Colonial Appetites: The Process of satisfying American food demand and its effects to colonial policies on animal disease and agriculture in the Philippines, 1902-1910[1]

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ABSTRACT

The Americans played a huge role in addressing various health-related issues in the Philippines at the beginning of the 20th century. This includes the improvement of public health and sanitation, as well as in combating the effects of various animal-related diseases, particularly cattle-related disease that threatened not only the livestock, but also agricultural production in the country which was also dependent on beasts-of-burden. Given the role of the Americans in health, there is a tendency for researchers to interpret this aspect of the American colonial period in the Philippines in a positive light, particularly focusing on the improvements especially on the establishment of health institutions.

Building on earlier studies about public health and disease in the Philippines, this study contextualized American imposed measures and policies, specifically in addressing the problem of animal disease in the Philippines, to American imperialism during the early 20th century with the assumption that such measures were largely influenced by the United States' objective of creating an environment conducive for American personnel and administrators stationed in their new colonial territory.

As such, this study investigated how the process of securing the food supply of the military influenced the prioritization and urgency of implementing policies against animal disease in the Philippines. The result showed that aside from mitigating the negative effects of cattle-related disease in domestic agricultural production, the Army's demand for beef was also a big consideration on how the Insular government prioritized

[1] The initial result of this study was presented in the 2020 CAS Student-Faculty Research Conference of the College of Arts and Sciences, University of the Philippines- Los Baños with title "Colonial Appetites: a gastronomic perspective on policies against epizootic diseases in the Philippines during the American Period, 1899-1913.

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policies. The urgency of keeping the military healthy and well fed also caused the re-appropriation of funds from other agricultural programs that might have benefited Filipino farmers in general especially programs that aimed to address problems on agricultural pests. Filipino farmers were also in the receiving end of the unwanted effects of stringent measures imposed in the islands.

Keywords: *(Palatability, cattle-related disease, rinderpest, beef)*

I. Introduction:

Putting human, animal, and plant diseases under control was one of the primary concerns of the Americans when they colonized the Philippine islands. This was crucial not only for the purpose of making the archipelago more conducive for American presence, but also for the purpose of maximizing their economic gains especially in the agricultural sector.

The importance of disease control and eradication prompted the rise of important institutions in the fields of agriculture and medicine such as the Bureau of Agriculture in 1902 and the College of Veterinary Medicine in 1908. It also necessitated the implementation of various scientific and traditional strategies in disease management such as quarantine, mass inoculation, and vaccination. While these developments provided substantial leaps in the field of agriculture and medicine in the country, scholars such as Reynaldo Ileto emphasized the importance of critically assessing these influences in the context of colonization and imperialism.[2]

Building on Ileto's interpretation on the history of medicine and public health in the Philippines, this study therefore presents another perspective on American colonial policy by focusing on food demand, particularly from the American troops stationed in the Philippines, and how it affected colonial policies against epizootic diseases in the country. The time-frame for this study begins from 1902, when the Americans declared the end of the Filipino-American war, and their focus shifted towards internal policies in agriculture, signified by the establishment of the Bureau of Agriculture, to 1910 which was the year when the Committee on Beef was created, and comprehensive report was submitted regarding the situation of beef supply in the country.[3] This study answers the questions: What were the policies and measures

[2] Reynaldo Ileto, "Cholera and the origins of the American sanitary order in the Philippines," in *Imperial medicine and indigenous societies*, ed. David Arnold (Manchester: Manchester University Press, 1988), 125-148.

[3] G.E. Nesom, ed., *The Philippine Agricultural Review, Volume 3, No. 7* (Manila: Bureau of Public Printing, 1910), 696-698.

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implemented by the American insular government to address the problem of satisfying the food demand of troops in the Philippines and how did it affect the crafting of policies and measures against animal-related disease, particularly on cattle, to secure the steady and safe supply of food to the American Army? Additionally, how did the dynamics between providing food and policy-making and implementation concerning animal-related diseases affected Filipinos in general and Filipino farmers in particular?

In answering these research questions, this study utilized the accounts from the reports of the Philippine Commission, the War Department, as well as various articles and reports that were published in the Philippine Agricultural Review magazine which was also a publication sponsored by the Bureau of Agriculture.

II. Public Health and Food History: A short review of literature

Since this study is centered on food security and health policies implemented to secure the food demand of the American army stationed in the Philippines from 1902 to 1910, it is necessary to position it within the available literature on public health and disease management and food history in the Philippines to determine the trends as well as the gaps that this study may address.

Interpreting colonial interventions in disease control and management in the Philippines

Ann Carmichael in *Infectious Disease and Human Agency: An historical overview* gives credence to a historical approach to disease and history where she suggested that the evolution of effective epidemic and disease control and management was linked to changing perceptions of geographical and socioeconomic differences through time.[4]

By identifying three historical stages that links human history and global change and the three modes of anthropogenic production that accompanied each stage, she was able to trace how human movement throughout history also accompanied and facilitated the movement of infectious diseases. The hunting and gathering stage will signify the start of the human race's dominance over the environment, while the agricultural and industrial stages paved the way for a more complex society with different socioeconomic activities and more defined socioeconomic classes. Increased socioeconomic

[4] Ann Carmichael, "Infectious Disease and Human Agency: An Historical Overview," *Scripta Varia*, *106* (2006): 1-46.

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activities marked the start of commerce that provided an economic impetus for colonization and global movement. Infectious disease will be spread through this globalizing movement of people and its effects would be felt differently throughout different socioeconomic classes. Such would be the case within urban settings where the rich would gain better access to health while the poorer sectors in society would be subjected to more hazardous health conditions. This will also become evident in the process of conquest as new diseases are spread to new areas throughout the world. [5]

In the case of the Philippines, the history of disease control and management, if viewed from an administrative and political point of view, is also closely tied to its colonial history as one the main factors in the spread of infectious disease in the Islands. As so called "colonial masters", the Spaniards and the Americans were both spreaders and the ones responsible on determining and establishing policies on how to deal with these diseases.

One of the major works dedicated on disease in the Philippines is Ken De Beviose's *Agents of Apocalypse: Epidemic Disease in the Colonial Philippines* where he emphasized the importance of thinking about historical processes ecologically to be able to understand how humans "interact with an ever-changing environment". Human intervention, especially those he mentioned as "forceful intrusions" to the environment, is one of the crucial historical factors that enabled drastic changes in these environments. One such example of forceful intrusion is that of colonization, where, in the case of the Philippines, the Americans and the Spaniards became the most forceful intruders. While not all diseases can be attributed to the colonizers in the Philippines, their intrusion to our environment as well as their aim to exploit our resources became the primary context and the major contributor of the emergence of diseases in the Philippines such as various outbreaks of venereal diseases, smallpox, beriberi, malaria, and cholera.[6]

With these intrusions, the process of changing the health conditions in the Philippines also became a huge part of the project of colonization. Warwich Anderson in *Immunization and Hygiene in the Colonial Philippines* showed the link between the process of immunization against smallpox and that of the American's policy of surveillance and registration of Filipinos, citing this as one of the earliest American intrusions to Philippine social life. Anderson also cited the symbolic significance of immunization as Americans projected it as part and parcel of "benevolence" being applied here in the Philippines.[7]

[5] Carmichael, "Infectious Disease," 7-15.

[6] Ken De Bevoise, *Agents of Apocalypse: Epidemic Disease in the Colonial Philippines* (New Jersey: Princeton University Press, 1995), 6-14.

[7] Warwick Anderson, "Immunization and Hygiene in the Colonial Philippines," *Journal of the History of Medicine and Allied Sciences*, 62. (2007): 1-20.

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Reynaldo Ileto in *Cholera and the Origins of the American Sanitary Order in the Philippines* also emphasized a similar interpretation towards medical response in the Philippines during the time of the Americans. Whereas nationalist historians tend to mellow down with American intervention to public health and disease prevention in the country, Ileto emphasized the need to situate medicine in the Philippines in the context of "colonial war" and the campaign for pacification. Relying solely on the report made by Dean C. Worcester is one of the primary catalysts why there is an apparent disjuncture in this aspect of Philippine history, where the Filipinos were portrayed as uncooperative, unsanitary, and backward in terms of health consciousness, thus enabling the spread of Cholera in the Islands. Ileto however cited the numerous times when the disease was also spread by American soldiers as well as the ineffective quarantine measures that were implemented. In Southwestern Luzon for example, the effects of war, poverty, and hunger coincided with the need to contain the disease, prompting people to violate quarantine laws in search for food and other necessary supplies. Ileto also mentioned how the Cholera outbreak overwhelmed the Americans as they relied heavily on quarantine measures, with the lack of medical experts, to prevent the spread of the disease.[8]

Indeed, the lack of medical experts was also a primary concern especially for the Americans in the Philippines. In Anderson's book entitled C*olonial Pathologies American: Tropical Medicine, Race, and Hygiene in the Philippines*, he stated that the military not only assumed the task of going after the Filipino revolutionaries, but also the challenge of ensuring that the sanitary and health conditions in the Philippines would be suitable for the army.[9]

As the rise of foreign animal and human diseases and epidemics marked the turn of the century from the 1800's to the 1900's, both the Spanish and the American colonial governments respectively saw the importance for a native response considering the lack of available medical personnel coming from the outside. Luciano P.R. Santiago in his article *First Filipino Doctors of Medicine and Surgery* traced the history of the first Filipino doctors to be trained here in the Philippines to the establishment of the Faculty of Medicine in the University of Santo Tomas (UST) in 1871. However, the university was only allowed to give a licentiate in Medicine prompting wealthy Filipinos to continue their studies in Spain, specifically in the *Universidad Central de Madrid* where they can acquire their degree in Medicine (M.D.). During the American period, those with licentiates in

[8] Ileto, "Cholera and the origins," 125-140.

[9] Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2006), 13-73.

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Medicine were allowed to practice in the field, and UST finally acquired the authority to grant an M.D. degree by 1902.[10]

Under the Americans, the training of native medical professionals was emphasized in colonial health policy which also included medical professionals for animal health. As the Americans assessed the overall conditions of the Philippines, one of the more pressing health issues aside from human disease was the persistence of animal diseases especially those affecting cattle. According to Arleigh Ross Dela Cruz in his article *Epizootics and the colonial of the United States in Philippine veterinary science*, dealing with diseases related to cattle in the Philippines became a very important concern since the agricultural sector in the country was heavily reliant on the services of these beasts of burden. So, in addition to the Bureau of Health, the Bureau of Agriculture was established as well as the Bureau of Animal Industry. Later on was the founding of the College of Veterinary Science of the University of the Philippines in 1908. Dela Cruz also focused on how colonial health policies reflected the American attempt to master the "tropics" using the progress in science as applied in the fields of medicine in the Philippines.[11]

Given the available literature on the history of public health and management in the Philippines during the American period, the important takeaways are: 1) The history of disease, health, and medicine in the Philippines, especially in terms of government policies, is closely tied to the country's colonial history and should be discussed in the context of conquest and colonization, and; 2) Colonial health policies in the Philippines prompted different changes at different scales from the Filipino body, communities, and institutions.

Food History in the Philippines

There is also a substantial amount of literature that are focused on food history of the Philippines. One of the most notable examples is Felice Sta. Maria's *The Governor General's Kitchen: Philippine Culinary Vignettes and Period Recipes, 1521-1935* which offers a very comprehensive and traditional take on food history focused on gourmet and food recipes in colonial Philippines, specifically those consumed by royalties and public officials in the country, from the start of the Spanish expeditions in Asia towards the establishment of the Philippine Commonwealth.[12]

[10] Luciano Santiago, "The First Filipino Doctors of Medicine and Surgery (1878-97)," *Philippine Quarterly of Culture and Society* 22 (1994): 103-140.

[11] Arleigh Ross Dela Cruz, "Epizootics and the Colonial Legacies of the United States in Philippine Veterinary Science," *International Review of Environmental History* 2 (2016): 143-172.

[12] Felice Sta. Maria, *The Governor-General's Kitchen: Philippine Culinary Vignettes and Period Recipes, 1521-1935* (Mandaluyong City: Anvil Publishing, 2006), 15-20.

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Doreen Fernandez's *Tikim: Essays on Philippine Food and Culture* on the other hand contextualizes Philippine food in Filipino society from what is provincial to what resonates in popular culture. She also provides a sociological and historical discussion of food in the Philippines.[13]

Indeed, more than the food and the flavors themselves, it is noteworthy to also examine the socio-political, historical, and economics of food. As enunciated by Marion Nestle in her book *Food Politics: How the food industry influences nutrition and health*, food is not a neutral object wherein as a basic human need, it is embedded within complex social processes such as the dynamics of supply and demand, the government's role in food production and distribution and its legalities, and ~~how~~ the control of capitalism on the flow of food networks in a global and local scale. In addition, Nestle also highlighted how discourses on nutrition, diet, and food science, affects vastly affects how societies perceive food and health.[14]

In the Philippines, another example of a study that used food as a framework to analyze important historical events is Daniel Doepper's *Feeding Manila in Peace and War, 1850-1945* which is focused on how Manila as a center of politics and the economy was sustained by multiple networks of food-producing provinces and the system by which food products were transported towards the capital. By focusing on this relationship, Doepper's uncovers how Manila grew as a megacity which then drastically changed the socio-political and economic dynamics of people within the metropolis and its adjacent environments and provinces.[15]

Equally notable is Resil Mojares' *Deciphering a Meal*, an essay which is part of his book compilation *Waiting for Mariang Makiling: Essays in Philippine Cultural History*. In this chapter, he analyzed how elites in Cebu consolidated political favors from the new "colonial masters" and maintained their status in the province's social hierarchy mainly through formal dinners and feasts.[16]

From the said literature, food as an important part of human nourishment and life, must be equally understood as an element in human society that both

[13] Doreen Fernandez. *Tikim: Essays on Philippine Food and Culture* (Mandaluyong City: Anvil Publishing, 1994), 1-59.

[14] Marion Nestle. *Food Politics: How the food industry influences nutrition and health* (Berkeley: University of California Press, 2002), 1-28.

[15] Daniel Doeppers. *Feeding Manila in Peace and War, 1850- 1945* (Wisconsin. University of Wisconsin Press. 2016), 3-12.

[16] Mojares, Resil. "Deciphering a Meal" in *Waiting for Mariang Makiling: Essays in Philippine Cultural History*, ed. Resil Mojares (Quezon City: Ateneo de Manila University Press, 2002), 198-217.

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influences and is influenced by various societal factors, relationships, and dynamics. Various social factors associated to food such as supply and demand, production, and the politics of food are therefore crucial considerations when writing about food history in the country especially when it relates to the history of public health in the Philippines.

This study can therefore be situated among works covering the history of public health and medicine, as well as the food history of the Philippines as it aims to answer how the process of satisfying colonial food demand affected health policies during the early years of American occupation in the country.

III. Of American troops and overcoming the Philippines' environment

The transition from the Spaniards to the Americans was a violent period in the country's history. As Filipino revolutionaries successfully defeated Spanish forces, the Spanish colonial government entered a pact to sell the Islands to the Americans to avoid the humiliation of being overthrown by a race whom they considered inferior for almost three centuries. With the Treaty of Paris in place, all that was left for the Americans was to quell the revolutionaries and the Aguinaldo-led Filipino revolutionary government of whom they promised to support in the first place.[17]

This prompted for the need to send military officers and enlist men towards a new and foreign environment that tested not only the military capabilities of the United States, but also the physical adaptation of their army in a new ecological system. From 1899 to 1902, over 120,000 soldiers were sent to the Philippines and were divided into four Departments covering contiguous areas in the archipelago namely Northern Luzon, Southern Luzon, Visayas, and Mindanao and Jolo.[18]

With the surrender of Emilio Aguinaldo and the United State's declaration of the end of the Filipino-American war in 1902, the number of American soldiers stationed in the islands was greatly reduced to 22,483. The creation of the Philippine scouts in 1901 which saw an increase in native enlistment to 4,978 by 1902, also enabled the United States to pull American soldiers out of the country during the same year further decreasing the number of army personnel in the country to 13,480.[19]

[17] Renato Constantino, *A History of the Philippines* (New York: Monthly Review Press, 1975), 169-181.

[18] Elihu Root. *Annual Reports of the War Department for the Fiscal Year Ended June 30, 1902, Volume 1, Report of the Secretary of War and Reports of Bureau Chiefs.* (Washington: Government Printing Office, 1903), 1-20.

[19] Root, *Annual Reports*, 125-140.

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As such, the Army played a crucial role in the Philippines' colonization and way beyond their main function of securing the territory from Filipino independence movements, as well as other groups within the islands whom the United States perceived as threats to its imperialist aspirations. For example, due to the lack of teaching personnel, the Army had to step in as temporary teachers from 1899 to 1901 within pacified areas while waiting for the assignment of American teachers. In the case of the Philippines, the first educators were called the Thomasites, who started to arrive in the country from the years 1901 to 1902.[20] The medical corps of the Army also had to stay longer to address the lack of medical personnel in the country especially during the cholera outbreak of 1902.[21] American troops were also given the additional role of enforcing health protocols not only for human-related disease but also, with the lack of veterinarians in the Philippines, in animal diseases especially during the early years of American occupation. Their role in this front, including that of the Philippine scouts and constabulary, was always given recognition in the numerous reports of the Bureau of Agriculture.[22]

Indeed, the tropical environment of the Philippines in itself, was a challenge in addition to the objective of removing the Filipino Revolutionary Government and quelling the revolutionary forces that have, since 1899, adapted the guerrilla form of resistance. The new colonizers needed to equally wrestle with human diseases such as malaria, dysentery, ~~and~~ cholera, and epizootic diseases such as rinderpest, foot-and-mouth disease, surra, among others. Ironically, as important as the Army's role was to the enforcement of health policies, was the Army's role in spreading disease as well as in hampering the process of "sanitizing" the Islands.

As discussed by Ileto in his article regarding cholera in the Philippines and as mentioned in the earlier part of this paper, American soldiers themselves were affected by the disease, making them as equally responsible in spreading it throughout the Islands. Ileto also emphasized the fact that the role of the Filipino-American war in spreading disease is often muted in American reports, as they continuously blamed the Filipino populace's lack of participation in spreading the dreaded disease. A good example of this is the

[20] Alexander Calata, "The Role of Education in Americanizing Filipinos," in *Mixed Blessing: The Impact of the American Colonial Experience on Politics and Society in the Philippines*, ed. Hazel McFerson (Westport: Greenwood Press, 2002), 89-98.

[21] Root, *Annual Reports*, 1-20.

[22] The indispensable role of the Philippine Scouts and constabulary can be read in the reports of the Bureau of Agriculture as published in the Philippine Agricultural Review magazine especially from the period 1908 to 1910.

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disregard for human welfare during the use of re-concentration zones as a military strategy in fighting against revolutionary guerrillas. These zones became a suitable venue in facilitating the spread of disease, since these areas were isolated and access to food, water, and medicine was scarce. It was also rather ironic that American doctors knew that physical distancing and avoiding mass gatherings were effective in dealing with Cholera; thus, the use of quarantine as a strategy was imperative, yet the military enforced re-concentration zones, which gathered and isolated huge numbers of people in one place. This was especially true in the provinces of Batangas and Laguna wherein strict and militaristic quarantine measures not only caused severe infections, but also prevented the conduct of agricultural and economic enterprises. Alongside the negative effects of cholera that affected both the body, through illness, and the social lives of Filipinos, through the strict implementation of American health policies, agricultural production was also hit by a severe case of Rinderpest which decimated the population of cattle by 90% at the turn of the century.[23]

In retrospect therefore, American troops served three functions when they were sent to the Philippines: 1) Fighters against the Philippine Revolutionaries and preservers of American-led peace and security, 2) as personnel responsible for proper implementation sanitation and health policies by the government such as quarantine and health and sanitary inspections, and, ironically 3) as agents carrying the disease. While the last function may be considered as indirect since American soldiers were unaware that they were facilitating the spread of diseases in the country, the first two functions signify the importance of the American troops in realizing the imperialist ambitions of the United States.

So, despite the decrease in the number of American soldiers in the Philippines by 1902, and considering the frail health system which was overwhelmed by both human and animal diseases, the need to ensure the health and well-being of Americans, particularly American soldiers in the islands, continued to be an important objective wherein American administrators had to quickly implement laws that will establish institutions for health, as well as in securing food for American personnel. So in addition to the prospect of improving the quality of agriculture in the country, one of the underlying concerns that drove this objective was of course the welfare of the Americans, and specifically providing for their need for food.

[23] Ileto, "Cholera and the origins," 125-140.

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IV. Beef Dynamics

With the crucial role of the Army in pacifying the Islands, it was equally important to keep the American war machine well fed and nourished with the best food source possible. The Quartermaster's Department, the subsistence department of the United States Army, and the chief commissary of the Division of the Philippines were in charge in making sure that the army was well refurbished and issues on supply are well taken into account and solved immediately.[24] And with beef being one of the most desired food by army personnel stationed in the country it was important for the United States to immediately address the issues of beef supply and cattle-related diseases in the Islands. So much so that in 1910, a special Committee on Beef was established which was composed of the Vice Governor, the Director of the Bureau of Agriculture, the assistant Quartermaster-general, and various officers of the United States army in the Philippines. The main objectives of this committee were to assess the current situation of beef supply in the country, evaluate the status of beef cattle supply in the Philippines as well as to determine the possibility of using native beef (carabao) for the beef demands of the army.[25]

Without sufficient beef source in the Philippines, the army had to heavily rely on imported beef especially during the early years of American occupation. In 1899, meat supply was transported to the Philippines from Australia through the United States Navy boat *Culgoa* and the United States Army boat Duke of *Sutherland.* Beef from Indo-China were also transported to the Philippines, but the quality of the meat gained generally unfavorable reviews from the soldiers. Only one shipload of beef came from the United States through the US Navy boat Glacier.[26]

By 1905, the Philippine Commission assessed that relying on beef supply coming from the United States was unsustainable, since it was apparent that the main concerns were of course the freshness of the meat, as well as its storage and preservation hence the importance of a closer source. Japan was also considered; however, their beef was deemed as too small and expensive by American standards.[27]

[24] C.F. Humphrey, "Report of the Quartermaster-General"in *Annual Reports of the War Department for the fiscal year ended June 30, 1903, Volume II. Armament, Transportation, and Supply.* (Washington: Government Printing Office, 1903), 1-33.

[25] Nesom, *The Philippine Agricultural Review*, 1910, 696.

[26] G.E. Nesom, "Report of the Committee on Beef" in *The Philippine Agricultural Review, Vol. 4 Number 9*, ed. G.E. Nesom (Manila: Bureau of Public Printing, 1911) 503-509.

[27] Bureau of Insular Affairs. *Sixth Annual Report of the Philippine Commission, 1905.* (Washington: Government Printing Office, 1906), 26.

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Australia then became the main supplier of beef for the army from the period 1902 to 1910 with Queensland Meat and Export and Agency Company (limited), of Brisbane as the contractor by 1910. The US Army ordered a total of 7,417,929 pounds of beef at 0.086 pesos per pound and 428,872 pounds of mutton at 0.075 per pound. From the report of the Committee on Beef headed by then Director of Agriculture G.E. Nesom, Lieutenant Colonel David L. Brainard, and Deputy Commissary Major C.R. Krauthoff on December 10, 1910, it was estimated that the army was purchasing an average of 1,350,000 pesos worth of beef and mutton annually from the start of American occupation to 1910.[28]

Ships delivering beef docked in Manila twice every month. It was then unloaded and stored at the Manila Cold Storage Plant, then reshipped to all military detachments in the Philippines. To ensure the freshness of the meat, beef had to be transported frozen solid in ice boxes. In 1902, the United States sent two refrigerator steamers, *Seward* and *Wright*, to serve as the main modes of transporting meat within the archipelago. Both ships were part of the 20 army-owned and chartered ships that were deployed by the government for inter-island transportation. This was in line with the fact that using maintaining government owned transportation, as well as chartered ships was relatively cheaper compared to using commercial lines. As such, the army still needed to dole out 483,860 dollars annually to finance the water transportation needs of all the military departments in the Philippines. From this amount, 164,514 dollars was needed to maintain and operate *Seward* and *Wright*.[29]

Having refrigerated steamers on the other hand did not entirely solve the army's need for continuous beef supply in the country especially from those who were stationed in the Visayas and Mindanao areas. From the report of the chief commissary of the Department of Visayas in 1903, delivery of beef was not done in regular intervals and of 634,305 pounds of meat transported by Seward and Wright beginning 1902, 19,635 pounds were ~~actually~~ spoiled during the delivery. One of the more interesting reasons was that of the Cholera outbreak, which prevented the timely delivery of beef to military detachments due to quarantine measures in the ports. 5,047 pounds were lost due to quarantine as the ice in ice boxes melted during the isolation period. Spoiled meats were just simply dumped into the sea. Another reason was the insufficient amount of ice used during transport.[30]

As such, the army was the biggest consumers of ice during the early years of American occupation in the country with expenses amounting to

[28] Nesom, "Report of the Committee on Beef," 503-505.
[29] Humphrey, "Report of the Quartermaster-General," 35-36.
[30] Humphrey, "Report of the Quartermaster General," 54-55.

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138,561.91 pesos for the years 1904 and 1905. In 1905, the subsistence department of the Army also entered into an agreement with the Insular government to provide 219 cubic feet of cold storage from the facilities of the Insular Cold Storage and Ice Plant in Manila.[31]

The huge cost in supplying the food demands of the army in the islands prompted the Insular Government to soon look for alternatives as well as other ways to replenish the beef supply in the Philippines. As stated by the report of the Committee on Beef in 1910, no change would be advisable in the continuous consumption of Australian beef unless two conditions are met by the insular government: either use the native Philippine beef or establish Government cattle ranches in the islands.[32]

Establishing cattle ranches however, meant the introduction of foreign cattle breeds in the country as well as the conversion of arable lands as grazing areas. The problem was that beef cattle breeds that were acceptable for the Americans were not acclimatized to the tropical environment of the Philippines. Most of the breeds that were introduced in the country quickly deteriorated and consequently failed to produce offspring. Milk-producing cows also failed to produce enough milk due to the quality of forage in the islands, and in extreme cases, died due to the hot tropical climate or disease.[33]

The presence of various cattle-related diseases in the country became one of the main reasons that also hampered the delivery of live cattle that would have been instrumental in establishing cattle ranches needed to address beef demand as well as in augmenting the already depleted number of draft cattle for agriculture. By 1910, the following diseases were identified to be existing in the Islands namely rinderpest, surra, glanders, foot-and-mouth disease, and ulcerative lymphagitis.[34] Not being able to provide solution to cattle-related disease would not only be disastrous to the health and wellness of American soldiers and officials in the country, but also to agriculture. To address this problem, the insular government established a school for veterinary medicine in 1908, which was then integrated to the University of the Philippines.[35] They also enacted policies that may help in combating cattle-related diseases in the islands.

[31] J.L. Clem, Report of Insular Cold Storage and Ice Plant, " in *Sixth Annual Report of the Philippine Commission, 1905.* (Washington: Government Printing Office, 1906), 26-61.

[32] Nesom, "Report of the Committee on Beef," 526.

[33] Bureau of Insular Affairs, *Fifth Annual Report of the Philippine Commission, 1904.* (Washington: Government Printing Office, 1905), 64-65.

[34] Nesom, "Report of the Committee on Beef," 514

[35] Dela Cruz, "Epizootics and the Colonial Legacies," 164-166.

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Most notable policies were: 1) Act No. 1760, otherwise known as the quarantine law, which prevented the introduction of communicable animal diseases through the close monitoring of ports of origin as well as the implementation of strict quarantine measures against imported animals;[36] 2) Act No. 1827 appropriated 100,000 pesos for the suppression of animal-related diseases in the Philippines; 3) Act No. 1855 appropriated 150,000 pesos for the construction of livestock depot as well as quarantine facilities in the ports of Manila, Iloilo, and Cebu,[37] and; 4) General Order No. 15 which prevented the unloading of cattle that died due to disease during shipment.[38]

Upon the implementation of the Quaratine Law in 1907, a total of 106,228 cattle were inspected in the port of Manila wherein 42,942 were imported from other countries. There was also a considerable decrease in the number of infections recorded wherein from 3,779 cattle and 614 Carabaos infected by rinderpest and foot-and-mouth disease recorded in 1909, only 441 infected cattle and two carabaos were recorded by 1910.[39]

Despite the improvements in cases being recorded in the ports, there were still cases of outbreaks of rinderpest and other cattle-related diseases that were recorded from the period 1907 to 1910 especially in various provinces throughout the archipelago. This led to the implementation of the Special Order No. 10 or the Field Methods in Combating Rinderpest which was aimed to supplement inoculation efforts that were also being conducted by the Bureau of Agriculture, thanks to the help of the San Lazaro serum laboratory and the Alabang depot.[40]

Considering all the challenges and the cost of transporting frozen beef as well as live cattle in the Philippines, why was the Insular Government hesitant in improving the number of native cattle in the country which would have been an easier venture not only in terms of logistics but also in preventing cattle-related diseases abroad from entering and arriving in the archipelago's ports?

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[36] War Department . *Annual Reports, 1907, Volume X. Acts of the Philippine Commission.* (Washington Government Printing Office, 1907), 445.

[37] G.E. Nesom, ed., *The Philippine Agricultural Review, Volume 2, Number 1.* (Manila: Bureau of Public Printing, 1909), 48-53.

[38] G.E. Nesom, "Report of the Director of Agriculture for the fiscal year ending June 30, 1910," in *The Philippine Agricultural Review, Volume 4. Number 1*, ed. G.E. Nesom (Manila: Bureau of Public Printing, 1911) 7-31.

[39] Nesom, "Report of the Director," 7-31.

[40] Archibald Ward, "Field operations against rinderpest in the provinces of Bulacan and Pampanga," in *The Philippine Agricultural Review, Volume: 4, Number 1*, ed. G.E. Nesom (Manila: Bureau of Public Printing, 1911) 64.

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V. Native beef and the Colonial preference

The answer to the question as to why the Americans did not prioritize native beef in supplying their troops in the Philippines can be summarized into two words: availability, and most importantly, palatability. In a census on the number of cattle present in the Islands that was conducted by the Bureau of Agriculture in 1910, it was ascertained that there were only an estimated 36,668 available cattle for beef of which 31,368 were native cattle or the carabao. This was way short of the 82,000 cattle needed to supply the Army annually. Relying solely on native cattle at the time may cause a severe shortage in the Philippines that may have devastating effects to the economy especially in the agricultural sector. The presence of epidemics such as the surra, rinderpest, foot and mouth disease, and other serious cattle diseases also puts the viability of native cattle into question.[41]

In terms of suppliers, major meat vendors and companies in the Philippines also had little to no experience in dealing with native beef since beef used for local consumption is usually slaughtered on site and distributed immediately to the community. In the 1910 report of the Committee on Beef, the following can be said about the major commercial meat suppliers in Manila, and why they don't deal with native beef:[42]

1. Lack and Davis- None- Never handled native beef and only handles imported meats from Indo-China, Hong Kong. States no native beef exist in the Philippines.

2. Faustino Lichauco- None- Never handled native beef. Reason is on the scarcity and poor quality of the meat. Brings in Australian, Chinese, and French East Indian beef on hoof and slaughters them in the Philippines

3. Castle bros. Wolf and Sons- Never handled native beef. Reason is on scarcity and poor quality of the meat. Imports wholly from Australia.

4. Philippine Cold Storage- Never handled native beef. Reason is on scarcity and poor quality of the meat. Imports from China and Hong Kong only.

5. Independent Cold storage- same remarks as number 4

[41] Nesom, "Report of the Committee on Beef," 506-508.
[42] Nesom, "Report of the Committee on Beef," 512.

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6. International Cold Storage- Only handles American and Australian beef.

7. Slaughterhouse- All beef cattle coming to Manila are slaughtered here and officials state that in one year not over 100 native beef cattle are slaughtered here, and they are very poor in terms of quality.

Mirroring the impression of major meat suppliers in Manila were the different army departments that were stationed in the Philippines. From a survey conducted among 48 army posts, only 9 responded favorably of native beef, while 23 found it unfavorable citing that the meat was "tough, stringy, no flavor, dry, unpalatable, generally unwholesome." The 23 posts who responded negatively also cited the uncertainty of supply as well as the prevalence of disease that may have affected the native sources of beef. 16 other posts never used native beef and preferred the Australian frozen beef supply. Most American soldiers also preferred to eat canned meat rather than eat native beef especially when there is a failure of delivery of frozen beef.[43]

Regarding the quality of the meat, the chief commissary of the Philippines Division in 1910 had this to say:[44]

> Owing to the lack of native cattle, may beef animals are imported in the Philippines from China. French East Indies, and Australia. The value of the cattle imported in 1909 amounted to nearly 1,000,000 dollars. It is understood that a large percentage of the native cattle in these Islands are afflicted with tuberculosis. The quality of the beef is inferior to the beef consumed by the most impoverished laborer in the United States.

The chief commissary of the Deparment of Luzon on the other hand had a more scathing remark on the quality of native beef stating that:[45]

> Native beef purchased at Puerto Princesa, Palawan, for two companies of Philippine Scouts, in November, 1905, at 0.10 dollars per pound. The commanding officer of that post, on May 27, 1909, reported as follows: This beef is of very poor quality, being poor, stringy, and in my opinion not very nutritious. In fact, I do not eat it myself, and the enlisted men do not like it. It is necessary to cook the same before the animal heat leaves the body to keep it from spoiling, and about the only way it can be used is to boil it.

[43] Nesom, "Report of the Committee on Beef," 509.
[44] Nesom, "Report of the Committee on Beef," 510.
[45] Nesom, "Report of the Committee on Beef," 511.

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The issue on palatability is therefore one of the main reasons for the search of alternatives from other countries, rather than to use native beef, to augment the supply coming from Australia such as those from French-Indo China and Japanese cattle. American agriculturists also had to explore options in India as the issue on palatability extended to the milk being produced by these cattle. Since milk is also one of the staple food of westerners, it also became important that Europeans and Americans living in the tropics be supplied with fresh dairy products. Jerseys, Guarneys, and Holsteins were identified as the best breeds for producing milk; however, these breeds were not suited for the conditions in the tropics. Most often, these breeds quickly degenerated and ceased giving milk when they were introduced in warmer climates.[46]

An alternative therefore was the Madras, Sind, and the Surti breeds from India that could produce 18-20 pounds of milk per day. Introducing it to the Philippines was also not a problem since both countries have similar tropical conditions. Though the quality and taste of the butter was not comparable to that produced from European breeds, David G. Fairchild who was in charge of assessing these Indian breeds commented that it is unobjectionable, and westerners only needed to remove their prejudice especially in dealing with native food to be able to take advantage of available resources.[47]

VI. The Filipino Experience

American reports treated human and cattle related diseases as something tropical and geographically limited to Asia,[48] however, it is apparent that a huge percentage of epizootic diseases in the country were imported by Westerners starting with the Spaniards. While Filipinos eat beef on occasion, it was not a staple protein in any Filipino meal especially in the Visayan regions. Culturally, Filipinos rely on pork, chicken meat, and fish as their main source of protein and native cattle, especially during the pre-colonial times, were treated more as game rather than a domestic animal.[49] The economic shifts brought by Spanish colonization particularly the introduction of export agriculture and cash crops by the late 18th and the 19th

[46] David Fairchild, "Breeds of Milk Cattle and Carabao for the Philippine Islands," in *The Philippine Agricultural Review, Volume 4, Number 9*, ed. G.E. Nesom (Manila: Bureau of Public Printing, 1911) 501-503.

[47] Fairchild, "Breeds of Milk Cattle," 501-503.

[48] Dean Worcester in a report he published in 1909 for example used the term Asiatic cholera implying that it is something different and can only be contracted in the Asian and tropical regions.

[49] William Henry Scott, *Barangay: sixteenth century Philippine culture and society* (Quezon City: Ateneo de Manila University Press, 1994), 43-49.

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centuries also shifted the role of native cattle wherein more and more were domesticated for farming purposes.[50]

By 1888, rinderpest was imported to the Philippines, and the Spanish colonial government that only started to employ veterinarians in the islands in 1828 and 1843, proved to be inadequate in combating the epidemic. By the time of the Americans, the role of the Spanish Veterinary Corps in the Philippines had been disregarded in American reports to promote the narrative of the inferiority of the Spanish colonial state in terms of its medical institutions, while simultaneously promoting the idea of a much superior scientific and technological innovations brought by the Americans.[51]

It is undeniable on the other hand, that the continuous importation of draft cattle and beef cattle, mainly due to the American need for beef, was one of the main catalyst as to why epizootic diseases remained in the country throughout American occupation despite the numerous measures enacted by the Americans to prevent the spread of said diseases. The lingering question now is how did such policies affect the lives of Filipinos?

First and foremost was its effect in agriculture. The lack of draft cattle as beasts of burden, of course, had severe effects in agricultural productivity and consequently, the food source of Filipino families. As the insular government struggled to find food sources for the army division that was stationed in the Islands, Filipinos were equally struggling with the low yield of rice which was made worse by the Cholera outbreak and the implementation of re-concentration zones especially in the Southern Luzon areas. Although hunger was not explicitly stated in American reports, there were instances where the insular government had to import huge amounts of rice just to sustain the local populace, signifying the existence of hunger and lack of agricultural production in the islands during the early years of American occupation.[52]

Second was on how quarantine measures affected daily life specifically farming routines. As more and more cases of epizootic diseases were imported in the country, more stringent quarantine measures were imposed preventing the usual movement and the utility of cattle for agricultural purposes. With the effects of quarantine creeping into the income of families, it became harder and harder for farmers to maintain and follow the rules,

[50] Corpuz, O.D. *An Economic History of the Philippines* (Quezon City: University of the Philippines Press, 1997), 105-138, 146-162.
[51] Dela Cruz, "Epizootics and the Colonial Legacies," 152-153.
[52] Root, *Annual Reports of the War Department*, 1-20.

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thus making the enforcement of quarantine on animals harder for insular officials.[53]

Third was on the local consumption of beef. Even if native cattle were not a staple protein for Filipinos, beef is still consumed especially on important occasions. With the implementation of strict quarantine laws and the continuous ravages of epizootic diseases, even the local consumption of beef was affected. In fact, an interesting measure that the Americans implemented in the country in the hope to balance beef supply and the need for draft cattle was Act No. 637 or an act regulating the registration, branding, conveyance, and the slaughter of large cattle. This act required cattle owners to register and brand their cattle through a central office of registration under the control of the Secretary of the Department of Interior as stated in Section 2. Filipinos were also prohibited from slaughtering their cattle without the authorization of the government. Failure to abide by this law was punishable by a fine of not more than one thousand dollars or imprisonment of one year. While there are no records as to how these laws affected local consumption of beef, it was apparent that with this law in place, it became harder for ordinary Filipinos to consume the said protein mainly because of the added bureaucracy in slaughtering cattle.[54]

Finally, policy implementation especially in the field of agriculture was affected in terms of priority in enactment. A great example is on the problem of locusts that has been hounding farms throughout the country particularly Southern and Central Luzon which was then happening along with the ravages of Cholera and cattle-related disease. In the hopes of addressing this problem, the government passed Act No. 817 on August 1903. This act provided for the creation of locust boards within each of the affected provinces in the islands with the power to call for the services of able-bodied inhabitants to suppress the pest. But with rinderpest still affecting the cattle stock of the Islands as well as the food supply of the army, all available funds, especially coming from the congressional relief fund, were used to fight the disease.[55]

Rinderpest continued to affect the islands in the next five years and little to no effort was made to address the problem of locusts infesting agricultural lands particularly the yields in corn, rice, and vegetables despite the many

[53] Dela Cruz, "Epizootics and the Colonial Legacies," 160-163.

[54] War Department, *Annual Reports, 1903, Volume XIV, Acts of the Philippine Commission.* (Washington: Government Printing Office, 1903), 340-385.

[55] D.B. Mackie, " A resume of the locust situation" in *The Philippine Agricultural Review, Volume 4, Number 7* , ed. G.E. Nesom (Manila: Bureau of Public Printing, 1911) 344-350.

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letters of request sent to the Bureau of Agriculture. It was not until 1910 that any active effort was made in this regard.[56]

This was also the general situation in terms of dealing with agricultural pests in the Philippines as noted by David B. Mackie who was then a newly appointed Agricultural Inspector in 1910. The problems concerning cattle were always the priority in policy and funding. A great example on how the Insular government treated the problems on agricultural pests can be read in Mackie's reports. For example, since all the resources of the Insular government and the Bureau of Agriculture were focused on combating rinderpest, Mackie was tasked to join the party in 1910 which was composed of the Director of Agriculture and members of the Bureau of Agriculture's Veterinary Section who were then making a survey on the effects of rinderpest in the Visayas. Since Mackie's work was subordinated by that of the veterinary section's mission, his initial assessment of agricultural pests in the Philippines was only based on casual observations. The limited time given for the assessment of agricultural pests during this mission also forced Mackie to only prioritize examining pests that were affecting major crops such as mango, banana, citrus fruits, coconuts, and sugar cane.[57]

VII. Conclusion:

The role of the US army was indeed valuable in pacifying the islands and fulfilling the United State's imperial ambitions, thus the emphasis of the Insular government in creating and implementing policies that ensured the proper replenishment of food for American personnel in the Philippines. The cost of supplying an army stationed far away however, proved to be expensive and challenging especially in terms of transportation and distribution leading the Insular government to consider local beef supply or even establishing cattle ranches in the Philippines. The dynamics in meeting the food demand of the army provided additional impetus to the importance of controlling animal disease in the country as the army's need for beef also coincided with Filipino farmers' utility of cattle as beasts of burden in agricultural production. Consequently, the implementation of policies against animal diseases in the country impacted various aspects of agriculture in the Philippines both positively and negatively.

Ileto, as discussed earlier, mentioned that Filipino historians have a tendency to mellow down when analyzing the contributions of Americans in the field of medicine and agriculture in the country.[58] While it is true that

[56] Mackie, "A resume of the locust".

[57] D.B. Mackie, "Some notes on agricultural pests" in *Philippine Agricultural Review, Volume 4, Number 7*, ed. G.E. Nesom (Manila: Bureau of Public Printing, 1911) 555-558.

[58] Ileto, Cholera and the origins, 125-130.

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these institutions grew leaps and bounds compared to their counterparts during the Spanish period, it is totally unfair to conclude that there were no attempts on the side of the Spaniards to address these issues on health and agriculture. It is also rather shortsighted to conclude that these developments immediately equated to positive results especially in terms of the Filipino experience and way of life.

Like anything that is associated with the American imperial ambitions, it is noteworthy to examine the domain of public health and agriculture in the context of imperialism rather than focusing on the positive impacts that these developments brought to the country. Strides in research have already been made in this front and a lot of studies have been published that are critical of how American imperial ambitions also translated into their attempts to tame the unfamiliar ecological environment of the Philippine Islands.

As the Americans struggled to bend the realities of the Philippine environment to fit their standards and their demands, the Filipinos were, more or less, always at the receiving end of the unwanted effects of the lapses in policy prioritization and implementation as we struggled to come to terms with changes in our social lives that were not even driven by our own needs and demands.

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