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in the Postwar Philippines

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PATRICIO N. ABINALES

Let them Eat Rats! **The Politics of Rodent Infestation in the Postwar Philippines**

This article is a preliminary exploration of the politics of the “war on rats” as the Philippine state evolved from its weak position in the postwar period to gain relative strength since the late 1960s. Initially when the central state was virtually incapable of combating rat infestation, rats figured in a rich narrative; but this narrative was replaced by a dull argot of science and development as technocracy and military expansion dominated rat campaigns. Relatedly, as the central state deepened patronage ties with rural warlords, particularly in Cotabato, wars between rival ethnoreligious groups erupted in which, uncannily, local understandings of this conflict called upon the old discourse on rats.

KEYWORDS: RODENT INFESTATION · STATE-SOCIETY RELATIONS · STATE FORMATION AND CAPACITY · MINDANAO CONFLICT

In the 1950s and the 1960s, the Philippines experienced massive rodent infestation, causing millions of pesos in crop loss, and threatening rural communities with widespread hunger. At that time no one could establish definitely the exact causes behind these flare-ups, and there was no evidence of academic or policy speculating on why extremely disparate places—from extensive rice farms, deforested areas, newly-opened settlement zones, drought-stricken villages, to the rural outskirts of provincial cities—were being attacked. What was always in the limelight, however, was the general anxiety over the serious consequence of rodent infestation. So widespread was the fear of rats that even government officials found a way to tie up the rampaging rodents to the security issues of the day. The secretary of agriculture, for example, even warned that the rats had been used by Communist China and North Korea to introduce the bubonic plague to the country (*Republic Daily*, 24 Aug. 1957, 1, 2).¹ Among politicians, their multiple concerns were epitomized by this January 1954 debate at the lower house of Congress (1954, 79) where Domocao Alonto delivered a privilege speech that described the extent of the damage caused by rat infestation in Mindanao. The “rat problem,” the representative from Lanao province declared, had already affected 60,000 settlers in the southern parts of Mindanao; in Cotabato province alone, 87 percent of the populated areas (roughly 142,000 hectares) had already been lost to infestation, costing the province over P3 million.

But before he could continue, the notorious warlord and representative of Cebu province Ramon Durano rose to interpellate Alonto by asking him if Islam treated animals, including rats, humanely. Alonto, a Muslim, responded by saying that Durano ought to give a serious thought to the problem since there were now reports of rats’ attacks in Cebu. What followed was this exchange:

Durano: There are no rats in Cebu, gentleman from Lanao.

Alonto: Is the gentleman sure of that?

Alonto: . . . I think that the people in the Bureau of Plant Industry know what they are talking about and when they say that there are rats in Cebu, there must be rats in Cebu. If there are no four-legged ones, maybe there are two-legged ones.

Durano: I do not know of any two-legged rats in Cebu, but four-legged rats there are none in Cebu. I am going to explain

that to the gentleman of Lanao. Does not the gentleman agree with me that the rats belong to the rabbit specie?

Alonto: Yes.

Durano: And that the rabbits are very palatable food especially in New York?

Alonto: That is right.

Durano: And inasmuch as the rats are of the same species as the rabbit, does not the gentleman think that it is a nice idea to teach our people to eat rats instead of dogs?

Alonto: Mr. Speaker, I do not know about the people from Cebu.

Durano: One thing again that I am going to inform the gentleman from Lanao is that during the Japanese occupation there was a scarcity of meat [in Cebu], so the Chinese panciterias [noodle shops] caught all the rats and they cooked them with pancit [noodle] and the people found out that pancit with cooked rats are better than any of those cooked with other meats. Formerly, we abhor eating the meat of the dog, but it has been found out that the dog’s meat is better than the meat of hogs or other meat. So, it is a question, Mr. Speaker and gentleman from Lanao, of adapting ourselves to such a situation indicative of an educated people. So instead of eliminating the rats totally—Is that the gentleman’s proposition, total elimination of the rats which is very dangerous?—it should be made gradually. I wish to inform the gentleman that in Johns Hopkins Hospital there is now a research being conducted whereby they extract a certain substance from rats and inject it to sterile people. I understand it could restore an individual’s vitality, Mr. Speaker, so if we exterminate the rats, the sterile people of the Philippines will have no more recourse in order to produce more people for further development. Therefore, my question, Mr. Speaker, is, is the gentleman from Lanao for an all-out eradication of rats? I understand that it is very dangerous move to eliminate the rats totally. (ibid.)

Now visibly irritated with Durano’s discourse on rat, cuisine, sterility, and species extinction, Alonto responded in kind and their debate rapidly

degenerated into a question of how many rats the people of Cotabato could eat, and what parts of a rat were palatable. Durano even offered to lend two of Cebu's famous "Pied Pipers" to Cotabato, saying not only would they lead the rats into the river to die, they would also help save a near-bankrupt national government some money. Cotabato, in turn, can give jobs to "musicians who are practically starving" (ibid., 80).² The House Speaker called for a recess and this ended the debate.

Durano was not being whimsical when he suggested that the people of Mindanao follow the example of their Cebuano comrades. Rodent cuisine, after all, was prevalent in rural Philippines at that time (In the urban areas people believed exposure to sewers, pipelines, and garbage made the urban cousins of the *rattus rattus mindanensis* unclean. The rural rats, however, were deemed the opposite, arising from their rice and other crop diet).³ Even the Department of Agriculture's Bureau of Plant Industry (BPI) shared the congressman's view. In a manual it published in 1958, the BPI included "Rats as Food" in the list of recommendations on how communities could wage an effective "war against rats."

Still another method that also gives lasting control is to teach people to eat rats' meat, especially the children who have not yet acquired any prejudice against the said meat. Once the people have come to like it, the chances are that there will no longer be a serious infestation for the people themselves will go after them, provided of course, the rats are not bred or allowed to propagate for the purpose. (Soriano 1958, 69–70)

But eating rats never gained traction beyond the rural areas. A disgusted urban middle class and elite, who held political power over their rural compatriots, and determined what "modern taste" (including culinary preferences) was all about, never took up the challenge. Durano's position—shared by many of his fellow *probinsyanos*—lost out in the debate to the more urbane Alonto, and eating rat's meat continued to be confined to the "backward" rural areas.⁴

This article tracks the changes in the relationship between infestation and politics in the postwar Philippines, looking at how national state leaders, local officials, and rural communities dealt with the "war against rats" (*Manila Times*, 25 July 1968). In its first two decades, the young Republic's weak capacities basically removed the national government from the equation,

and communities and local governments had to pick up the slack, waging campaigns with variable results. But it was also this "bottom-up" nature of the "war against rats" that allowed for the "vermin" and many creative ways of trying to exterminate them to be in the public eye. Once the state's administrative capacities improved, with Manila leaning increasingly more toward centralized governance, the campaigns became better coordinated. But unfortunately this came at the expense of how Filipinos saw and talked about rats. What was once a narrative dominated by rich, often funny, stories of fighting rodents "from below" was steadily displaced by a depoliticized, scientific argot that followed the empowered state's script. The stories by Durano steadily fell on the wayside, replaced by scientific accounts filled with dry statistics and badly written sentences. Yet, somehow, the popular found ways to break out of the stultifying walls constructed by state and science, and in places like frontier zones the rat narrative would rear its head, albeit this time in more hostile forms. How all this came about is what this essay wishes to explore.

Rat infestation has always been connected to massive ecological changes resulting from human actions (such as war and destruction of rain forests) or by changes in nature itself (Morse 2001, 18; Epstein 2001, 31–32, 49–50).⁵ What a diverse set of scholars—notably William McNeill, Harold Zinsser, and Alfred Crosby—has added to this observation is just how much this destructiveness, not to mention the diseases rats carry with them, could bring about the decline of empires, collapse of armies, and the weakening of states' abilities to dominate their population.⁶ Their insights were not picked up by the generations that came after them, nor by colleagues in neighboring disciplines like political science, where the "sexier" topics of power, coercion, revolution, and elite rule prevailed. The emergence of the "new" field of nontraditional security studies (NTS), however, has revived interest on how diseases and their vectors affect state capacities (Buzan et al. 1998; Caballero-Anthony et al. 2006).⁷ This concern has become particularly important in recent years in light of the appearance of new diseases and the return of old ones long thought to have been completely tamed, if not eliminated, by modern medicine.⁸

This article therefore sees itself as part of this renewed interest in the politics of infestation, although it is fairly preliminary given the infancy of the scholarship in the Philippines.⁹ I first tell the story of the early years of the war against rats, showing why, between Domocao Alonto's apprehensions and Ramon Durano's optimism, events favored the former mainly because

of the national government's weak presence in this war against rats and the prevalence of the uncoordinated, poorly supported initiatives at the provincial levels. I then look at a shift in state involvement in the late 1960s, as state capacities improved and the war became better coordinated. I examine the impact this empowered state had on how rodents were talked about and dealt with. I close with a case study of how aspects of the displaced old narrative helped frame the ethnoreligious wars in Cotabato province.¹⁰

What is conspicuously absent in this essay is the one theme that the above studies are concerned with: the relationship between rodents and diseases. My original plan included discussing this issue, only to find out that the postwar data were limited by the Department of Health's apparent decision to rely on a few broad categories to describe diseases and/or their causes. This made it difficult to ascertain whether rodents were indeed the vectors of diseases or whether ailments were caused by something else.¹¹ That said, this does not mean that the correlation does not exist; it simply means that this would be set as a future project.

A Fear of Rats

Looking back at the 1950s, scientists noted the “widespread irruption of rat populations in Mindanao and Mindoro [following] a rapid expansion in the amount of land cultivated to rice” as forest lands were cleared and in their place arose homestead and big farms devoted to food production. In one annual agricultural cycle—1953 to 1954—80 percent of Mindanao's total rice production was lost to rat infestation, a loss valued at US\$55.3 million, which “led to widespread shortages in the island” (Singleton and Petch 1994, 18). Over 200,000 people in ten of the most heavily infested municipalities of Cotabato were confirmed to have been starving and ready to move out of their municipalities. There were even reports of “several suicides” and “of hunger-wracked farmers going insane” (*Republic Daily*, 24 Mar. 1954, 1, 2; 31 Mar. 1954, 1, 2). Manila, the United States, and international aid agencies promised emergency assistance to the affected areas (Villadolid 1956, 1–2). The United Nations Children's Fund (UNICEF) pledged US\$98,000 worth of rice and corn, while the Committee for American Remittances (CARE) promised US\$100,000 worth of food. The Department of Agriculture released P2 million in emergency funds to prevent further infestation in Mindanao and offered a P100,000 grant “to anyone who can discover a virus that will exterminate rats without harming man, other animals and plant” (*Republic Daily*, 14 Jan. 1954, 1, 2; 31 Mar. 1954, 1, 2). The campaigns

appeared to stem the infestation. Across the nation, government officials reported that “the anti-rat campaign bagged approximately 75 million rats and saved P31,400,000 in crops [leaving] 15 provinces with moderate rat infestation; 25 provinces with slight and 13 provinces under observation” (Legaspi 1956, 3). Cotabato's “Operation Bonfire” killed off 35 million rats and “weaned the rodent population so that the remaining rats are practically impotent” (*Republic Daily*, 3 June 1954, 1–3). The secretary of agriculture happily announced that farmers could now harvest their rice “luxuriantly, without any sign of damage from rats” (*Republic Daily*, 4 July 1954, 4).

But this good news did not hide the fact that Manila was largely unaware of the seriousness of the rat attacks. This was most likely due to the limited information at its disposal: apart from the intermittent report of rats killed in the Manila harbor, national authorities initially had no idea of the extent of rodent infestation and even the number of rodents “out there” in the provinces (Department of Health 1953, 36–37). Hence, the initial response was to treat what was happening in the provinces as minor problems.

And when the national government responded to the crisis, it made little mention of the myriad difficulties it faced in the implementation phase. Funds were indeed available but these were not easily released, panicking the Mindanao provinces (*Mindanao Cross*, 16 July 1955, 3; 9 Dec. 1955, 4; 16 Dec. 1955, 4). The interagency working group that Manila set up to improve interagency cooperation was impeded by bureaucratic rivalry and slow implementation (*Republic Daily*, 24 Aug. 1957, 1, 2). Agriculture officials lamented how overregulation slowed down the distribution of antirrat chemicals and handicapped “rodent field men” who could not “scout or lend technical assistance to farmers in stamping out infestation in its early stages” (*Republic Daily*, 9 Dec. 1955, 4; and 16 Dec. 1955, 1, 2). Davao customs officers refused to release donated antifu drugs on the grounds that the appropriate duties had not been paid and donors had not explicitly stated to which agency the donations were to be given (Nuñez 1957, 5). The Cotabato provincial health officer complained that a Department of Finance regulation prohibited his office “from making direct drug purchases except through the national government” (*Republic Daily*, 16 Mar. 1954). Distribution of the pesticide warfarin also “hit a snag” when BPI officials refused to release the chemical to untrained citizens, reserving to its experts its authorized use. In Zamboanga City local officials complained of “delinquent health officers” who spent more time in Manila than in their assigned areas (*Zamboanga Times*, 23 May 1957). Moreover, politics

interfered frequently with preventive health measures. Efforts to clean up congested slum communities that attracted rodents and their diseases were stymied in a still predominantly rural Davao City when politicians blocked the relocation program, fearing the wrath of “the squatter-voters” (*Mindanao Times*, 29 May 1957).

Farmers themselves were causing problems. Antirodent teams in Zamboanga del Sur were met with resistance from farmers who “refused to kill the rats because of the superstitious belief that the ‘God’ of the rats would punish them” (Lucero 1959, 16). The *Mindanao Times* found out that in Davao “the majority of people don’t want the extermination drive because they believe the campaign would only stir the ire of rodents.” The newspaper appealed to church and school authorities to wage “an education drive to smash this form of superstition” (*Mindanao Times*, 1 Mar. 1961). A plan to use a P1 million fund to help farmers in Zamboanga del Norte and Davao ran aground when it was opposed by farmers who had the “deep-seated superstitions” that killing rats would lead to the rodents “multiply[ing] faster and wreak[ing] greater damage” on their crops (*Manila Times*, 16 June 1961).

This did not mean that people just gave up. In fact, the public response to government appeals for help in the campaigns was quite enthusiastic. Students from Manila volunteered by the hundreds and joined in the Cotabato antirat operations, and municipalities in provinces north of Manila did not wait for government assistance to initiate their own wars against the rats.¹² Some devised the most creative of tactics, of which the most popular was the holding of “beauty contests” where supporters of candidates submitted tails of dead rats and beetles to compile points in favor of their candidates (*Manila Times*, 9 June 1960; see *Republic Daily*, 23 Nov. 1955, 4). In a contest aptly titled “Operation Survival,” the “lovely contestants” competed in collecting the most number of “tails of dead rats and beetles” to win cash prizes provided by the Philippine Coconut Administration and the Zamboanga City council (*Daily Mirror*, 8 June 1960). The local elite of San Juan municipality, Pampanga, offered to pay five centavos per rat caught using methods other than poison, which it considered “dangerous to human lives and to farm products” (*Daily Mirror*, 29 May 1964). And if “you can’t lick em,” Surigao’s agriculturist declared, eat rat’s meat because this was tasty and “even medicinal.” He then conducted public demonstrations on “how to prepare a dish of rats in Barrio Matabao, Buenavista,” reporting that these were “well received” (*Manila Times*, 16 Mar. 1964).

Unfortunately efforts were not enough to stem the infestation. As the 1950s came to a close and the new decade began, there was no letdown in the obstacles to the antirat war. In Cotabato, the *Mindanao Pioneer* warned that “86,000 families stand to face famine” because “government seems to be taking the problem for granted” and assistance had “been token—nothing more” (*Mindanao Pioneer*, Davao City, 8 Aug. 1959). Davao and Zamboanga del Norte wired Manila that lack of “men, material and money to achieve maximum effect” had effectively combined with “people’s superstitions” to hinder implementation.¹³ Provincial worries mounted especially after an October 1962 issue by national newspaper *Daily Mirror* exposed how paltry the antirat funds for the provinces were.¹⁴

Politics once more intruded into the process. Manila stopped supporting Negros Occidental on the pretext that its governor, Jose C. Zulueta, was using the funds to consolidate his political control. Zulueta was a political opponent of then Pres. Diosdado Macapagal (*Manila Times*, 17, 20, 22 Jan. 1962; 10 Feb. 1962). In contrast, when Cotabato Gov. Udtog Matalam, a close ally of President Macapagal, sought the latter’s help, Manila immediately sent him P300,000 and pledged to mobilize the military to help in the provincial government’s campaigns (*Manila Times*, 10 Mar. 1963; 3, 14, 29 Apr. 1963; and 10 May 1963). Moreover, nature conspired to help the rats. A long dry season in 1963, which affected rice seedling preparation, led to a massive invasion of “big rats” on “wide tracts of rice lands” in villages in Agusan. Floods continued to hit Cotabato, Agusan, and Davao, prompting the BPI to warn that these had “caused the abnormal breeding of rodents resulting in their tremendous increase in numbers.”¹⁵

Local governments persevered despite problems with manpower and limited funds, trying desperately to sustain popular participation (*Manila Times*, 12 Sept. 1960 and 23 Oct. 1961). And the national government did finally begin to show signs of becoming more involved. President Macapagal managed to get Congress to pass Republic Act No. 3942 (the Rat Extermination Law), which included punitive provisions like requiring “all able-bodied male citizens to cooperate” in the campaigns or face penalties for refusing (*Manila Times*, 18 Mar. 1964).¹⁶ Interagency cooperation also showed some signs of life, with the BPI claiming that it had learned valuable lessons from its mistakes of the past decade (Department of Health 1961, 27–28; *Manila Times*, 10 Feb. 1960). As a result of better coordination, the BPI campaigns salvaged “about P222 million worth of rice and corn

crops . . . saved due to intensive campaign against the rats for the past seven years.” The agency’s director added that another “P94 million worth of other crops were also saved from rat destruction” (*Manila Times*, 4 Sept. 1960). Streaming in were more success stories. In Zamboanga del Norte, farmers turned around an 80 percent loss in their rice and corn farms in 1960 by having a more prosperous harvest on the following year. Cotabato officials likewise declared that the systematic chemical poisoning destroyed rat lairs in places like the Liguasan Marsh and Buluan Lake, and significantly reduced the ratio of rats per hectare (*Manila Times*, 26 June 1960).¹⁷

But all these celebrations proved short-lived. The BPI’s enthusiasm was mitigated by reports of 5,000 “aboriginal tribesmen” living in Davao’s remaining forested areas being threatened with hunger after rats destroyed their crops (*Mindanao Times*, 3 Sept. 1960). Conditions in Davao as well as Cotabato worsened when locusts joined rats in attacking farms (*Daily Mirror*, 10 June 1960). Rodent infestation was also reported in other Mindanao provinces: Bukidnon, Lanao del Norte, Lanao del Sur, Misamis Oriental, and Zamboanga del Norte (*Manila Times*, 3 Feb. 1960). A few months later, towns and villages in Bulacan, Pampanga, Tarlac, and Nueva Ecija provinces—the so-called “rice bowl” and “sugar central” of the country—were reporting similar infestations (*Daily Mirror*, 10 and 25 June 1960).¹⁸ Provinces south of Manila also raised similar anxieties as rats, army worms, locusts, and mosaic disease destroyed rice farms and sugar lands (*Daily Mirror*, 14 Sept. 1960; *Philippine News Digest*, 29 Sept. 1961; *Manila Times*, 11 Oct. 1961; *Manila Times*, 14 Feb. 1963; *Daily Mirror*, 22 July 1964). By 1964, Bulacan officials were sounding like their counterparts in Cotabato, warning of hunger in many towns caused by rats (*Daily Mirror*, 24 Apr. 1964).

Back in Mindanao, farmers in Zamboanga del Norte were abandoning their lands in the face of an imminent “large scale invasions of rats.” A BPI rat control expert sent by Manila to survey the damage in the Liguasan Marsh and Buluan Lake areas came back with the news that 63 percent of the 5,200 hectares of rice lands had been destroyed (*Manila Times*, 23 Aug. 1961). An official in the village of Surabaya, Ipil town, Zamboanga del Sur, warned the local social welfare office that people there were starving and appealed for immediate relief aid (*Philippine News Digest*, 10 Mar. 1961, 14). Zamboanga del Sur province later on reported that it lost some 80 percent of its rice and corn harvest (*Manila Times*, 16 June 1961). Two years later,

Governor Matalam appealed for funds from Manila after declaring a state of emergency in twenty towns of the “imperial province” facing a “serious and alarming” resurgence of rat infestation (*Manila Times*, 30 Mar. 1963). The BPI director chimed in, warning that the infestation threatened 16 million cavans of harvested rice. This prompted Manila to release P372,000 in emergency funds for an extensive aerial dispersal of poison of the affected areas (*Manila Times*, 29 Apr. 1963; *Daily Mirror*, 10 May 1963).¹⁹

Moreover initiatives from below continued, although the resort to more punitive measures indicated that local governments had become increasingly worried about the success of the measures. The Basao municipal council in Benguet implemented an ordinance that required each family “to catch at least five ricebirds or rats” or be fined P1.00 for not complying (*Philippine News*, 22 May 1964; *Manila Times*, 25 May 1964, for the Basao municipal council). The provincial board of Mindoro Oriental required the “chiefs of office and government paymasters” to withhold payment to all employees if they failed to “submit five rat tails anytime before September 30 (the end of the month)” (*Manila Times*, 9 Sept. 1964). It also “conduct[ed] a rat tail collection contest among farmers and schoolchildren” in cooperation with “civic-spirited citizens” of the community, to compensate for its limited capabilities and after realizing that nothing would be coming from Manila (*ibid.*).

But these were the exceptions for in other parts of the nation, there was none of the enthusiasm that marked the previous campaigns (*Manila Times*, 3 Sept. 1964). All indicators pointed to a repeat of the crisis of the late 1950s and the only way to reverse the trend was for both the local and national governments to put their acts together and devise a more forceful and effective containment strategy. The first indications of this shift became evident in the last years of the presidency of Ferdinand Marcos.

State Strength and the Depoliticization of Infestation

There was no sign of any letdown in rat attacks when Marcos became president. Cotabato, Davao, and Surigao del Sur were still sending frantic appeals to Manila (*Manila Times*, 20 June, 8 July 1964; *Manila Times*, 9 Apr., 7 July, 6 Aug. 1965; *Daily Mirror*, 16 Mar., 30 Mar., 9 Apr., 9 July 1965; *Ang Bag-ong Suga*, 5–11 Feb., 2 Aug. 1965). The BPI office in Zamboanga del Sur informed the Manila head office that the province’s 9,621,400 rats had now vastly outnumbered its 2 million people, thereby creating a “very

serious” situation (*Philippine News Service*, 21 Apr. 1965).²⁰ Infestation had spread to provinces previously listed as rodent free: Ifugao province in the north, Mindoro Oriental and Aklan (in the central Philippines), and Surigao del Sur in northeastern Mindanao island became the newest provinces hit by the infestation (*Daily Mirror*, 31 Mar. 1965).²¹ Rats were also attacking towns and farms in Samar, Surigao del Sur, Bulacan, Davao, and Mindoro provinces, as well as throughout the southern Bicol region.²² In Samar farmers denounced local and national officials for their alleged indifference to their plight. As “hordes of rats” had destroyed all but one-third of the 1.5 million cavans of rice, the farmers complained “they have often petitioned provincial officials to send the [Department of Agriculture and Natural Resources] personnel to combat the rats but nothing has been done.” A spokesman for the farmers added that it was “sheer stupidity on the part of the [national] government to put up the office of the DANR in Catbalogan which is a fishing town, instead of [in the] agricultural valley” (*Manila Times*, 18 Mar. 1964). In Cotabato the residents of M’lang blamed “the alleged inefficiency of the Bureau of Plant Industry personnel” for the failure to consistently implement the antirat law and for failing to expand its local office so that it could carry out a more efficient campaign (*Manila Times*, 3 Sept. 1964).

Congress was once again alarmed by all these bad news. Bohol congressman Jose S. Zafra cited a *Philippine News* report showing the affected provinces and the corresponding number of hectares seriously infested (table 1). He warned: “This gives a total of 1,036,400 hectares of agricultural land which is infested with rats,” one which should “stagger the imagination of the country’s government officials, including lawmakers who must immediately work out an effective solution in the extermination of rodents” (*Daily Mirror*, 22 July 1968; see also *Daily Mirror*, 21 July 1968). Zafra’s colleagues at the Senate shared his unease. Sen. Emmanuel Pelaez demanded “an all-out rat war, where stopgap measures and half-hearted efforts will not suffice.” He added:

Rat damage is greatest in this country where rats outnumber our human population by 15 to 1, and where 30 per cent of our agricultural production, worth some P1 billion annually, is destroyed by these vermins [sic]. And not only that: rats are a deadly menace not only to our food crops but also to our national health, for they are notorious carriers of diseases such as the bubonic plague.” (*Manila Times*, 25 July 1968)

Another senator, Helena Benitez, moved for the immediate release of funds appropriated for research on rat extermination, and declared that “her studies as vice-chairman of the Senate committee on agriculture and scientific advancement showed that there are more rats threatening the lives of the people than those being killed” (*Manila Times*, 29 July 1968; see also *Daily Mirror*, 24 July 1968).

In a subsequent Senate hearing, agricultural and health officials shocked senators when they reported that 48 provinces were “in the throes of the rat infestation” (*Daily Mirror*, 18 July 1968). What made matters worse was that these were devastated areas that were still unable to get back into the preinfestation conditions (table 2). The director of the government’s Office of Statistical Coordination and Standards (OSCAS), an office that had improved considerably its ability to collect and organize data, also reported with more confidence that nationwide 2,587,500 cavans of rice planted in an area of 1,952,072 hectares (valued at P36,849,300) that had been damaged by rats would be the most accurate statistics to date (table 3).²³ The officers projected that the country will continue to feel the effects of the destruction well into the 1970s (table 1).

But these apprehensions were not enough for politicians to set aside their politics. Intraelite and institutional combat remained the primary concern of congressional opposition to Marcos and the hearings on the

Table 1. Provinces affected by rat infestation, 1968

PROVINCE	HECTARES
Cotabato	480,000
Surigao del Sur	160,850
Nueva Ecija	117,000
Lanao del Sur	73,000
Zamboanga del Sur	66,000
Zamboanga del Norte	25,000
Pampanga	21,000
Bulacan	20,000
Tarlac	18,500
Iloilo	4,400

Source: *Daily Mirror*, 22 July 1968

seeming failure of the executive office to deal effectively with the rat problem turned into an opportunity to try to trim down presidential control of state resources. Thus, despite their alarm and anxieties, Congress refused to support Marcos, reducing a 1965 allotment of P1.3 million for the antirat campaigns to P663,000 in 1968 (*Daily Mirror*, 22 July 1968; see also *Daily Mirror*, 21 July 1968). This left Marcos with no option but to seek out other ways of addressing the rat problem, adding it to one of his many “projects” of reinforcing the presidency to advance his political ambitions. Andrew T.

Table 2. Rice damage caused by rats in sample during the wet season of 1970

PROVINCE	HECTARES OF RICE (1,000)*	NUMBER OF BARRIOS SAMPLED	MEAN PERCENT DAMAGE
Cotabato	278	20	8.08
Nueva Ecija	267	19	2.68
Iloilo	200	17	2.64
Pangasinan	152	13	7.58
Camarines Sur	109	10	2.75
Bulacan	83	9	3.71
Negros Occidental	67	5	.72
Mindoro Oriental	61	5	4.30

Source: Rodent Research Center 1970, 9 (fig. 1). Based on figures supplied by the Rice and Corn Production Coordinating Council (1969)

Table 3. Damage per region, per cavans, pesos, 1968

REGION	CAVANS	PESOS
South/Eastern Mindanao	1,067,900	12,166,000
Bicol region	628,800	4,327,700
North/Western Mindanao	316,500	4,751,300
Southern Tagalog	293,200	5,227,500
Central Luzon	215,400	4,072,300
Western Visayas	197,300	2,388,900
Cagayan Valley	117,700	2,514,400
Eastern Visayas	95,400	1,118,700

Source: Rodent Research Center (1970, 9)

Price-Smith (2009, 63) observed about how “the outbreaks of disease,” or in this case, vectors like rats, would “often shift power from the people to the state.”²⁴ This was what happened during the last years of Marcos’s first term. The president would craft a strategy that differed significantly from that of his predecessors. In this shift, the technocrats, whom Marcos recruited in his first term to help run his government, began to take over the management of the campaign.²⁵

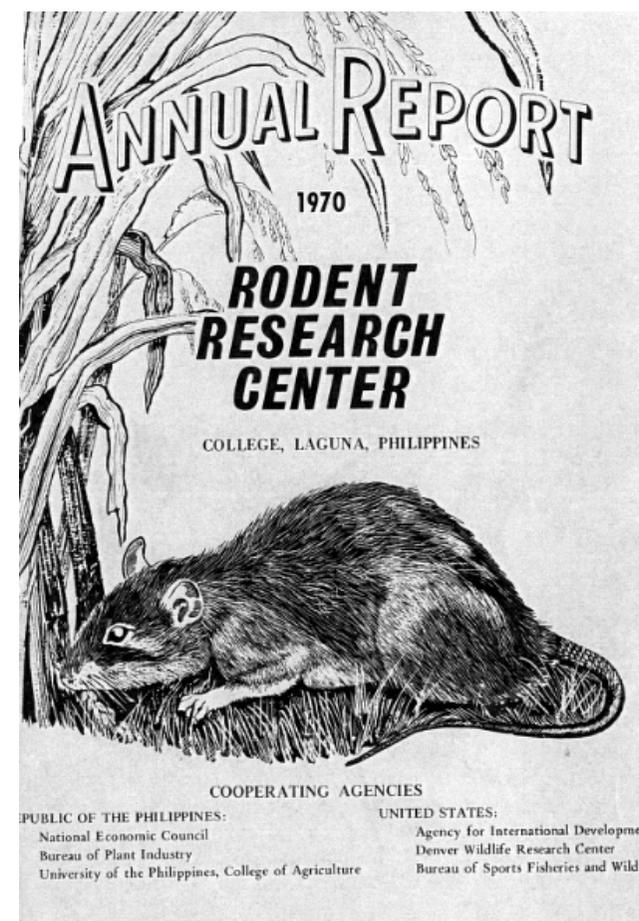


Fig. 1. Cover of the 1970 Annual Report of the Rodent Research Center

Under technocratic supervision, the manner in which rats were treated began to shift away from seeing them as a distinct problem to one that regarded them as mere manifestations of the more fundamental issue of rural backwardness. Technocrats also shed rodent infestation off its social and political features, defining it solely as a scientific issue. Eliminating rats was now part of the broader challenge of national economic development and a scientific test. In this reorientation, the technocrats found close allies and fellow travelers not from Congress but from fellow technocrats at the United States Agency for International Development, the German government, and the World Bank, whose views were no different from those of their Filipino colleagues (*Manila Times*, 19 May 1968; see also *Daily Mirror*, 25 May 1968; *Manila Times*, 21 Aug. 1968).²⁶

Marcos also placed another state agency at the center of the new approach. While in the past presidents called in the Armed Forces of the Philippines (AFP) to assist civilian agencies and local governments, its role remained merely supportive. After it accomplished its mission it returned to the business of fighting criminals and insurgents. Under Marcos, the AFP became a full *and active partner* in the antirat operations.²⁷ Henceforth, when its civic action units went out to the field to help in counterinsurgency campaigns, “anti-rat drives” became part of their tactical repertoire (*Daily Mirror*, 25 Mar. 1968). When infestation hit Tarlac, Nueva Ecija, and Pampanga, Marcos’s top technocrat, Executive Secretary Rafael M. Salas, placed the AFP in the lead role over the civilian BPI, and gave it de facto supervisory powers over provincial and municipal officials (*Manila Times*, 26 Mar. 1968).²⁸ Finally, the well-supported AFP’s Research and Development Center (RDC) compensated for congressional cutbacks and took over the work of crafting effective and more economical methods of exterminating rats, and working closely with civilian agencies in implementing these (*Daily Mirror*, 17 Apr. 1967).²⁹ Not since the administration of the late Pres. Ramon Magsaysay had the military been accorded such prominence.

This partnership of military and technocracy foretold an unprecedented centralization of power in the name of “development.” It also signaled a shift in the way the infestation was presented and who could articulate it. Whereas before the war against rats was a popular, local-based, and politicized event, arising in part from the failures of the national state, this time, with a “professional” technocracy and military taking over, the rat narrative underwent a profound transformation. Gone was the association

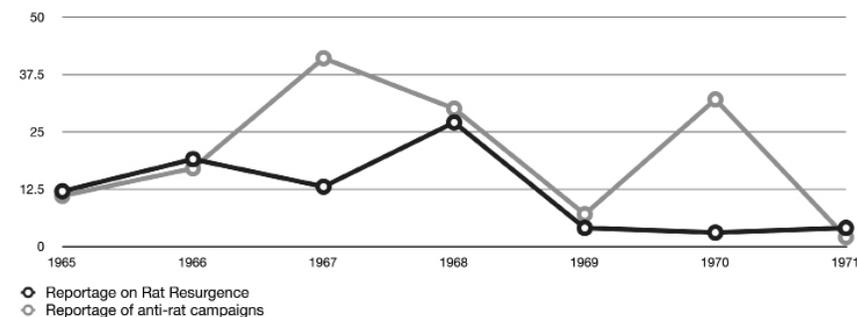


Fig. 2. Reportage of rodent resurgence and government campaigns, 1965–1971

Source: See the appendix

of rats with communist threats, the disorder of the old tales and rhetoric of rodents as part of the social anthropology of the villages and towns, the comparisons between the “four legged rats” to the “two legged rats” (i.e., Filipino politicians), the promotion of rodent cuisine as an antipoverty measure, and the use of the infestation to criticize the state’s inattentiveness and inefficiency (Singleton and Petch 1994, 18). Under the technocrats, the only argot allowed was the top-down, depoliticized lingua franca of the scientific community. And it was an official language that was backed by the power of an expansive military, which could exact compliance and stifle those who insisted in talking the old way with the fear of retribution.

Public knowledge of rats also became circumscribed. As government operations continued to increase (and seemingly improve), the frequency of media reports on outbreaks of infestation also began to go down (fig. 2). By 1971 there was hardly any report about rat attacks and community-based wars against the vermin. Instead the previous “sensational” accounts were replaced by rather bland statistical microstudies by the Rodent Research Center, an office linked to the International Rice Research Institute which took the lead in coming up with different science-based strategies that government could use against rats. This, for example, was how the center summarized its evaluation of rat infestation in 1970:

Damage in the 98 barrios sampled in 1970 (late harvest delayed surveys in 24 barrios) averaged 4.5+/- 0.4. . . . Only three barrios, all in Iloilo, did not have rat damage while 60 barrios had more than 2%. All the sample barrios in Negros Occidental received less than 1% damage, but all those in Cotabato had more than 3%. Damage

exceeded 10% in one Nueva Ecija barrio, five Pangasinan barrios, and six Cotabato barrios. Two barrios, one in Cotabato and the other in Nueva Ecija, lost more than 20% (20.4 and 22.2) of their rice to rats. Damage to one paddy in a Cotabato barrio was 50.7%. (Rodent Research Center 1970, 9)

But not all was lost. For the political manifestations of the old narrative did not completely disappear but moved into another realm, morphing into a more bellicose form. In Cotabato the idioms once associated with rat infestation found a new domain in the conflict between the Muslim Maguindanao (the majority Muslim group), the non-Muslim indigenous Teduray, and the Christian settlers. Of the three protagonists, it was the settlers who identified themselves wholly with what the rats had done to the terrain.

Rodents and Ethnoreligious Wars: The Case of Cotabato

Scholars on Muslim Mindanao have oddly said very little about the settlement zones. But what the few published accounts on the latter suggest is that early indigene-settler relations places like Cotabato were relatively conflict free, partly arising from pragmatic economic arrangements set up by Maguindanao elites and settler communities. Typically, the Maguindanao and the Teduray (also known as Tiruray) sold lands to settlers who, upon acquisition of sufficient contiguous lands, then turned inward to form or consolidate their communities, limiting contact with the other groups to petty trading. Any political matter involving the settlers and the Maguindanao were settled by the latter's strongmen, who have had ties with national state actors (*Mindanao Cross*, 5 Mar. 1949). The settlers and the Teduray figured very little in these negotiations (Suzuki 1993, 1–48).

Gov. Udtog Matalam repeatedly reminded settlers not to take sides in the electoral battles, warning them “to remain neutral in the conflict among datu and warn[ing] that if they would interfere in it, they will ‘suffer the consequences’” (*Mindanao Cross*, 8 Jan. 1949). Those entertaining political careers needed the approval of Matalam and his patron Sen. Salipada Pendatun: as the *Mindanao Cross* (23 Apr. 1949) put it, a “Christian candidate” would only succeed with “the backing of the Moro factions.” By the late 1960s, however, the Mindanao frontier began to close, and this coincided with Marcos's strengthening of central state capacities and challenging the

power of his local opponents. In Cotabato, Marcos formed patronage ties with Muslim opponents of Matalam and Pendatun, as well as with leaders from the fastest-growing and demographically denser settlement zones. The self-imposed walls dividing the Maguindanao and Filipino settlers began to break down, as tensions over land ownership and political rivalries grew.

When the violence escalated some settlers allied with the Teduray to form the Ilaga (Abinales 2000; McKenna 1998). Their leader was Feliciano Luces, a settler whose family was killed by the Maguindanao and who vowed to seek revenge. Charismatic and protected against bullets by sacred amulets, Luces, who became known as Kumander Toothpick, turned the Ilaga into a “well-trained army that obviously operated outside the confines of the law” (George 1980, 144–45).³⁰ Their savagery prompted a Maguindanao ideologue to describe them in these terms: “The word Ilaga is an Ilonggo or Visayan term for ‘rat.’ How these ‘half-crazed or mad killers’ . . . acquired the name or chose to be known by it, is perhaps explained by their gory activities in Mindanao” (Jubair 1999, 136).

The popular explanation for the term Ilaga was that it was the acronym for “Ilonggo Land Grabbers Association,” the Ilonggo being settlers from the Western Visayas. But this did not dovetail with how Toothpick described the group's origins. (It also ignored the fact that non-Ilonggo settler groups also referred to themselves as Ilaga.) In a 1971 interview with the *Mindanao Cross* (12 June 1971), he recalled that the Ilaga were initially 30 men armed with Second World War vintage firearms who vowed “to protect the 29 barrios and sitios in the Pandan area of Upi [from the] group of Hadji Disumimba and his father Hadji Rascid.” They were protectors, not land-grabbers. It was the journalist T. J. S George (1980, 144–45) who first came up with a more appropriate explanation behind the name:

Ilaga meant rat. How the gang got that name is a question that can have a hundred answers, most of them romantic, all of them plausible, none of them provable. Perhaps the least convincing theory is rooted in the days when Mindanao was first thrown open to economic exploitation; it was a time when vast forests were denuded almost overnight and millions of rats scampered south into the marshes of Cotabato, devastating crops in their path. Thus the term rats was considered appropriate to describe northerners come to plague the south.



Fig. 3. The amulet vest of a former Ilaga who claims it protected him from the Barracudas' bullets, 2009

The Ilaga, in short, got their name from applying the tactic perfected with devastating results by their biggest scourge, the “real” rats: pillaging Maguindanao villages by stealth in the middle of the night, and destroying everything and killing everyone in sight. When interviewed in 2009 former Ilaga confirmed George’s description, telling me how rats inspired them to inflict the same kind of damage on the Maguindanao (fig. 3).³¹ And Luces was the King Rat and Robin Hood who led them in battle. Communities would testify that Toothpick

never harmed them as long as they did not betray him—much like how the King Rat behaved vis-à-vis the community. He only accepted what was offered to him. [They] virtually exonerated Toothpick from charges of terrorism. They considered their barrios peaceful [because] the outlaw bands had stopped molesting them for rice and carabaos since Toothpick came. (*Mindanao Cross*, 5 Sept. 1970)

People saw in him their hopes and aspirations, and he animated their imagination. Moreover, he typified the popular initiative of taking matters into one’s own hands when dealing with crises. And these challenges were embodied in Toothpick and his Ilaga. But once they linked up with the AFP, joined the Civil Home Defense Force (CHDF), and agreed to become private armies of Christian strongmen, their populist charm began to fade.³²

The AFP and the Christian politicians used the Ilaga to lead the assaults against the Maguindanao and unleashed them on hapless Muslim men, women, and children (*Mindanao Cross*, 24 Apr. 1971).³³ As the violence intensified, Muslim and Christian groups kept pace in inflicting brutality after brutality against each other (table 5). Their control over Cotabato seriously threatened, beleaguered Muslim elites countered, with Matalam forming a Mindanao Independence Movement with an armed group, the “Blackshirts,” whose name was derived from the preference of its members to wear all-black attire in battle.³⁴ In other places, they were also called “Barracudas,” and some of their leaders adopted names like Kumander Pusa (Commander Cat), an obvious pun directed at the Ilaga.³⁵ These forces became the foil against the Ilaga and the AFP and constituted the main force of the armed separatist movement, the Moro National Liberation Front.

Toothpick became disillusioned with the Ilaga after local politicians eased him out from the Ilaga leadership. Mayor Sebastian Doruelo, the warlord of

Kidapawan town, would claim the mantle of leadership, declaring that he, not the uneducated peasant Toothpick, was the group’s true spokesman (*Mindanao Cross*, 24 July 1971). Then, worried over the furor the Ilaga’s brutality had made, Marcos ordered Toothpick’s arrest, kept him out of the public eye, and had him released a few months later with nary an explanation. But with full media coverage, Marcos received Toothpick in the presidential palace and declared him a free man. Disenchanted Luces subsequently went back to his hometown and refused to participate in any Ilaga activity. No one remembered when he died or what he died of, although his followers and those who admired him still think he lives in one of the forested areas of the border of Maguindanao and Lanao del Sur provinces.³⁶

The degeneration of Toothpick and the Ilaga from a popular militia into an extension of state and warlord power echoes that of the community-based antirodent campaigns after Manila took over and technocratized the war against rats. The Ilaga’s origins were a localized response to settlers’ quarrels with adjoining Maguindanao villages, especially after their relatively isolated moral economies were affected by the political and demographic changes being experienced in Cotabato. With the political stakes raised considerably

Table 5. “Genocide” in Cotabato, 1971

MONTH	MUSLIMS KILLED	HOUSES BURNED	CHRISTIANS KILLED	HOUSES BURNED
January	30	0	36	6
February	16	0	25	31
March	6	3	24	4
April	8	33	16	124
May	22	3	19	2
June	91	7	33	5
July	19	20	20	4
August	37	44	48	16
September	47	89	35	31
October	48	28	14	52
November	20	6	22	4
December	20	20	48	12
Total	364	253	340	291

Source: *Mindanao Cross*, 15 Jan. 1972, 5

in a frontier that was fast closing, the violence escalated, this time taking openly ethnoreligious tones. When Marcos declared martial law on 21 September 1972, the *ummah* rallied behind the Moro National Liberation Front (MNLF), an armed coalition of young radical nationalists, Islamic scholars, and disenfranchised anti-Marcos politicians. When the MNLF launched a massive counterattack against the AFP and the CHDF on 24 October 1974, Marcos declared the separatist movement the most serious security threat to the Philippine Republic and ordered the deployment of more than half of the AFP to Muslim Mindanao. The Philippines experienced its second conventional war since the Second World War, one whose impact continues to be felt today. Of the Ilaga who helped bring about this war little was heard of, although in the communities where some of them are living their senior years the association of their “movement” to that of the rat persisted.³⁷

Conclusion

Where they once jostled with communists and corrupt politicians for space in the debates of the day, rats have been demoted these days into mere irritants to public health and the state’s development agenda. They have been robbed of their place in national history and the popular imagination. The appropriation of the term Ilaga by an anti-Muslim rightwing vigilante group in the very places that experienced the worst of the infestation further pushed the poor rats away from the public realm. Yet, this marginalization and a change in meaning did not mean the vermin’s complete disappearance in Philippine history. True to their nature, the despised rats have repeatedly found ways to reinsert themselves into the discourse and even complicate it. Here are two such instances.

In 1974, scientists from the University of the Philippines (UP) College of Agriculture, who were interested in exploring readily available and cheap alternative sources of protein after the prices of pork, chicken, and beef went up considerably, conducted a series of taste tests in the surrounding rural areas to determine if people could be drawn to rat’s meat. The communities were asked to sample different types of sausages including ones that contained rat’s meat. The scientists happily published in the Rodent Research Center’s annual report (1974, 72–75) that “formula C (i.e., sausage with 50% rat meat) had a higher personal acceptability score (7.07) than the other formulations tested, and sausages A and D (50% pork lean and 60% rat meat, respectively) were given the second highest rating (6.97).” Unfortunately,

nothing came out of the project because the college's dean, repulsed by the idea of the rat meat being sold in public markets all over, turned down the scientists' request for additional funding. Despondent, the latter shelved the project and a few years later the more senior of them opted to retire.³⁸ This bureaucratic ruse, however, did not deter the communities surrounding UP's Los Baños campus to continue feasting on rat cuisine, albeit now generally ignored by the national press.

Thirty-eight years later, in 2008, rodent experts admitted that "the magnitude of annual losses caused by rodents in the past fifteen years in the Philippines remained poorly documented" (Singleton et al. 2008, 3). They stated that, conservatively speaking, "rats probably cause annual pre-harvest losses to rice in the range of 5–10%. Virtually nothing has been reported about postharvest losses but based on recent studies elsewhere in Asia . . . they would be expected to be around 3–5%." They added:

Of the nearly 7 million farming households with an average of five per household, nearly 2.5 million are *palay* (rice) farmers . . . Annual production of rice in 2007 was 16.24 million. In 2007, the annual consumption of rice per head of population was around 118 kg. If we estimate that losses to rodents (pre- plus postharvest) is around 10% and we can save 6% of these losses through effective management of rodents, then there would be an annual savings of 1 million [tons] of rice. This would be enough to feed 8.7 million Filipinos for a year, with rice providing on average 41% of their daily calorie needs. (ibid)

The best that these experts could come up with was a guesstimate. In the Philippines—as in other places—the rodents continue to have the upper hand despite having been pushed out of the public discourse.

Abbreviations used

AFP	Armed Forces of the Philippines
BPI	Bureau of Plant Industry
CHDF	Civil Home Defense Force
DANR	Department of Agriculture and Natural Resources

MNLF	Moro National Liberation Front
NTS	Nontraditional Security Studies
OSCAS	Office of Statistical Coordination and Standards
RDC	Research and Development Center

Notes

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- 1 The secretary added: "Should you find any person who desist from killing rats, watch out, he may be a communist." *Cebu Daily News*, 2 Mar. 1952, 4; 11 Mar. 1952, 1, 8.
- 2 I searched for any information on these two famous "Pied Pipers" in the Cebu newspapers of the period, but alas could not find anything.
- 3 And elsewhere! The biologist Hans Zinsser (1934, 202 n. 7) wrote that rats "have been eaten without harm under stress," citing the case of Paris under siege in 1871 and the French garrison in Malta in 1798, where "a rat carcass brought a high price." Zinsser (ibid.) also cited a certain Robert Southey who suggested "that the first requisite to successful rat eradication was to make them a table delicacy."
- 4 It was—and still is—open knowledge that Alonto, like everyone else at the House of Representatives, spent more time in Manila than in his turf. His children all went to schools outside Lanao for their education. The Filipino provincial elites always aspired to leave their rural homes even if they claimed to represent them. A reviewer also pointed out that Manilaños were also eating rat and mice to fight starvation during the war years. But there is no evidence that the habit of eating rodents persisted into the postwar period in the nation's capital, while in the rural areas it did not even falter any bit.
- 5 A pair of rats can produce as many as 15,000 descendants in one year and rats are known to breed the whole year round (Hendrickson 1983, 71). Indonesian farms, for example, lose an average 17 percent of preharvested rice, while in Vietnam rodent infestation "is one of the three most important problems faced by the agricultural sector," according to the Australian Commonwealth Scientific and Industrial Research Organisation (n.d.). See also Louria 1998, 250–51.
- 6 Among the classics in this field are McNeill 1977; Zinsser 1934; and Crosby 1993.
- 7 NTS studies, however, have a fundamental drawback: in their effort to portray NTS as presenting a problem equal to if not more serious than traditional security (TS), they understate the extent to which the two spheres are linked. Wars destroy *both environments and states*, an interesting facet that remains unexplored by nontraditional security scholars who remain focused on

societies with no major transformative conflicts. However, in places like Afghanistan, Iraq, the Philippines, and Sri Lanka, major wars or insurgencies threaten both state stability and human

security. Bringing these flashpoints into the analysis would broaden enormously the reach of NTS studies, as the war zones in these countries offer a contemporary reconfirmation of McNeill's explorations of premodern plagues and peoples.

- 8 Notably, see Garrett 1994 and Garrett 2000. Among political scientists, the best analytical work so far is Price-Smith 2009.
- 9 Historians have also begun to produce works that look at how pestilence figures in the shaping of society, albeit their works are limited so far to the colonial period. See De Bevoise 1995; Anderson 2006; Newson 2009. Their colleagues in political science are less interested in vectors and diseases, their eyes are more concerned with studying floundering government policies and the eroding health system, or the domination of transnational pharmaceutical corporations in Philippine medicine. See Bautista 2002. On foreign corporations, see Anon. 2001; Bolano 1990; Atienza et al. 1978.
- 10 At the onset, let me note that the use of rats as a popular metaphor in ethno-religious violence was not replicated in other areas of the Philippines. It appeared to be specific only to frontier provinces in Mindanao like Cotabato where Muslims and Christians fought each other. Moreover I have not found any data that points to the semiotic origins of the use of "war" as a metaphor for the antirrat campaigns.
- 11 The only time there was such an attempt to correlate rodent infestation to diseases like the plague happened during the first decade of American rule when colonial officials monitored an outbreak of the plague in Manila caused by fleas of rats that traveled with vegetables and poultry product imports from Hong Kong. This health problem, however, appeared to have been short-lived and the plague never spread to the countryside nor did it return in the succeeding decades. In 1921, the government reported a "pandemic wave of influenza" across the colony that was responsible for "increasing the number of deaths from several diseases, especially respiratory." But whether this pandemic was caused by rodent-borne diseases or not is not known. On the Manila plague, see Heiser 1913, 109–15. On the 1921 pandemic, see Valenzuela-Tiglaio 1998, 12. By the latter part of the 1920s, health officials noted very little evidence that the plague was still around. An examination of 250 "wild rats" on suspicion that they were carriers of leptospiraeterohemorrhagiae, the bacteria found in rat's urine and often associated with the plague, revealed only "one rat infested with this spirochete." See McKinley 1927.
- 12 On the student volunteers, see *Republic Daily*, 3 June 1954, 1–3. On village initiatives, see "Accent (Editorial)," *Lungsuranon* (Cebu City), 4 Dec. 1955, 6.
- 13 *Mindanao Times*, 1 May 1961, and *Manila Times*, 20 June 1964 (for Davao); *Manila Times*, 16 June 1961 (for Zamboanga del Norte); *Manila Times*, 8 May 1964 (for Bulacan); and *Manila Times*, 1 June 1965 and *Daily Mirror*, 5 June 1965 (for Nueva Ecija).
- 14 The newspaper reported this breakdown of funds released for rat eradication, plant pests and disease destruction: Region 1 – P6,000; Region 2 – P4,000; Region 3 – P7,375; Region 4 – P6,500; Region 5 – P5,000; Region 6 – P5,000; Region 7 – P19,000; and Region 8 – P20,000 (*Daily Mirror*, 1 Oct. 1962).
- 15 *Manila Times*, 5 Jan. 1963 (on Agusan); and *Manila Times*, 14 Mar. 1963 (on Davao, Agusan and Cotabato). This happened again in 1965 when heavy rainfalls forced hungry rats to search for food and attack the recovering rice lands (*Manila Times*, 21 Mar. 1965).
- 16 Local governments promptly took advantage of this new law to reinforce their own ordinances and ensure citizens' compliance. The Midsayap town council in Cotabato, for example, invoked R.A. 3942 to imprison twenty people who refused to join the campaign by invoking the new law (*Manila Times*, 10 May 1967).
- 17 According to the local bureau chief, the rat-to-hectare ratio went down from 694 in January 1960 to only 245 in May (*Manila Times*, 16 June 1961).
- 18 Locusts are also one other infestation that profoundly reshaped a lot of rural communities but which remain unstudied. On the attacks on sugar plantations, see *Manila Times*, 21 Jan., 27 Feb., 6 Mar., 19 Mar., 29 Apr. 1960; 4 Mar. 1961 for attacks on sugar plantations. Scientists, agriculturists, and historians have never explained why rodents suddenly appeared to spread also to agricultural lands north and south of Manila. But it is likely that the dramatic increase in typhoons hitting the northern portion of the island of Luzon was a major factor. Sixty such "cyclones" hit the country in 1959 and 1960, and 44 passed through the country in 1963 alone. These climate-induced ecological changes near Manila, and the continuing failure of the BPI antirrat operations in Mindanao were enough to get Congress to take the problem more seriously (as compared to how it was just regarded as a comical sidelight during legislative deliberations a few years earlier). See Virola 2008. On the typhoons that hit the Philippines in the 1960s, the popular Wikipedia came up with the following: http://en.wikipedia.org/wiki/1960_Pacific_typhoon_season; http://en.wikipedia.org/wiki/1962_Pacific_typhoon_season, accessed 5 Dec. 2010.
- 19 Matalam, in the meantime, invoked an old law—Commonwealth Act No. 3942—which compelled "all able-bodied men from 16 to 60 to work two days a week" for the government, and help in the campaign (*Manila Times*, 14 Apr. 1963).
- 20 The figure was based on a density of 200 rats per hectare.
- 21 *Manila Times*, 2 May 1965 (for Ifugao); *Philippine News Service*, 27 July 1964 (for Mindoro Oriental); *Manila Times*, 4 Oct. 1964, and 16 Apr. 1965 (for Aklan); and *Manila Times*, 21 Feb., 16 and 18 Mar., and 23 Nov. 1964 (for Surigao del Sur). The accounts do not indicate the pattern of infestation, whether rats followed human migration or were the result of ecological changes that these provinces underwent. Ascertaining this will involve additional *field-based* research, which could only be done in the near future.
- 22 *Manila Times*, 10 Jan. 1964 (for Samar and southern Bicol); 21 Feb. and 16 Mar. and 8 May 1964 (for Surigao); 26 Mar. 1964 (for Bulacan); and *Philippine News Service*, 27 July 1964 (for Mindoro). For Davao, see *Manila Times*, 20 June and 9 July 1964, and *Daily Mirror*, 4 and 22 July 1964. Additional information on the Bulacan infestation can also be found in *Daily Mirror*, 24 Apr. and 3 May 1964.
- 23 According to Nozawa (n.d.), the OSCAS began producing more systematic data on topics like interindustrial relations starting in 1965. By 1968 it had expanded its scope of concerns.
- 24 Price-Smith, however, may only be partly right. As these Philippine examples suggest, vectors are equally capable as the diseases they carry in bringing about social and political destabilization.
- 25 Marcos recruited PhD graduates in economics, engineering, and management from some of the top American universities, and professors from the University of the Philippines and the Jesuit-run Ateneo de Manila University to help him run the government. Marcos would claim that he would then just "sit back" and watch these managers run the government (Roxas 2000, 86–87).
- 26 See *Manila Times*, 7 Aug. 1968 re Marcos's approval of the German technical assistance. On American research on rats, in the Philippines and Southeast Asia, see Brown 1972.

- 27 The military and Philippine Constabulary actively supported Cotabato in dealing with rat infestation in the impenetrable Liguasan Marsh but were also careful to respect the wishes of the local government. See *Daily Mirror*, 21 Jan. and 26 June 1960; *Manila Times*, 26 June 1960.
- 28 Note that these provinces were also known as the “hotbeds” of the communist insurgencies.
- 29 The RDC under the command of Col. Francisco V. Baula was manufacturing chemically treated rat baits that could be broadcast to infested fields with a minimum cost of P2 per acre (*Daily Mirror*, 19 July 1968).
- 30 Luces was supposedly given the title because of his gaunt figure.
- 31 I conducted these interviews of former Ilagas in General Santos City, from 12 to 15 Oct. 2009. The interviews are part of an oral history project on the Mindanao war that I am working on with Prof. Rufa Guiam of the Mindanao State University. Given the risks they faced, I have acceded to the request of these former anti-Muslim militias not to mention their names nor their locations until they feel that the areas they lived in will be completely peaceful and their personal securities assured.
- 32 Interview with former Ilagas, 13 Oct. 2009.
- 33 Wrote George (1980, 151): “When Christian thugs went on a rampage, the military was either elsewhere or arrived too late in the scene. Naturally Christian gangs became reckless in the knowledge that they could count on what amounted to military connivance, however, indirect. Muslim gangs grew desperate in their anger.”
- 34 By 1972, only 12 of the 34 municipalities of Cotabato were still under Muslim control, with the richest in the hands of Christian politicians. The growing power of these ascendant forces forced Maguindanao leaders like Congressmen Salipada Pendatun and Duma Sinsuat to try to accommodate their new rivals by agreeing to subdivide the “empire province” into three smaller provinces. But this did very little to stem the violence (*Daily Mirror*, 16 July 1972). Former MNLF guerrillas I interviewed on 5 Feb. 2010 in Cotabato City said the label “Blackshirt” came from the preference of the MIM combatants to wear an all-black attire when going to war.
- 35 The origin of the term “Barracuda” remains unknown.
- 36 George (1980, 149–50) hints that Toothpick might have had a hand in the assassination of his erstwhile local patron, Constabulary Colonel Manuel Tronco in 1971, who had been responsible for his arrest and detention.
- 37 In my interviews with former Ilagas, they claimed that the term remained popular in non-Ilonggo villages and that armed militias formed by Visayans and Ilocanos also used it.
- 38 Interview with Dr. Fernando F. Sanchez, former director of the National Crop Protection Center, University of the Philippines, Los Baños, Feb. 2008.

Appendix

Table A1. Newspaper accounts of rat resurgence by province, 1965–1971

PROVINCE	YEAR						
	1965	1966	1967	1968	1969	1970	1971
Albay		1			2		
Bataan	1			1			
Benguet		1					
Bicol		1					
Bulacan	3	2	4	6			
Camarines Sur							
Cotabato	1		1	1			
Davao	1						
Davao del Sur						1	
Ifugao	1						
Laguna		1					
Lanao	1						
Manila				1			
Mindoro Occidental				1			
Mindoro Oriental	1						
Negros Occidental		1					
Northern Samar						1	
Nueva Ecija	1	3	2	4			
Pampanga	1	4	3	6			
Pangasinan				1	1	1	1
Samar		1		1			
Sorsogon					1		
Surigao del Sur				1			
Tarlac		4	3	4			2
Zamboanga del Sur	1						
Total	12	19	13	27	4	3	4

Sources: *Ang Bag-ong Suga*, *Daily Mirror*, *Manila Times*, *Mindanao Cross*, *Philippine News Service*, various issues, 1965–1971

Table A2. Newspaper accounts of government antirat campaigns by province, 1965–1971

PROVINCE	YEAR						
	1965	1966	1967	1968	1969	1970	1971
Aurora						1	
Bataan	1					2	
Bohol						1	
Bulacan	2	1	6	2	1	2	
Camarines Sur				1			
Cebu						1	
Cotabato	2		4	2		1	
Davao	2			1		1	
Eastern Samar						1	
Laguna		1		1		1	
Lanao del Norte			3	1		1	
Lanao del Sur			3	1		1	
Mindoro Occidental			2	1		1	
Misamis Occidental			1				
Negros Occidental	1	2		1		1	
Negros Oriental				1	2	2	
Northern Samar						1	
Nueva Ecija	1	4	6	4	3	2	
Pampanga		5	7	4	1	2	
Pangasinan				1		1	
Rizal				1		1	
Surigao del Sur	1			1		1	
Tarlac	1	4	6	5		2	2
Western Samar						1	
Zambales						1	
Zamboanga del Norte			1	1		1	
Zamboanga del Sur			2	1		1	
Total	11	17	41	30	7	32	2

Sources: *Ang Bag-ong Suga*, *Daily Mirror*, *Manila Times*, *Mindanao Cross*, *Philippine News Service*, various issues, 1965–1971

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