’ role always returns to the politics of colonial rule and capitalist domination, there is still an essential utility of the good, which can be manipulated. Cleaning commodities, such as soap, were marketed as modernism postwar. Some ways Zimbabweans interacted with the soap, however, were unpredictable or represented resistance; i.e., by using soap purely for its function - and not for abstraction by which it was advertised - aspects of the political control were diminished (Burke 1996). Still, Burke posits that needs, once made, do not casually go away, as their making or unmaking cannot be attributed to a single power or institution. Whether or not commodities outwardly *represent* political intention, the way they change social or ecological domains can always be brought back to the political origins of power.

Furthermore, when demand for commodities, or practices of trade, change, so do the surrounding environments. Food consumption is based on reasons of taste, cultural norms, status, belief systems, economics, identity, or advertising rather than reasons for nutrition (McClancy et al 2009). Still nutrition is often a method of advertising, and ingrained in our beliefs. Despite this, that which we find edible or inedible is not necessarily based on whether or not we can eat it. Ohnuki-Tierney (1994) argues that certain people in post-war Japan viewed rice as part of their Japanese identity, separating themselves from either Chinese or Western identities. Rice did not play this role because it was a food to feed the stomach; it was significant because of what it represented at that point in history. Food’s inherent relation to identity can create strong personal attachments or aversions to others who eat, and food can be used as a political tool to manipulate

status and social capital if it is assigned with an intrinsic meaning (Ohnuki-Tierney 1994).

## 2. Situated Context

It is clear that power relations *do* influence the control of consumable commodities, however, I asked, *how*? Before I explain the methods I used to shed light on this question, I will introduce the context within which I structure this paper: milk and Senegal.

### 2.1 Globalizing Milk

Milk has been consumed in many parts of the world since the domestication of cattle (Diamond 1997). It wasn't until the industrial revolution and the rise of transnational railroads that milk's economic worth was realized by large corporations in the United States, Europe, and India (Wiley, 2014). By the late nineteenth century milk in the United States was more than just a food; it was a symbol of purity, nationalism, and American politics (Wiley 2014). By advertising via health and science, milk became the solution for obtaining standards of weight, health, and beauty that created the perfect body. These ideals were primarily marketed toward Anglo-American women and children through ideas of wealth, appearance, and the proper way to "nurture". By equating milk consumption to perfection, companies excluded those who could not drink milk from the modern ideal, leaving out "mostly people of color - who are often genetically lactose-intolerant ... by declaring milk perfect, white northern Europeans announced their own perfection" (DuPuis 2002, 11).

Milk was highly traded because it was extremely cheap to make, and greatly profitable. In 1950s and 60's Europe, due to low productivity from World War II, food supplies and prices could not be guaranteed. Europe entered new protectionist trading agreements; the Common Agricultural Policy (CAP) allowed the European States to trade with each other freely, banning or highly regulating foreign imports (Spero and Hart 2009). The CAP also artificially stimulated competition in outside markets by entering into preferential trade agreements, starting with the then French colonies in Africa. The EU justified these and subsequent trade agreements with other states as, "aid to underdeveloped countries and as adjustments for the discriminatory effects of CAP" (Spero and Hart 2009, 84).

As Bretton Woods came to an end, Europe emerged as the world's largest trading bloc while still maintaining protectionist policies. In order to incentivize farmers' production within the Union, the EU guaranteed fixed prices for certain foods, and would buy and store unsold goods. Through new technological innovations (Blyth 2002), food production soared in the 1970s,

creating “food mountains” of surplus that were critiqued because they had high budget costs, were unpopular with consumers and taxpayers who funded the storage, were bad for farmers, and distorted world markets (European Commission 2016). The EU pushed to export the surplus and create plans to curb overproduction. Dairy was an especially high oversupply, so the CAP created milk quotas in 1984 to deal with the “mountains” of butter and powdered milk that were accumulating. The milk quotas were one of many iconic measures the CAP implemented in the 1980s. Each EU state was given a quota of dairy based on previous production rates, and production and sales could not exceed the set cap.

By this time European multinational corporations (MNCs) had been exporting sterilized, condensed, and powdered milk, and baby formulas to Sub-Saharan Africa and other regions for over a decade. The quotas did not necessarily inhibit the MNCs; there was a seemingly endless supply which lasted longer than expected. The quotas were supposed to last only 5 years, but it wasn't until 2008 when Europe finally considered removing them. European farmers were aggravated by the limitations of the quotas. The European Commission took time to remove the quotas as it would significantly alter the global dairy market; Europe is one of the largest players (Bouamra-Mechemache et al 2008). In March 2015 the quotas were finally removed and farmers throughout the EU were permitted to produce milk without limits (European Commission 2016).

## ***2.2 Senegal***

Senegal is situated on the westernmost tip of Africa, has a population of 15.4 million (2016) and has one of the fastest growing Sub-Saharan economies. Senegal's gross domestic product (GDP) is 14.68 billion (USD) and gross national income (GNI) is 950 (USD). At least 63% of Senegal's population resides in cities: 23% in Dakar, Senegal's capital, and 40% in other urban areas (World Bank 2017). There is a large income divide between the rural and urban areas; poverty is most prevalent in rural areas due to low agricultural production, limited capacity of sustainable jobs, and inadequate resource allocation for social services (GFDRR 2011). Furthermore, Senegal has a growing middle class which is magnifying the rapid urbanization and changing demands for standards of living (Resnick 2015). Senegal's climate is characterized by two distinct seasons: a dry season from approximately October to May, and a rainy season from approximately June to September. Due to global climate change and Senegal's location, Senegal is highly vulnerable to drought, locust invasion, flooding, sea-level rise, coastal erosion, and bush fire. Senegal's multiple coastal regions, including Dakar, are especially susceptible (GFDRR 2011). Senegal has a long political history and became independent from French colonization in 1960. Léopold Sédar Senghor was Senegal's first president after independence. Senghor was a socialist, but since then Senegal had become a democracy. Senegal's current president is Macky Sall.

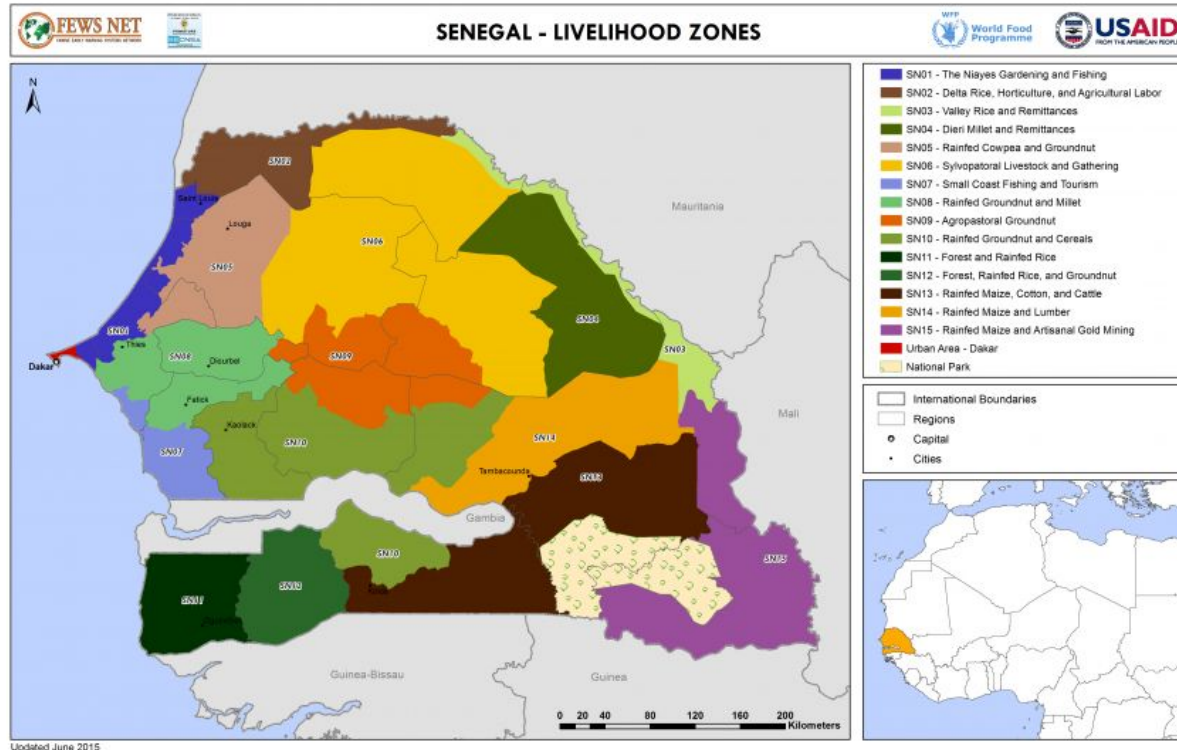


Figure 1: Livelihood Zones in Senegal 2015. Source: *fews.net*

Milk has been consumed in Senegal for many centuries. Unlike much of Africa, Senegal is along a central “belt” of general lactose tolerance due to livestock domestication beginning over 5,000 years ago (Gariné and Gariné 2001). Senegal’s agriculture is historically pastoral and biodiverse. Livestock rearing occupies 30% of the Senegalese population; over 90% of the rural population own livestock, and 52% of the urban population own some type of animal (Wane et al 2017). Despite such a large livestock population, Senegal remains a net importer of meat (especially for religious holidays) and milk; approximately 2.3% of Senegal’s *total* imports are milk and milk powder (Seck et al 2016). Senegalese fresh milk and sour milk (yogurt) are sold at markets, door-to-door in cities like Dakar, and at milk stands. Women predominantly harvest and sell milk in these settings, controlling part or sometimes all of the revenue. As Senegalese farms become more intensive and productive, however, men often take over the role of caring for cattle and harvesting milk (Orasmaa, 2016). Production of dairy most often occurs in rural areas and transportation to cities is difficult; vehicles are often not equipped with refrigeration or cannot travel great distances. Maintaining a cold chain - a supply chain that must be maintained at low temperatures - is difficult and sanitation is not always achieved (Gning, 2004).

Supply of Senegalese milk has not been able to keep up with demand in the past because of these production barriers and because of Senegal’s climate. During the dry season (October-May) milk production is very low and unsustainable; in extensive farming cattle graze for feed, and both

grass and drinking water are limited. Furthermore, much of the milk that is produced must be fed to the calves in order to maintain a large enough herd. During the wet season, however, milk flows abundantly.

Milk's economic, social, and nutritional significance has often been overlooked during the formation of Senegalese agricultural policies; during the colonial period, the agricultural focus was on groundnuts because they were the main export from Senegal to France (Seck et al 2016). Because of this, other agricultural activities were marginalized. Groundnut production areas were therefore provided with ample infrastructure like roads and railway systems that facilitated the crop flow to France (Dia 2009). While these roads can be used for other agricultural transportation, specialized infrastructure for milk production is lacking.

Senegal has been importing powder, sterilized, and condensed milk since the 1960s. The origin of the milk products comes primarily for the European Union, Argentina, and New Zealand. Due to market systems this is not constant: Iran, Singapore, Malaysia, Brazil, Uruguay, and others have exported milk to Senegal in the past (Chatham House Resource Trade Data 2017). Since the 1980s, imported milk has absorbed 46-96% of the Senegalese dairy market (Corniaux et al. 2012). The European Union is the only trading bloc that has consistently exported milk products to Senegal, and France is consistently the largest player.

When the CAP milk quotas ended, so did the limits on EU milk production. This is significant because in the coming years, multinational dairy corporations are predicted to capitalize on this flood of milk into the market, and create new, or advance already existing, markets in peripheral and semi-peripheral countries. EU exports to West Africa are predicted to increase approximately 40% by 2025 (Orasmaa 2016; European Commission 2016). Milk powder imports can be beneficial because they allow the urban population to access cheap dairy, and because they satisfy demand during the dry season. The quantity of milk powder imports, however, are economically harmful because they drive up local milk prices and control the dairy market (Wane et al 2017).

The daunting numbers, however, do not tell the full story. In Senegal, dairy farmers, rural and urban populations, governments, and organizations have exerted power by resisting to economic and political dominance from their former colonizer and from institutions like the IMF, WTO and World Bank that care little of social justice, income equality, or standards of living (Stiglitz 2003; Trommer 2014).

### **3. Methodology**

#### *Focus Question*

Senegal has been historically situated within a world system where their international power is structurally diminished. That being said, Senegal is one of the fastest growing economies in West Africa and is becoming increasingly powerful within the global economy. While institutionalized structures are nearly impossible to tear down, groups within Senegal have pushed back against these structures in numerous ways. Senegal is an important place to study these power relations because there is generous scholarship and awareness of the debate on powdered milk. The focus of my research will respond to the following question: *How have powerful institutions (MNCs, IMF/WB/WTO, neocolonial ideas) capitalized on Senegal's milk market, and what forms of resistance at the local, state, or international level have challenged these institutions?* This question is asked in the hopes that it explicates my framework question (*how do power relations influence the control of consumable commodities within a neoliberal system?*), and shows a clear example of this theory in action. To answer this question I will create a historical timeline, economic models, and a resistance analysis. I chose these three methods because I hoped to fill gaps in the available research, and because they support each other well by each showing compelling measures of scale, which I will explain more in my discussion.

### *Historical Timeline*

My first methodology will be creating a historical timeline that details significant gestures of power. This timeline will start post World War II and span until present day. I will use both primary (government documents, policy frameworks, news publications, etc.) and secondary (historical, political, and economic analyses, peer reviewed journals, general histories, etc.) sources. More than just important background information, a historical timeline is key in answering this question because along with telling a more complete story, I will point out these significant moments where power relations occur, and how they alter what happens next. In other words, a historical timeline will clearly show how cyclical political and economic history is, and how important ideas and decisions in the past influence the present and future. As economist John Maynard Keynes famously expressed: "The difficulty lies, not in the new ideas, but in escaping from the old ones". Understanding where biased policies, stereotypes, and power relations come from can aid in the escape from old ideas.

### *Resistance Analysis*

Next, a resistance analysis will attempt to manifest the ways in which individuals resist at a private, civil society, and state level. The model I will use to frame this method borrows from Lamb (2013), and highlights both the field of action and genre of the resistance applied. How I will arrange resistance in this framework will be based on the cumulative historical, political, economic, and ecological research I have done on this topic. My data will therefore include

reports, histories, social media, art, news publications, and empirical research and more. While this question will answer the latter half of question - responding to what forms of resistance exist - I will also need to address *who* is able to resist, how resistance is enabled, how resistance brings together or separates groups of people, and how resistance is distinct in a neoliberal system. This will be my most abstract of methods, and the method I feel least qualified to complete; by ordering types of resistance, I hope simply to show the scope of power that challenges a predefined world system of “winners” and “losers”, and how every aspect of the story shapes the political ecology of states and the globe.

### *Economic Model*

Finally, I hope to clearly show how the supply of milk is controlled, how flooding a market with an outside commodity has the ability to undermine domestic economies, and how advertisements play a role in demand. With my economic model I am not condemning trade; trade *can* be mutually beneficial, and countries *could* have comparative advantage by moving resources from a less productive to a more productive use. Under global institutions, however, this does not always happen (Stiglitz 2003). This method will therefore directly answer the element of my question that asks how institutions capitalize on foreign domestic markets. The primary model I create for this method will be purely theoretical, and will not use data; ideally it could be applied to any market that is flooded by an outside commodity. I will, however, pair this model with some more specific quantitative figures. The data for these will come primarily from FAOStat, UN Comtrade, and the World Bank.

## **4. Analysis & Results**

### ***4.1 After the Second World War: a Historical Analysis of Power 1947-2017***

I began this method because I knew I needed a broader understanding of the history of trade, resistance, and power in order to understand this topic. I was surprised, however, how little background information there was in similar case studies, and how disjointed information was about specific events. Therefore, I created this timeline from many sources that not only touched on Senegal, powdered milk, resistance, or institutionalized power, but a combination of many or all. The goal of this timeline, therefore, is to both recognize significant historical events that alter the current state of the Senegalese dairy market, but to also because I have not yet been able to find a relatively complete timeline on this topic that is both domestically and internationally situated.

In 1947, following the end of the second world war, the General Agreement on Trades and Tariffs (GATT) were formed in Geneva. GATT was later used as the framework for the WTO,



and is important to note here. In 1958, the European Economic Community (EEC) entered preferential trade agreements with the then French colonies, as mentioned in my situated context. These were hardly the first trading agreements established between Europe and Africa. However, these were the first post-WWII agreements that directly violated the terms of trade established by the Bretton Woods agreements (Spero and Hart 2009). Analysis of these, and previous trade agreements, show that African prices of goods were significantly lower than global market prices, reaffirming the belief that extraction of raw goods from African countries is a leading factor of slow economic growth in the 20th century (Tadei 2015). In 1959, Senegal joined with French Sudan (now Mali) to form the Mali Federation in order to gain political independence from France. The allying of Senegal and Mali proved that there were power in numbers. In 1960, Senegal became independent and elected socialist Léopold Sédar Senghor as their first president. In 1962 the Common Agricultural Policy (CAP) was introduced, altering commodity production in Europe (European Commission 2016).

In 1963, the Yaoundé Convention was signed in Cameroon facilitating treaties between the EEC and 18 African states that were now “ex-colonies”. The Yaoundé Convention had two five-year-long terms that concluded with the 1975 Lomé convention in Togo. Lomé took Yaoundé one step further by establishing terms of trade between the EEC and the African, Pacific, and Caribbean (ACP) states. Lomé established a Stabex System of non-reciprocal trade, allowing ACP countries to export goods to Europe with no charge, while European exports to ACP countries would be guaranteed compensation in the form of tariffs or quotas (Arkoh, 2014). A few months later, at the Treaty of Lagos, the Economic Community of West African States (ECOWAS) was formed. ECOWAS was made in order to create a trading bloc which allowed unionized self-sufficiency within global trade. Along with focusing on trade of goods, ECOWAS handles monetary and financial issues between states, incorporated social and cultural matters, and can employ military forces in times of political instability. (For example, in 2017, ECOWAS sent militaries from Senegal and other ECOWAS states into the Gambia when long standing president Yahya Jammeh refused to step down to new president elect Adama Barrow (ECOWAS.int, 2016)).

In the late 1970s, Europe saw falling milk prices, and Senegal saw poor harvests and economic downturn in its interior. Senegal’s government took on short-term structural adjustment programs (SAPs) from the IMF to subsidize over a decade of poor agricultural outcomes. These came in IMF loans and subsidized foods (Gning, 2004). Poor harvests combined with SAPs made rural living difficult; workers migrated to the capital, Dakar. In 1984 the EEC implemented milk quotas under the Common Agricultural Policy (CAP). During this time, multinational corporations such as Nestlé and Lactalis International (and Danone beginning in the 1990s) began exporting sterilized, condensed, and powdered milk, and baby formulas to Sub-Saharan Africa. In the 60s and 70s, Nestlé was highly criticized for distributing baby formula to “Third

World” countries and advertising formula as a superior alternative to breast milk, which caused the death or illness to many infants (see Jallow 2009; Sethi 1994; Solomon 1981). Newer imports of milk, however, could be seen as beneficial aid because they were replacing cow’s - not mother’s - milk, and no longer only targeted mothers of young children. During the 1970s and 80s, powdered milk supplied the urban population of Senegal with a cheap source of protein especially during poor harvest years when there were significant reductions in income. The quotas were originally going to last for only five years, however removing the quotas at any point in the 20th century would drastically collapse the global dairy market. In the interest of large scale MNCs in Europe, removing the quotas would be favorable. In the interests of small scale farmers around the world, the quotas could mean losing their livelihoods (Bouamra-Mechemache et al 2008).

In the early 1990s, powdered milk imports soared in Senegal and West Africa, and became a true staple in everyday life (Broutin et al 2000). In 1994, France devalued the CFA Franc, Senegal’s (and much of West Africa’s) currency. The CFA devaluation was intended to encourage Francophone West Africa’s domestic production and control elevated inflation (Diagne 2004). To fulfill this, and hoping to launch a more lucrative local dairy industry, the Senegalese government imposed a 29.6% tax rate on imported powdered milk. This tax rate, however, was quickly reduced to 5% because of new established terms of trade and the formation of the World Trade Organization (Gning 2004).

Since 1947, there were periodic “rounds” of the GATT established to formulate trade agreements. The eighth round of such agreements, the Uruguay Round, is important to mention because it facilitated the creation of the WTO. The Uruguay Round took place in 1994 in Marrakech, and is therefore usually referred to as the Marrakesh Agreements (Fieleke 1995). The World Trade Organization came into effect in 1995. The WTO provided a negotiating framework used for reducing barriers of international commerce (Walker 2015). The WTO has constantly been criticized for this framework, and has spurred many protests in opposition to global free trade, like the 1999 Seattle WTO protests that are discussed in my introduction, and the 2003 Cancun WTO protests. Both of these occasions were highly significant; they marked a shift towards protests that were multinational and brought together coalitions of people from all over the world. The Seattle protests were significant because they successfully shut down the WTO Ministerial Conference for the first time. The Cancun protests were significant because they focused on trade of agriculture and the harm that subsidies caused to domestic farmers; Lee Kyung Hae, a farmer and activist from South Korea, committed suicide at the protest in order to manifest the destructive effects of free trade. His death was both tragic and in some terms effective; after 2003, the WTO made an effort to move itself out of the public eye (Narlikar 2004).

In 2000, using the framework set by the WTO, the EEC (now officially the European Union as of 1993) and the ACP countries formed for the Cotonou Agreement in Cotonou, Benin. The Cotonou Agreement abolished the Stabex system that was set in place by the Lomé Convention in 1975, because it did not conform with WTO regulations. Cotonou created the Economic Partnership Agreements (EPAs) which were set to liberalize trade between ACP and EU countries, meaning not only that the EU provides duty-free access to its markets for ACP exports, but ACP countries were required to also provide duty-free access to their own markets for the EU, which would lose these countries a significant revenue from tariff income. This change was met with resistance from the ACP countries, many of which refused to sign.

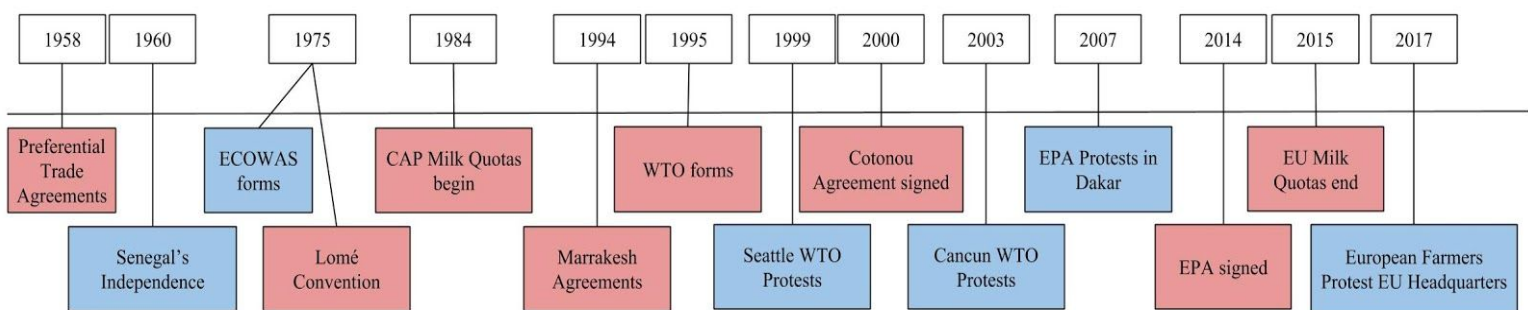
The EPA's were meant to go into effect in 2007. However, despite much push, no country had signed. The EU then split the ACP countries into six separate "subgroups", justifying this decision as a way to cater towards specific state and bloc needs. ECOWAS was one of said groups. In December of 2007 at an EU-Africa summit in Lisbon, Senegal's President Abdoulaye Wade announced Senegal's intention not to sign the EPA's. Several marches and protests broke out in Dakar, Brussels, Burkina Faso, Mauritania, and Mali in opposition to the EPAs. The protest in Dakar had over 50,000 participants (Schnatterer 2008). Senegalese hip hop artist Didier Awadi launched the song 'On ne signe pas' (We won't sign); "[Awadi] connects [the] trade agreements with the EU with poverty and clandestine emigration to Europe. The song accuses the EU of a neocolonial mindset and compares EPAs to the historical experience of transatlantic slave trade" (Trommer, 2014).

As surplus "mountains" dried up, and global milk prices began to rise again, farmers in the EU felt burdened by the quotas which were not allowing maximum profit (figure 2). Governments in France, Germany, Austria, and Finland (some of the globe's largest dairy producers) were still in favor of the quotas because they kept the market from being flooded, and maintained the non-industrial, high quality reputation that European food often has. The EEC worried that keeping the quotas would put European markets in competition with expanding markets in Brazil, Argentina, and America (*The Economist* 2008). Quotas could not be eliminated overnight, however; in 2008 during a 'health check' of the quotas, the EEC found that immediately eliminating the quotas would result in an intense global price reduction for dairy. They chose to perform a "soft landing" meaning that the quotas would increase by 1% from 2009 until 2015, when they would end, making the price reduction less harsh. (Bouamra-Mechemache et al 2008; European Commission 2016).



Figure 2. Source: *The Economist* 2008

In 2014, the EPA's were finally signed by ECOWAS. The EU put pressure on ECOWAS by threatening to remove significant agreements, which would tax West African goods entering the European market (Fall 2016). This is significant; the EPAs were intended to be signed seven years earlier, however, resistance from every state within ECOWAS postponed the signing. The EU, therefore, resorted to threaten ECOWAS with the prospect of being essentially removed from world trade, a move that practically guaranteed the signing of the EPAs. In 2015, the CAP milk quotas ended, showing a high increase of powdered milk exports to Senegal, and many other places around the world.



*Figure 3: Timeline. Boxes in red represent institutional power, boxes in blue represent resistance*

What can we learn from this timeline? Figure 3 shows what I consider to be fourteen highly important instances that reflect power since the mid-20th century. By this, I mean that boxes in red reflect how institutional power is used to exert economic and political control over dynamic trade sectors within Senegal (or, more broadly West Africa). The boxes in blue, then, reflect resistance to a neoliberal regime by grouping together (often across state borders) in order to promote a similar understanding of how global trade should be understood. There are two things to clarify with this visual. First is how one form of power does not come without the other; power relations are inherently an exchange, each actor vying for something different (i.e. communication across borders, higher paying jobs for CEOs, allowing foreign products into domestic markets, having high returns on investments, etc.). Therefore, to talk about one, it is important to talk about the other. For this reason, my second methodology will go into greater detail about the power of resistance.

Second, it is important to show the shift towards neoliberalism, and how this changed both forms of power. If we are to say that neoliberalism “started” in the 1980s (see Blyth 2002), then this timeline is lacking events before that, and that is not to say they are not important. With

neoliberalism came many changes to an international global order, and the ones I want to make clear here are (1) the formation of global institutions that set a standard for free trade that did not consider variations based on states, and (2) the emergence of resistance that was large-scale, multi-state, and public. Therefore, I hope to show this through the timeline visual; the international agreements often impact many states and are decided by previous standards, and the protests are public and loud, and involve many actors who may not necessarily want the same thing. The final box on the visual has not been discussed yet: the protest at the EU headquarters. On January 23rd, 2017 farmers from Belgium, France, Germany, the Netherlands, and Lithuania gathered in front of the EU headquarters in Brussels and sprayed them with one ton of powdered milk in protest of decreasing prices after the milk quotas ended. I include this in the timeline to show the globality of measures like the end of the EU milk quotas and how the “winners” and “losers” aren’t always who one would expect them to be. In this case, I argue that the “winners” are the high employees of the MNCs who export powdered milk throughout the world.

#### ***4.2 Levels of Resistance: An Analysis***

At this point we must think more deeply about resistance. In her article, “Power and resistance: New methods for analysis across genres in critical discourse analysis”, Eleanor C. Lamb (2013) looks to show that there is not a binary relationship between elite-level power and grassroots resistance. Rather, they are both present everywhere and should be examined in levels. Lamb expands on a model used by Reisigl and Wodak (2001) who study the discourse of discrimination, and the model was proposed by Girth (1996) who studies political discourse. I have altered Lamb’s model to understand discourse and resistance framed around trade between the European Union and Senegal, focusing on the dairy industry. The first two rows of the model are slightly altered from Lamb’s version, however for the most part the same. The last row/box includes examples of resistance applied to the framework I am using; Lamb’s final box is simply “discourse topics”, allowing these to change based on the situation.

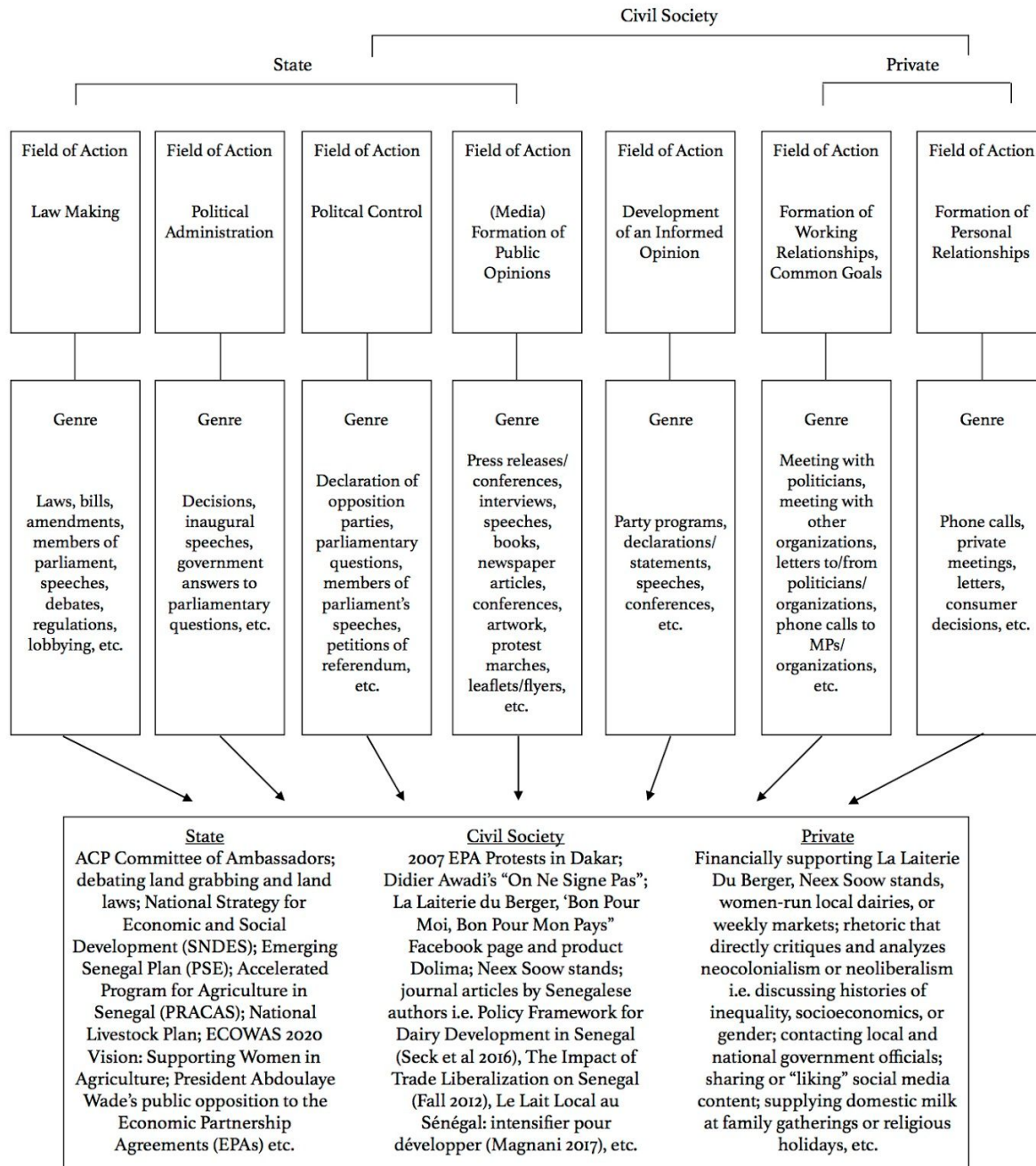


Figure 4: Power and Resistance: Discourse Methods. Model source: Lamb 2013

At the **state level**, discourse topics and actions include large public announcements of resistance to a status quo; examples from the column include the following: In September, 2017, the Africa, Caribbean, and Pacific (ACP) states held their committee meeting in Brussels. The Ambassador of the Republic of Senegal, Amadou Diop, resided in Brussels from August 2017 to January 2018. The Cotonou Agreement mentioned in my historical analysis between the EU and the APC

states will expire in 2020, and Ambassador Diop is working with other ACP ambassadors on the new policy framework document that places more emphasis on the ACP countries, sustainability, and innovation (ACP 2017). Other forms include a research report on land governance in Senegal debating new land laws that have emerged in parts of Africa and asks, “How can it be ensured that these will not only benefit large investors and state actors but also small farmers and the rural population?” (Kaag et al 2011, 4).

Furthermore, the Senegalese government has recently worked to develop agricultural plans and policies including the National Strategy for Economic and Social Development and the Emerging Senegal Plan both of which work towards growth, wealth creation, social protection, sustainable development, institutions, peace, and security, working with a framework that considers changes from 2013-2035 (FAO 2015). The Accelerated Program for Agriculture in Senegal, and the National Livestock Plan both work towards diverse and sustainable agriculture that can majorly contribute to rural economic development (ibid). The Ministers for Gender and Women Affairs of ECOWAS and FAO are working together for their “Vision 2020” part of which aspires to “enable women benefit more equitably from agri-food value chains” (ECOWAS 2016). At this level, historically defined institutions of trade, like the WTO, are challenged; creating concrete plans that address changes to trade policies (e.g. the expiration of the Cotonou Agreement) increase the chances of changing an institutionalized norm.

At the **civil society level**, discourse topics and actions include public opinions that come in the form of media and declarations; examples from the column include the following: the 2007 Economic Partnership Agreement (EPA) protests in Dakar, Senegal that were prompted by President Abdoulaye Wade’s opposition to the EPA’s at an EU-ECOWAS summit in Lisbon, and Didier Awadi’s song, “On Ne Signe Pas”, all discussed in my historical analysis. La Laiterie Du Berger (LDB) is a Senegalese dairy company that was started in 2007 by Bagoré Bathily, which employs rural Senegalese dairy farmers, making milk drinks, yogurts, and cream under the brand “Dolima.” Their Facebook Page, “Bon Pour Moi, Bon Pour Mon Pays” (good for me, good for my country) posts regularly about awards that LDB gets, panels and information sessions, welcomes new farmers to their “club”, and share posts that fans make on their own social media of them eating or drinking



Figure 5: Tax Collected by the State. Source: screenshot from France 2 video on Bon Pour Moi, Bon Pour Mon Pays Facebook Page 2017

Dolima products (mostly Facebook, Instagram, and Snapchat). They also discuss the difficulty of marketing and selling milk in Senegal; in a video posted last spring, a news station (France 2) reports on LDB and the paradox of local milk being taxed more than three times as much as imported milk (figure 5). The video has over three hundred thousand views and the top comment says, “sad for us, and sad too that a foreign chain (France 2) reveals this anomaly of our economic system. There is a lot to do. The national preference is over at home, and it begins with the approach of our leaders, more busy enriching foreign capital than exalting what is made in Senegal” (Bon Pour Moi Facebook page 2017).

Additionally on the civil society level, scholars from Senegal (and abroad) have been addressing this topic for many years; Dieye et al (2008) examine the price volatility of milk in Senegal, and the importance of trust in the local dairy system. Dia (2009) analyzes the geography of dairy production in Senegal, networks of communication, and the colonial and present policies that are in place for livestock farming. Corniaux et al (2012) study mixed-modeling integration of both powdered and fresh milk in both Senegal and Mali. Seck et al (2016) research how crossbreeding cattle could increase domestic supply and better meet the current demand for dairy, especially in the urban areas. Magnani (2016) critically analyzes livestock intensification, approaching the study with an ethnographic lens and comparing a techno-scientific culture with herders’ rationalities and actions. Orasmaa (2016) studies the implications for West Africa after the end to the EU milk quotas, considering the impacts of local dairies, women, and low-income rural individuals. Wane et al (2017) research the socioeconomic stability of farmers who work for La Laiterie du Berger. At this level, multinational corporations are challenged because they are both critically analyzed in the public and academic sphere, and now must compete with other products.

Finally, on the **private level**, discourse topics and actions include individual choices that may not hold power on their own, but are powerful when placed in a network; while private actions may not be “transnational”, they still advocate for something, even if it does not reach outside of an immediate community or social group (Heyman 2005). Examples from this column include the following: buying milk that is completely produced in Senegal at markets, Neex Soow stands, or from door-to-door sales people; consuming this milk at family gatherings during religious holidays; being active on social media; or contacting local or state governments to voice opinions. While this level does not directly challenge any specific institution, institutions of neocolonialism are called into question; private levels of discourse that recognize power structures can lead to collective action and pass on information and opinions generationally.

When considering the kinds of resistance possible, it is important to ask questions that may not always have answers. This is to say that not everyone who wants to support a local product will be able to; even at the private level, a more disposable income is needed to purchase fresh milk

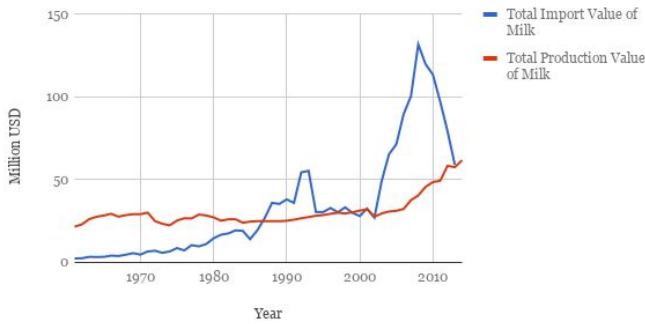


over powdered. And, not everyone may want to support local milk. Furthermore, within neoliberalism, only consumers are seen as the responsible actors for creating a norm and for resisting, both of which are not true (Singer 2014). This raises questions of *who* is able to resist, and who groups together or disagrees on methods of resistance. It is also true that, for the most part, the urban population in Senegal consumes the most foreign milk, and the rural population produces the most fresh milk. This raises questions of a rural and urban divide, and to whom governments listen when making policy decisions. And finally, within the local industry, there is hierarchy: La Laiterie du Berger, despite the socioeconomic justice it works for, has the ability to put smaller dairies out of business *and* (here's the real catch) is invested in by Danone, one of the largest multinational food corporations in the world, based in France (Orasmaa 2016). This raises questions of scale, and the importance of different political and economic climates. These questions are what bring me to my final methodology, where I dive a little deeper into Senegal's economy.

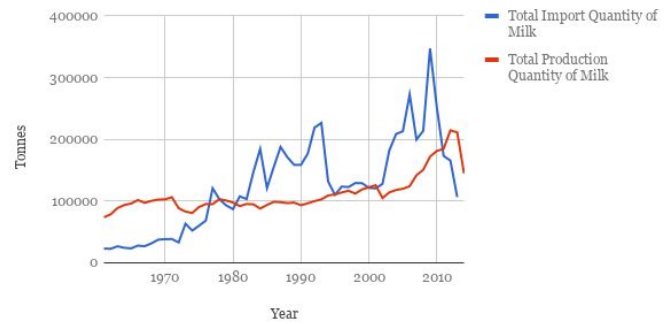
#### ***4.3 Supply & Demand: An Economic Analysis of Milk in Senegal's Market***

European powdered milk, primarily from France, absorbs much of the Senegalese dairy market. What does this really mean? With my economic model and analysis, I hope to show how the supply of powdered milk in Senegal is steered by institutions like MNCs and trade policies, that a market flooded by an outside commodity can financially harm domestic producers, and how advertisements play a large role in the sales of milk. While supply has been more or less consistently increasing since the 1960s, I argue that the supply is manipulated intentionally to maintain control over the market. An example of this is that prices for powdered milk are lower during the wet season when supply of fresh milk is higher; this way, powdered milk is always the cheaper product. Figure 6 shows a comparison of import value versus production value, and Figure 7 shows a comparison of import quantity of versus production quantity of milk in Senegal from 1960 - 2014. Both trends are increasing; import value has a steeper slope. Significant points in the graphs are 1984-1988, 1992-1994, and 2008 onward. Each of these points represents a important period in the dairy economy. The first significant point starts in 1984, when milk quotas were introduced, and imports dropped slightly as there now was a cap on how much milk farmers were able to produce. As multinational corporations gained control of surplus reserves, exports began to increase (Dia, 2009), which can be seen in the late 1980s.

Comparison of the Import Value vs. Production Value of Milk in Senegal (Million USD)



Comparison of the Import Quantity vs Production Quantity of Milk in Senegal (tonnes)



Figures 6 & 7: Comparison of Import vs Production of Milk in Senegal 1960 -2014. Source: FAOstat.

In the early 90s, powdered milk imports to Senegal were at an all time high. Interestingly, at this time the “Got Milk” campaign hit the United States in order to increase consumption; milk sales and ideas about milk - that is was truly the perfect food - were on decline (DuPuis, 2002; Evstatieva and Cornish, 2017). Despite the hype, the “Got Milk” campaign ultimately failed to increase the American dairy demand. Since Americans wouldn’t drink it, global prices decreased, and countries, especially in the European Union, sought to export all the excess; more milk was exported to Senegal. In 1994, however, the CFA Franc, Senegal’s currency, was devalued by France, significantly increasing national prices of foods, drink, and pharmaceutical products. France had the power to devalue the CFA Franc because most former colonies’ imports came from France, France controlled much of the countries’ manufacturing industries, and more than half of French foreign aid went to Africa (Noble, 1994).

Interestingly, the devaluation was intended to increase domestic production, and actually did benefit the rural Senegalese population for a time; as I mentioned in section 4.1, after the devaluation, a tax on powdered milk imports was implemented. This tax was significantly decreased because of the establishment of the WTO, and Gning (2004) argues that the decrease was also attributed to Senegal’s “urban bias”. She posits the Senegalese government favored the tastes and needs of the urban population because of the concentration of workers, students, and state functionaries who have a much stronger political presence than the rural population. Because of decades of poor agricultural production and political turmoil (see Diop 1990), foreign food products that were part of the structural adjustment programs (SAPs) became much more expensive once the currency was devalued. The urban population, who had grown to rely on the SAPs for both nutrition and personal taste, were unhappy with the increased prices, and certain taxes on foreign imports quickly fell. Furthermore, Gning stands that while the CFA Franc devaluation was largely beneficial for rural Senegalese workers, it was also a decision made regionally and out of direct control of the Senegalese government.

Imports of powdered milk were levelled for a few years, but at the turn of the century, with the decrease in tariff, milk imports increased substantially. In 2008, dairy imports reached a peak. This happened because after almost a decade of high prices and strong global demand, market prices began to fall back to normal levels (More 2009). Also, Argentina peaked exports in 2008, and for the first time *almost* matched France's level (Argentina exported approximately 24 million USD to Senegal, and France exported approximately 27 million USD) (Chatham House Resource Trade Data 2017). 2008, however, was Argentina's peak in the Senegalese dairy market. After 2008, imports again began to level out or drop. The end of the dairy quotas, however, will change this drastically: by 2025, EU milk exports to West Africa are anticipated to increase 31-35% for Skim Milk Powder (SMP) and 38-43% for Whole Milk Powder (WMP) (European Commission 2016; Orasmaa 2016). The primary markets in West Africa are Nigeria, Senegal, Ivory Coast, and Ghana. Projections (from both the European Commission database and OECD database) can be seen on figure 8:

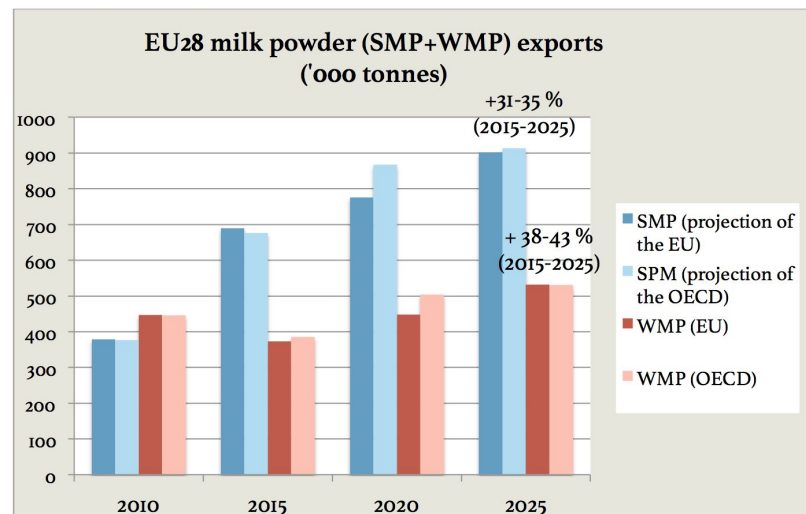
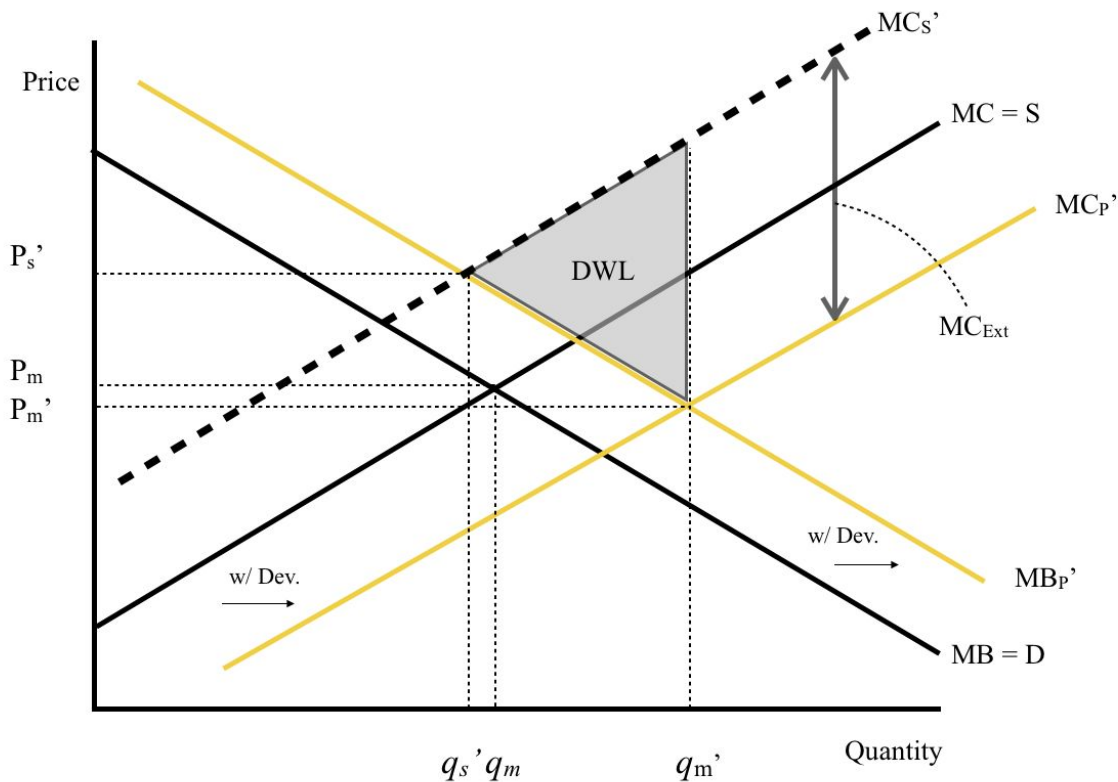


Figure 8: Projections of European Milk Exports by 2025. Source: Orasmaa 2016



*Figure 9: Negative Externalities and Deadweight Loss of a market flooded by a foreign commodity*

How will a roughly 40% increase in milk powder in the Senegalese market look? Figure 9 shows the negative externalities and deadweight loss experienced by domestic producers when a foreign commodity floods a market. The original supply (or marginal cost) and demand (or marginal benefit) curves ( $MC$ ,  $MB$ ) represent an unchanging supply and demand of the foreign product. The yellow lines ( $MC_p'$ ,  $MB_p'$ ) represent the deviation; how supply and demand change as the amount of the foreign product increases as something else changes, i.e. a tariff reduction, an increase global supply, or a reduction of global prices. In this case, both supply and demand are increased as the price lowers and more people can afford the product. The dotted line represents the social marginal cost ( $MC_s'$ ), or where supply would land in a socially optimal setting in which it would fairly compete with the domestic product. The difference, therefore, between the social marginal cost ( $MC_s'$ ) and the private marginal cost ( $MB_p'$ ), represents the negative externalities ( $MC_{Ext}$ ). The negative externalities include ecological costs from processing facilities, transportation, and agricultural intensification at the source, or public health costs and hazards. Ideally, negative externalities will balance out with positive externalities. The most common positive externalities are public health; other positive aspects of increased foreign

commodities are limited to the accessibility and affordability of the product. These, however, are market forces rather than externalities.

This model also shows the deadweight loss that is experienced by domestic producers;  $P_s'$  and  $q_s'$  represent the socially optimal price and quantity, respectively, meaning what would be best for domestic society;  $q_m'$  and  $P_m'$  represent the private market, or the reality. Deadweight loss occurs at this difference, and is the lost revenue that could be allocated to the domestic producers if the foreign product was absent or of a lesser supply. Outcomes and circumstances will vary based on case, but this model can be applied to many situations. In Senegal, this will not likely be felt immediately. Although revenue from milk sales can represent up to 80% of some household incomes, rising milk powder imports are not likely to decrease motivation to rear livestock. It is more plausible that as prices drop for imported powdered milk, future generations will become used to these tastes, and long term demand for fresh milk will decrease (Duteurtre 2009, Orasmaa 2016). One way that younger populations' tastes and demands have been influenced is through advertisements.

Advertisements play a large role in Senegal's milk market. They come in many forms, typically billboards and commercials on TV. Similar to the history of milk itself, these endorsements target women and children, and overall promote a sense of modernity. Figure 10 shows a mother handing her son a bag of powdered milk. The top text reads, in Wolof, "Ramadan with Peace", while the bottom text reads, in French, "the most beautiful proof of love". Using religious holidays to sell their product is a typical theme of Lactalis International's brand Laicran. In a commercial produced by the same company, this "proof of love" is seen again (figure 11): as a family settles down to eat breakfast, a young girl pouts as she waits; she expects the worst. When her mother walks in holding a tray of Laicran milk and bread, she immediately perks up, calling her mother "sweet and kind". Interestingly, this family alludes both modernity and some traditional Senegalese values; they are sitting at a table which is not typical for mealtimes and the men in the photo are dressed in typically western clothing. The mother and daughter, however, are dressed in more traditional Senegalese clothing, and the family is eating baguette which is a stereotypical Senegalese breakfast. This is an interesting paradox, and one that is present in much of the powdered milk advertisements; by promoting both western ideas of modernity *and* traditional Senegalese values, these advertisements have the potential to appeal to most identities. In a 2017 "Vitalait" commercial, lions roar in the background while actors kick soccer



Figure 10. Source: [lactalis-international.com](http://lactalis-international.com)



Figure 11. Source *lactalis-international.com*

balls, wave Senegalese flags, and drink powdered milk. This commercial was celebrating the Africa Cup tournament, and simultaneously promoting their product. Ironically, the entire audio for this was in English; a tune in the background sang: “Vitalait, forever. Peace and love, forever” on repeat (Vitalait 2017). The use of a popular culture event like the Africa Cup, coupled with the use of traditional Senegalese imagery displayed the

acceptability of milk drinking by making it both modern and established.

Despite the presence of advertisements, it must be recognized that demand for commodities are not as two-sided as they may appear. Available literature (Orasmaa 2016, Broutin et al 2015, Corniaux et al 2012) argues that markets for fresh and powdered milk are segmented; having completely separate tastes, textures, and purposes, one does not purchase based on the price. These authors go on to say, however, that *competition* of the products cannot be segmented so easily. First, there is price volatility in both products due to world markets and Senegal’s climate (wet season vs dry season). Second, because of this, many dairies use milk powder as supplement during the dry season to keep up with demand. Finally, yogurt, liquid milk, and fermented milk are all products that are made from fresh milk *and* powder. Cheese, butter, and ice cream are not typically offered from fresh milk in Senegal. These factors increase competition between fresh and powdered milk.

Despite this, it is still important to recognize purchasing for taste. Just as some Senegalese consumers consider origin when purchasing milk, others may consider a taste or quality in powdered milk that cannot be offered in fresh. This is to say that powdered milk is not always bought as a last resort, solely for nutritional benefits, or simply because it is cheap. Similarly, fresh milk is not always bought as a means of “protest” or by wealthier classes.

#### ***4.4 Discussion of Results: Scale***

Through a historical timeline, a resistance analysis, and an economic model I have attempted to shed light on the question: *How have powerful institutions (MNCs, IMF/WB/WTO, France’s neocolonialism) capitalized on Senegal’s milk market, and what forms of resistance at the local,*

*state, or international level have challenged these institutions?* The main takeaways I intended to bring up were the following:

History became a central point in my understanding of this question because of how temporally situated this topic is. The purpose of my timeline was to fill in the blanks that I found in previous research, and piece everything together in order to talk about Senegal's milk market at an international scale. Another purpose of this timeline was to show *how* these power relations are played out. While each event is different, there were certain themes that played larger roles. The largest theme I see is scale: there is power in numbers. Resistance is most powerful when it is at an international scale, and so are institutions. Institutions can exert power through separating these pairings; when the European Commission broke the African, Caribbean, and Pacific nations into smaller sub-groups, they separated a larger group that had the ability to work together to demand a better policy. When people from all over the world met in Seattle to protest to WTO, they were able to shut down an important meeting.

Scale is extremely important when talking about resistance. Of course, the point of this analysis was to show the effectiveness of large scale resistance, however, my hope was to also show the importance of resistance at the civil society and private levels; while posting a comment on a Facebook page won't take down a multinational corporation, it can add to an ongoing conversation which may lead to a protest that decreases the salary of the CEO of that MNC. When ECOWAS collectively agreed to not sign the EPAs for almost seven years, they were met with the calculated ultimatum from the EU to tax West African imports in Europe. Because of historical dependence, this was unimaginable; ECOWAS was forced to sign (Fall 2016). The fact that the ECOWAS states worked together to resist these agreements, however, is significant and must be acknowledged as a success.

Finally, economics are necessary to show *how* institutions have capitalized on the Senegalese dairy market. The theme of scale comes in because, in the grand scheme of things, this topic may seem quite insignificant. I argue that this is not the case. First of all, it is significant because it impacts many important people and livelihoods. But it is also significant because it represents a microcosm of a very common exchange of powers: the "winners" exerting control over the "losers" in a world system. While there are rarely passive victims in this relationship, what is significant about Senegal's resistance is how widespread and public it is; representing a microcosm of how advocacy across borders can hold power.

## **5. Comparison & Relevance**

The remainder of my paper will try to understand this situation at a global level. First, I will discuss how this topic compares to other contexts, and what general lessons can be learned from

these. I will then apply these comparisons to the overall relevance of my framework. In section 6, I will suggest next steps for policy and recommendations for further research on this topic.

### ***5.1 Commodities as a Form of Power***

In this paper, I argue that one way institutional power can be exerted is through the control of a country's dynamic sectors. In this section I will show a few examples of how this can be played out through economic control of consumable commodities in other situations around the world.

Gewertz and Errington (2010) follow the consumption of fatty, cheap meat eaten by peoples in the Pacific Islands who are among the most "overweight" in the world. "Flap meat" is the highly fatty, underbelly of lamb and mutton which is generally rejected by First World countries, like New Zealand and Australia. The flaps are then exported to the Pacific Islands. "Core" to "periphery" trade brings the epitome of fatty meat to those with the epitome of "fatty bodies". The authors do not claim that flap meat causes obesity, or has any causal effect on lifestyle diseases. However, these flaps become compelling symbols of what many see as unequal relationships between differently located people – some eating and others eschewing, some becoming rich and others becoming sick. Flaps become not just a commodity, but also a controversial political identity, and one that holds power in key agricultural sectors.

Leatherman and Goodman (2005) juxtapose the relationship between four Yucatec Mayan communities' increased consumption of imported "junk" food and their willingness to "embrace" globalization because of high profits from tourism in Cancun. The decreased reliance on historical forms of agriculture is termed "cola-colonialism", and the increased reliance on tourism-based economy has increased public health hazards and environmental costs. Those who live and work here, however, recognize the direct access to income that tourism brings. Despite this, they are largely absent from any regulatory bodies that influence the inflow of commodities and institution of tourism. Neoliberal attitudes argue that free trade of commodities brings a closeness of nations by liberally sharing goods and services. This, however, ignores structural inequalities; in following the commodity of turkey tails around the globe, Singer (2014, 448) argues, "in a world of distinctly richer and poorer lands and peoples, and a vastly unequal distribution of power, trade is not a neutral economic process, but is itself a tool in the arsenal of power and a force in the rise of health problems in countries that now suffer the double burden of infectious and chronic diseases".

Political ecology of consumption "rests on understanding the importance of unequal power in our social and natural lives" (Heyman 2004, 128). Modern consumption, therefore, does not arrive alone; it requires capital and power, and movement along new paths of trade and commerce which demonstrate the new relationship between consumption, and other social,



cultural, economic, geographic, and biophysical changes (Heyman 2004; Singer 2014). Although type-two diabetes rates have increased significantly in Senegal in the past few decades (see Seck 2015), I am not claiming that the increased consumption of powdered milk has any correlation, or that it is a “killer commodity” (Singer and Baer 2008). I am, however, claiming that the unequal power that institutions like the WTO and multinational corporations hold allows them to financially undermine domestic actors in places like Senegal, and to capitalize on these power relations by selling a commodity that would otherwise go to waste. Powdered milk, then, becomes an example of dependency; milk powder is needed along with fresh to meet demand, yet restricts the development and capital that could be earned by domestic producers in the milk market. The terms of trade that facilitate this exchange *are* direct results of terms that were established during the colonial period, *and* they become neoliberal when they adhere to a global standard and disregard the costs of adjustment (e.g. increasing imports without increasing social programs that foster job development).

If power is more successful in higher concentrations, then setting a standard like the WTO guarantees success and capital for the “winners”. This also supports the success of transnational advocacy networks. Macatory et al (2010) study West African anti-globalization movements in Niger and Burkina Faso. Social movements brought into being by unions, human rights organizations, and consumer associations took governments in power by surprise. Overall, the authors argue that while the transnationality of these protests brought them under the public eye, the demands largely lost momentum because the authorities that the protesters were demanding from had little resources to help the cause. Despite this, it can be argued that transnational resistance is successful within neoliberalism because, “(1) states’ choices vis-a-vis political challenges are in fact conditioned by their relationships with other global actors; and (2) increased global integration generate potential sources of unity for political movements” (Smith and Johnston 2002, 8). Therefore, while there is not one large ‘success’ that I assert when discussing resistance within Senegal’s dairy industry, there are many smaller successes that are quite relative, yet nevertheless there (e.g. postponing the signing of the EPAs due to Wade’s opposition, public protests, and media). These need to be recognized as forms of power in the same way institutional power is so recognized.

## ***5.2 Re-framing***

The framework of my paper asked, *How do power relations influence the control of consumable commodities within a neoliberal system?* I stand that at a global level, transnational institutions control commodities through historical and changing global trade agreements, through marketing and advertisement that directly target consumers, and through controlling the supply (e.g. policies that allow a 40% increase of powdered milk in Senegal’s market after the milk quotas ended, or lowering the prices of powdered milk during the rainy season so that it is always the

cheapest option). Additionally, this perpetuates colonial attitudes by veiling this control with the justification of development and modernity. The power of transnational advocacy, too, influences the control of consumable commodities by promoting or protesting policies and laws, engaging in discourse, and maintaining a market of alternatives to a dominant commodity (e.g. Neex Soow stands). This phenomenon is complex and each case is different; however, these kinds of power dynamics ultimately demonstrate an interconnected world system and political ecology: the connections between the political, economic, geographical, and ecological domains are both established in history and are constantly changing. For example, the case of fatty flap meats in the Pacific Islands is continuing to be shaped; in 2007 Samoa, Fiji, and Tonga governments banned the importation of flap meats with the intention of supporting domestic agriculture. In 2013, however, Samoa finally joined the WTO and this ban has since been lifted, opening the trade routes once more (Singer 2014).

## **6. Next Steps & Further Research**

I will now make some final comments on next steps and further research. I will suggest one policy change and one practical change that I envision would reasonably make Senegal's milk market more equitable and profitable, while still creating a market for both fresh and powdered milks. Ultimately, if these were enacted, my hope would be that change would be breached far past just the dairy sector, moving towards fairer trade agreements and balances of power. These suggestions are quite optimistic, most likely flawed, and would take a lot of work on many levels. I am not offering any silver bullets. I propose the reinstatement of some type of milk quota that is global and the promotion of domestic investment in local dairies over foreign investment.

### ***6.1 Milk Quotas and Domestic Investment***

I am basing the need for another milk quota simply on the needs of dairy farmers throughout the world who have struggled since the end of the quotas to compete in a world flooded with dairy. Ideally, a global milk quota would both curb overproduction - which would have positive ecological impacts such as soil health, methane emissions, and biodiversity, and reduce costs of storage - and would raise the global price of milk, allowing domestic dairies to compete with multinational corporations. This quota could be flexible; it could start based on each country's previous production, but change if that country experiences more demand. Some might argue a milk quota would increase prices for consumers and that it would limit the financial means of producers. Ideally, however, a milk quota would be large enough to meet demand, and since dairy is such a highly consumed commodity, it is relatively inelastic. Therefore, demand does not

change much when price goes up (Andreyeva et al 2010). Furthermore, if these quotas were somewhat modeled after the previous ones, allowances could be traded between farmers.

Another option would be to tax larger institutions, like MNCs, when their products cross borders. This of course would be difficult to administer and enforce, and ultimately unrealistic because it would largely not comply with WTO regulations, but could foster growth of smaller dairies and other economic sectors. The suggestion of a quota or tax, however, does not address all income inequality related issues; even the development of smaller dairies within countries like Senegal won't significantly promote economic growth for the lowest income farmers (Orasmaa 2016). Still, adding quotas and taxes could further promote overall domestic economic growth and decrease wealth inequality in Senegal.

Furthermore, I argue that foreign investment - especially by MNCs - in dairies should be limited, and domestic investment should be promoted. Piketty (2014) shows that in the continents of Europe, America, and Asia, national income per capita is usually equal to output per capita. The wealthier countries in each bloc (typically the north) receive a positive flow from capital, and this is partially cancelled by the flow out of the poorer countries (typically the south and east). This usually ends up equal, give or take 0.5 percent. The only continent where this is not the case is Africa, because nearly 20 percent of capital is owned by foreigners and the income of Africans is roughly 5 percent less than the continent's output. Furthermore, as wealthy countries invest in poorer countries, their share of income can grow to massive proportions, always remaining greater in poorer countries, "which must continue to pay to foreigners a substantial share of what their citizens produce" (Piketty 2014, 70).

Therefore, while the success of La Laiterie du Berger (the commercial dairy in Senegal discussed in section 4.2) is highly impressive and encouraging, it is concerning that one of their largest investors is Danone, the French multinational food corporation. Danone does strive to promote their social responsibility through buzzwords like "health" and "sustainability", but is ultimately the fifth largest food corporation in the world (Taylor 2017). While there may be good intention, it is hard to know if Danone is simply capitalizing on the discontent with foreign products by investing in a company that is seemingly completely "Senegalese". Although foreign investment is highly attractive and often necessary, domestic investment would be much more productive in facilitating domestic economic growth. However, because the continent of Africa's output is higher than Africans' incomes, this will be difficult, and, dairies may not be what wealthy Senegalese investors are looking for.

## ***6.2 Suggestions for further research: Women, Climate Change, and Commodities***

Clearly, further research must be done on this topic. I recommend that research be done in three fields: investment, climate, and commodities. As shown above, investments must be made for farmers' socio-economic growth. I believe that researching women farmers needs to be a priority for Senegal. Women are more likely than men to be the collectors, producers, and salespeople of dairy in Senegal. With an increase in flow of powdered milk, women's jobs will be particularly at risk; even as local dairies have become more prominent in recent years, men have taken over the tasks as the jobs become more industrial and profitable (Orasmaa 2016). Similarly, research must be done on the vulnerability of the lowest income farmers and the impacts of trade liberalization. Researching international trade coupled with individual actors is both highly interesting and important work that leads to a global conversation.

As a coastal state, Senegal is highly susceptible to drought, locust invasion, flooding, sea-level rise, coastal erosion, and bush fire. Furthermore, it can be argued that increased trade liberalization can further climate impacts by decreasing biodiversity, and increasing soil erosion and runoff (OECD 2004, Ackerman et al 2003). Terms of trade like the North American Free Trade Agreement (NAFTA) has been continuously criticized for bringing more harm than good (e.g., increased pollution and economic damage) to countries like Mexico (Dundun 2017). It would be interesting, therefore, to perform studies that question the impact of the EPAs or other agreements on climate. This is highly important as well because of the reliance of farmers on Senegal's rainy season to maintain crops. Both wet and dry seasons are becoming increasingly harsh, which lead to uncertainty in income year to year. Furthermore, to address climate change at the agricultural level, research should be done on the use of biofuels or renewable energy for agriculture in Senegal.

Finally, I suggest more research on the role of commodities that recognizes a situated uniqueness and a global importance. Studying the histories of commodities is often revealing of the histories of power in certain contexts. Food, beauty and cleaning products, drugs and pharmaceuticals, etc. are all present in our lives much more than we realize. This isn't necessarily a bad thing, but exposing this presence can be very revealing. As I hope has been proven in this paper, commodities rely on more than just the consumer and are highly complex.

### **6.3 A Final Note**

I read an interview with Didier Awadi about his most recent album *Ma Révolution* which came out in 2013. Awadi says,

When we look at everything that is happening in the West African subregion, and around the world ... there is an air of revolution. I would like us to go to the end of this revolution, to change the systems and reflexes inherited from colonialism

in order to develop ourselves ... the election [of current president Macky Sall] is part of this reflection but there is also what happened in Côte d'Ivoire, Libya, Mali, Guinea-Bissau ... the challenges of Wall Street, the economic partnership agreements between North and South. In short, it is a global movement, there is an air of revolution in the world: people want to change the capitalist system as it is today. I think this is time for Africa to do otherwise and adopt policies based on our realities. (Diagne 2013, translated from French)

In this quote Awadi is a bit of a revolutionary, but he is also a realist. Power relations are hardly new, and learning from the past is an important way to influence the future.

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