

THE BIRTH OF THE DROUGHT INDUSTRY: IMPERIAL AND PROVINCIAL RESPONSE TO THE GREAT DROUGHT IN NORTHEAST BRAZIL, 1877-1880

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Over the last century, Brazil's Northeast interior has developed an image of pervasive misery, social banditry and religious fanaticism, all related in some way to the periodic droughts which afflict the region. The building of this image accompanied the work of three generations of Northeastern politicians to extract from the governments of the Empire and the Republic a political definition of the drought region and a guarantee of federal funds to combat the drought problem. Although multi-dimensional regional planning has in recent decades eroded the emphasis on droughts, they remain in the popular mind the Northeast's most characteristic element, and they continue to receive ritual attention in the literature on the region.(1) Paradoxically, perhaps because this drought literature so frequently has served to obscure the entrenched regional political interests and social systems, the droughts themselves have not received the close scrutiny which in recent years has begun to illuminate many aspects of the Second Empire and Old Republic.(2) This has left a serious gap in our understanding not only of the Northeast but Brazil as a whole. This generation needs to be reminded that the great droughts of the past were not figments of the Northeastern imagination, but genuine and profound crises to which the region and the nation repeatedly have been forced to respond. My paper deals with the worst of these, the Great Drought of 1877-1880.

From February, 1877, to May, 1880, the social and economic dislocation generated by this drought devastated five Northeastern provinces and seriously

affected at least six others. Because it defined naturally a problem region which transcended provincial lines, and because it posed major problems and decisions for the central government, the drought provides not only the opportunity to study a critical phase in the formation of the regional consciousness in the Northeast, but a unique case study in the functions of the Imperial system as well.

Even after we discount the exaggerated rhetoric which characterizes much of the literature, the evidence leaves no doubt that the Great Drought was a catastrophe of major proportions; in fact, measured in loss of human lives, it was the worst natural disaster in the history of Brazil, and probably of the western hemisphere. At a conservative estimate, the drought and the epidemics it spawned resulted in a quarter of a million deaths. Approximately an equal number migrated from the region and did not return. In effect, the population and economic growth lost to the Northeast in 1877-1880 were not regained for another generation, while other regions were gaining rapidly.(3) Contrary to the common Northeastern belief that they were "abandoned" in 1877 by a government dominated by the more powerful provinces of the central-south, the Empire spent over seventy thousand contos — or approximately thirty-seven million dollars — in relief measures, a figure exceeding one fifth of the total Imperial revenues over the three year period.(4)

Modern regional planners argue convincingly that even such prolonged droughts would have minimal effect on a society equipped with adequate transportation, non-agricultural industry and reasonably — distributed resources. This logic cannot be denied. Had such a society existed in Northeast Brazil in 1877, no emergency action would have been necessary: there would have no been crisis. However, what existed in 1877 was an agrarian-pastoral society of extreme poverty, whose puny resources were very unevenly distributed. Under these conditions the extended drought created a genuine emergency to which the government ultimately was forced to respond. My concern here is not with how the society might have been better structured so as to forfend entirely a drought crisis, but with the nature of the response that was made, with the institutions that existed then.

A satisfactory explanation of why such a calamity could occur in any society would require detailed analysis of its institutions and traditions. I will limit myself here to an examination of some aspects of the administrative and political structure of the Empire in an effort to explain why despite an extraordinary financial effort, a centralized government apparently equipped philosophically and institutionally to handle such an emergency failed to avert calamity. I will argue that its failure was due to four interrelated factors: (1) the fiscal caution of the Conservative government at the outset, which severely reduced the initiative of provincial presidents and introduced a fatal degree of rigidity into the relief structure, (2) provincial self-interest in using the drought to obtain Imperial money for public works and private profit, (3) a drought-born Northeastern lobby which was strong enough to elicit

heavy spending but too weak to create the regional coordination of it, and (4) a Liberal government which, coming to power in the midst of the drought, was so preoccupied with reforming the Imperial structure that it failed to use it as well as it might have to administer relief.

The Northeast would appear at first glance to have been at least as capable of exerting unified pressure on the Imperial government as any region of Brazil. It had been settled for over two hundred years, its elite contained many of the Empire's most powerful families, interlocked across provincial lines, and a sense of regional political identity had three times manifested itself in revolts against the central government. The law school at Olinda served as an educational and cultural focus, and regionalist groups in literature and philosophy were forming around such figures as Silvio Romero and Franklin Távora.(5)

We must be careful not to exaggerate this regional unity. It was weakened most seriously by a fiscal structure which gave the Imperial government a monopoly on imposts while leaving each province dependent on its own export taxes for operating revenues. A separate Imperial treasury was maintained in each province and presidents were expected to keep their expenditures of Imperial funds within the limits of their own Imperial revenues. This system encouraged fiscal timidity by presidents and intense economic rivalry between provinces. Legislatures discouraged export from their interiors through ports in other provinces and kept close watch along internal boundaries. This situation was aggravated in the 1850's and 1860's by a cotton boom which led to a rash of new customs houses along provincial borders and in rival ports, and it was intensified by depleted provincial income in the depression of the early 1870's. Thus, administrative divisions which cut across natural economic zones became a constant irritation and a major retardant to a sense of regional solidarity.(6)

The cotton rush created also, for the first time, a rival to Recife as the regional metropolis. The cattle regions of the interior had for centuries been culturally and economically distinct from the sugar regions of the coast, but as long as the export trade was monopolised by Recife, this subregion in the sertão remained without focus. In the second half of the nineteenth century, the port of Fortaleza became the natural outlet for the cotton shipped to Europe from the interiors of Ceará, Piauí, Maranhão, Rio Grande do Norte, and large areas of Paraíba and even Pernambuco. The capital of Ceará emerged as the natural leader for a viable subregion centering on the economic activities of cattle and cotton, and on the culture of the sertão.(7)

However, even within this new subregion there was dubious unity. The provinces of Paraíba and Rio Grande were torn economically between Fortaleza and Recife, and provincial loyalties still took precedence over any sense of region. Provincial presidents identified with the province rather than the region, and communications between provinces was virtually non-existent. In sum, there was no Northeast region in 1877. There were instead two vaguely-

defined cultural-economic zones, themselves cut by arbitrary administrative lines which effectively frustrated the development of a genuine sense of region.

Such a sense of region might have made more effective the relief system of Imperial Brazil. That system allowed recourse to government aid only after private and religious charity had failed. In 1877, these responded early and were sustained throughout, but were never adequate to handle a disaster of that size. The puny financial resources of backlands municipalities made any effective action by them, even in normal times, virtually impossible. Thus, the relief responsibility passed immediately to the provincial and Imperial levels.(8)

Provincial assemblies could legislate on local matters, but they lacked the money and administrative authority to implement emergency measures. That authority rested with Imperially-appointed presidents who executed both Imperial and provincial decisions. The eloquent apologist for the Imperial system, João Camillo de Oliveira Torres, has characterized them as the indispensable key to a flexible Imperial structure which was "united but decentralized". Through these presidents, the Council of Ministers could coordinate provincial actions to the benefit of the government and the Empire.(9)

Subject to review by the ministers, the presidents had in theory nearly unlimited power in their provinces; in fact, they found it almost impossible to be effective. By 1877, to encourage their husbandry of Imperial rather than provincial interests, presidents in the Northeast were usually not natives of the provinces they governed, and their terms were so brief as to preclude their understanding local conditions. Ceará, for example, had twenty-two presidents between 1850 and 1877, not counting the many interim executives.(10) This had disastrous effects on provincial administrations. Most presidents were unlikely to take imaginative or decisive action, particularly when Imperial funds were involved, lest they hamper their careers. In most cases, such essential public works as roads, ports and school buildings had to be built and maintained with the meagre provincial revenues. Use of Imperial money was usually limited to items already approved by the Imperial parliament. With these restrictions, the president of a poor, remote province was faced continually with the temptation to declare prematurely or to exaggerate a state of emergency in order to tap the Imperial Relief Fund.

This fund was a remarkable survival of the welfare state ideal in an age of laissez-faire liberalism. The Constitution of 1824 guaranteed every citizen unconditional public relief, and the annual budgets of the Minister of the Empire regularly provided funds upon which provincial presidents could draw. If the Imperial treasuries in their provinces should be depleted they could borrow against the Relief Fund from the Imperial treasuries in other provinces, or from private interests.(11)

The use of the Relief Fund varied as widely as the personalities, political courage and circumstances of the presidents. Having served their own apprenticeships, the Imperial ministers were aware of the difficulties and temptations

of provincial finance, and any president who used the fund knew he must eventually account for it. In 1877, Brazil had been struggling for a decade against a heavy deficit stemming from the Paraguayan War and the world economic crisis of the 1870's, and the most consistent characteristic of the Conservative governments since 1868 had been an extreme fiscal caution. The government was dominated by the Finance Minister, the Baron Cotegipe, "...an angel with gown and sword to guard the national treasury."(12) Under these conditions a president was unlikely to commit Imperial funds without assurance of support from the government, a political party, or a strong province or united region.

The Imperial structure was first alerted to the drought in mid-February, 1877, when municipal councils in several provinces petitioned presidents for aid to peasants whose crops had failed due to a long-delayed rainy season. Only in Paraíba did an interim vice-president, governing in the temporary absence of an Imperial appointee, dare to commit a small portion of the Relief Fund. In other Northeastern provinces the presidents waited over two months to employ the fund, at a time when decisive action might have averted the disaster that followed.(13) The sequence of decisions for Ceará — where the crisis was most intense — is typical of the overall pattern. President Caetano Estelita Cavalcanti Pessoa waited until the middle of March before he appointed commissions to coordinate private charity, and he procrastinated for two more weeks before writing to the Minister of the Empire for permission to tap the Relief Fund. While he waited for a reply refugees moved out of the interior to flood the streets of Fortaleza and the agricultural areas near the coast. Two weeks later the obvious danger of epidemics and riots — and the pressure of the Liberal opposition in the province — persuaded him to open on his own initiative a modest credit on the Relief Fund and to begin sending some aid to the interior. These late, hesitant measures had little effect. By May, when the Imperial government finally was persuaded that a crisis existed and gave presidents permission to begin a cautious, tightly-controlled food dole, the drought emergency was already developing into a human catastrophe.(14)

Hundreds of thousands of refugees concentrated along the São Francisco and Paraíba rivers, in the Cariri Valley and along the coast. Hamstrung by their inexact knowledge of what was happening and by the government's warnings against unnecessary spending, presidents still refused to take the initiative or to cooperate among themselves. For example, thousands of starving, rioting refugees remained unassisted for a month while the presidents of Alagoas and Pernambuco argued over whether they were Alagoan responsibility because they were gathered around a depleted food depository in that province, or Pernambucan responsibility because most of them came from there.(15)

With approximately a hundred thousand refugees camped near Fortaleza, President Estelita of Ceará at last yielded to local pressures and defied the policies of the government. On his own authority he wrote checks on the Imperial treasuries of Maranhão and Pernambuco, began buying food from local merchants, established a direct money dole and subsidized steamship companies to carry refugees out of the province. He was quickly removed for the arch crime of careless spending and replaced with an elderly functionary whose last experience as a provincial president was forty years past, and whose chief qualification to coordinate relief seems to have been that he could be trusted not to spend.(16)

While the government procrastinated, Northeasterners searched for ways to broaden the application of relief. Although the Conservative ministry never ventured more than a direct food dole, the provincial and local commissions actually administering it had from the first used it to employ refugees to build and repair the churches, council chambers, jails, roads and reservoirs they had been forced to ignore in normal times. In Ceará and Pernambuco, provincial interests saw the opportunity to finish major projects started in the prosperous 'sixties and now stagnating in the depressed 'seventies. A group of Cearense entrepreneurs had pending with the government a request for a large loan to rescue their Baturité Railway, started to tap the cotton boom in the northern part of Ceará, but now far from complete and on the verge of total bankruptcy. The great hope of the Pernambucan interior, a railway to link Recife with the middle São Francisco valley, had a similar history and was in 1877 near abandonment.(17)

The desperate entrepreneurs saw in the masses of drought refugees a vast pool of cheap labor and a providential opportunity to draw Imperial funds into their projects. With British policies during a parallel drought in India as their precedent and Herbert Spencer's *Social Statics* as their authority,(18) they argued that relief for the able-bodied was not a right, but a privilege to be earned through public labor. Their thoughts were clearly guided more by opportunism than by social philosophy. Urging the use of refugees to complete the Recife-São Francisco Railway trackage, the head of the provincial drought commission of Pernambuco lamented that:

We have not known how to draw all the advantage that this calamity offers us... at no time will we find so many robust workers demanding work... nor such good disposition to conquer difficulties in the interest of saving their own lives.(19)

This drought opportunism combined with a genuine need for more effective relief to create a drought lobby in Rio de Janeiro, led from the first by Cearenses. Early in April, the most prominent members of the Cearense colony in Rio de Janeiro organized a committee to coordinate private charity for their province. Most of the parliamentary figures from Ceará were in-

cluded and — despite the notorious bitterness of Cearense politics — the leadership was scrupulously bipartisan. Their well-publicized campaign lasted over two years and collected money from Brazilians all over the world. More importantly, their unified effort aroused public sympathy at the Court and helped create an effective drought bloc of wider scope in the Imperial Parliament. Acting in concert with the Liberal Party, this drought lobby was able to extract a substantial relief commitment from the reluctant, financially-pressed government.(20)

Senator Tomás Pompeu de Sousa Brasil, as the outstanding authority on the climate of the Northeast, as Ceará's leading entrepreneur, and as the chief of her dominant Liberal Party, was the natural leader of the drought lobby. Early in April, Pompeu gathered all Cearense deputies and senators for a meeting with the Minister of the Empire, Antônio da Costa Pinto e Silva. Despite this highly unusual solidarity, the Minister, who had served as a president in the Northeast during the drought of 1845, remained openly sceptical.(21) His caution was reinforced by the defection from the Cearense bloc of her most famous native son, novelist-jurist José de Alencar, who declared in the Chamber of Deputies that the drought could not yet be serious, that the Liberals were using as political allies "...the elements and these scourges... that we are accustomed to consider punishments of Divine Providence".(22) This division of opinion convinced Costa Pinto that he should remove from provincial presidents their initiative to tap the Relief Fund. To avoid reckless spending in the name of public relief he ordered all food for the drought area sent directly from the Court. The first shipment early in May carried his warning to presidents not to open new relief credits and to spend on no purpose other than food transport.(23)

Their first effort having failed, the Cearenses gathered reinforcements from the other drought provinces. On April 24, twenty-three cosponsors from the provinces of Ceará, Paraíba, Rio Grande do Norte, Pernambuco and Rio Grande do Sul submitted to the Chamber a bill calling for two thousand contos to be added to the depleted relief fund. This was the first manifestation of an inter-provincial drought lobby. It was small and weak, and led by a minor province. Alone it had little chance of success. However, the project was immediately championed by the Liberal Party, anxious for any opportunity to discredit the faltering Conservative government. Northeastern claims that the ministry was violating their Constitutional right to direct relief and abandoning an entire region to calamity were vigorously seconded by Liberals from all sections of the Empire. Unable to resist this unexpected pressure, Costa Pinto conceded the need for more relief funds. By May 19 the bill had passed both houses of parliament.(24)

I should underscore three characteristics of this first drought lobby because they persisted throughout the crisis: (1) the lobby was dominated from the first by Ceará and the results were primarily to her benefit; (2) Rio Grande do Sul, perhaps because it was also a cattle province that suffered

from drought, consistently supported the drought lobby; (3) the most effective support and opposition to the drought lobby was not regional but political: among the strongest supporters of drought relief were Liberal leaders Gaspar Silveira Martins from Rio Grande do Sul and Martinho Campos from Minas Gerais; the most consistent opponent of drought spending was the Conservative leader Cotegipe, from Bahia.

The lobby had made more money available, but it could not control the way it was spent, and Costa Pinto intended to keep the provincial presidents tightly under control. The urgent necessity for relief forced him to abandon his earlier decision not to buy food in the Northeast, but he still did not allow presidents to buy food where they wished. Instead, he established a central coordinating body and staging base through which all Imperial aid was to be channeled. Fortaleza, as the economic center of the drought region, would seem to have been the logical site, but Ceará was a Liberal stronghold and the president there had apparently come under their sway. Costa Pinto therefore turned away from the capital of the new subregion and established his base in Recife, which was the traditional center of the Northeast and which had a much smaller stake in the drought issue.(25)

Had this coordination come earlier and been accompanied by adequate funding the results might have been different. By now the interior was nearly impassable and the food deposits established near the coast served primarily to accelerate the ominous massing of refugees. The drought lobby now began to argue that the government should use relief funds for large-scale relief projects which would both disperse and utilize them. In both the Chamber and the Senate, Cearense politicians submitted bills for that purpose. Their arguments were consistent: the dole was a shortsighted response which robbed men of their dignity; construction of railways and reservoirs would not only give honorable relief but would provide means to combat future droughts. Thus, to the moral argument was added another: the environment of the Northeast could be altered by man; the drought offered the opportunity to do so.

All their eloquence was insufficient to overcome the financial difficulties of the government and neither bill passed. It is clear, however, that the drought industry had been born. Most of the opposition was not to the principle but to the expense, because of the vague outlines of the projects to be built, and most importantly, because those projects would be limited to the province of Ceará. Even Cotegipe was attracted by the cheap refugee labor and had already authorized its use to complete the telegraph line between Recife and Fortaleza.(26)

The concept was further strengthened by debates in the most prestigious technological circles at the Court over the causes and remedies for the droughts. The tone of the exchanges and the final recommendations showed that the transformation of the relief philosophy was complete. The Polytechnic Institute and the Society for Aid to National Industry advised the government

to use salaried refugee labor for large public works in the drought area and recommended that a commission be sent immediately to the Northeast to study specific measures. More than a simple plea for anti-drought works, these proposals called for a comprehensive program of regional development, the legitimate sire of the regional agencies of the Republic.(27)

The Conservative government was not prepared to implement such a sweeping plan, nor were the other drought provinces as well organized in their demands. The drought commission was formed, but its instructions limited it to finding means to build large reservoirs and improve the communications within the province of Ceará only. After four months of study the commissioners recommended that ten thousand contos be spent in Ceará over a ten year period to build thirty large public reservoirs, that subsidy be provided for smaller private ones, and that Imperial funds and refugee labor should be used to construct three railways, with immediate priority given to the Baturité line.(28)

Before the commission delivered its final report the Imperial government passed over to Liberal control, and the party faithful hastened to claim their prerogatives after a decade out of power. Northeasterners had reason to expect better treatment from the new government than they had received from the Conservatives. Not only had the Liberals by their rhetoric committed themselves to the cause of the drought provinces, the new President of the Council of Ministers, João Lins Vieira Cansação de Sinimbu, was a Northeasterner from Alagoas. Of particular interest to Cearenses, he had for two decades been one of Tomás Pompeu's closest friends and was known to favor his projects. Early in 1876 he had assured Pompeu that if the Liberals had then controlled the government, the Baturité line would be given first preference for Imperial aid, even above the Bahian and Pernambucan roads favored by earlier Liberal administrations.(29)

With a starting deficit of nearly thirty-five thousand contos, the Sinimbu ministry was in no better position financially than the ousted Conservatives. However, the new Finance Minister, Gaspar Silveira Martins, was a believer in all things liberal, including expanded public works and deficit financing. Encouraged by the Emperor, Sinimbu took steps to relieve the Northeast. With parliament between sessions he reminded an emergency meeting of the Council of State of the Constitutional relief obligation and the threat of anarchy if it were not met. On the advice of Silveira Martins he asked, and was given, permission to emit sixty thousand contos in inconvertible paper money to meet the emergency. Ten days later, with the probability that when parliament reconvened it would refuse to approve his rash financial action, he asked the Council for permission to dissolve it, gaining permission by only one vote.(30)

The new elections predictably returned a strong Liberal Chamber, and on June 1, 1878, before it convened, Sinimbu issued a decree which allotted nine thousand contos to construct the Baturité Railway, another from the northern

Ceará port of Camocim to Sobral, and another around the Paulo Afonso Falls in Alagoas and Pernambuco. Such action had been recommended by the drought commission, yet it is difficult to overlook the fact that Sinimbu himself was from a province that would benefit from the Paulo Afonso railway, that his appointee as President of Ceará was a large landholder in the area of the Sobral line, and that the last crusade of his good friend, Tomás Pompeu, had been to gain Imperial funding for the Baturité road.(31)

With Spencerism and opportunism triumphant, direct relief virtually disappeared in the drought area, replaced by compensated labor on a wide variety of works projects and by ill-managed subsistence colonies. All the provinces and municipalities of the Northeast scrambled to build and repair roads, reservoirs and public building with this windfall of cheap labor and ready money. Periodically over the next two years the drought provinces extracted additional funds from the parliament. When the drought spending was finally suspended in May of 1880, the Liberal government had spent 71,500 contos, as compared to the 2,500 spent by the Conservatives in the first year of the drought.(32) Under the Liberal ministry, presidents were allowed almost total freedom in their relief spending. There was active competition for positions on the drought commissions, and a general air of profiteering prevailed. The large merchant houses of Fortaleza made huge profits when the government began to allow purchases within the drought provinces.(33)

The expensive relief program had come too late, and was too corrupt and poorly coordinated to arrest the overwhelming calamity now enveloping the backlands. The large railway projects did little to disperse the crowds in the coastal cities and along the São Francisco. By the middle of 1878, almost completely unable to cope with the hordes of migrants, other drought provinces emulated the most distasteful of Cearense solutions and began embarking refugees out of the drought region.(34)

The epidemics that began late in 1878 seemed almost inevitable. Exact mortality is unknown, but official records show over 64,000 deaths in Fortaleza during 1878-1879, 35,000 in Mossoró, about 9,000 in the city of Paraíba and over 4,000 in Recife. The epidemics spread to the interior with the railway projects and to the Cariri valley with returning emigrants in 1879. They were carried to Rio de Janeiro and the Amazon basin by refugees moved there by the government. At a conservative estimate smallpox claimed at least 100,000 total lives and at least another 100,000 died from other drought-connected causes. The government responded by sending small amounts of weak vaccine and five doctors when the epidemic was almost over.(35)

The Sinimbu government had been created for the express purpose of electoral reform, and by 1879 the drought effort had come to be a heavy liability. The issuance of paper money for relief expenses was vehemently opposed by the dissident faction of the Liberal Party, and Sinimbu's enemies began to multiply as it became apparent that he could not succeed with the reform. His ministry began to fragment, and as it did, the strength of the

drought coalition began to fade. In February of 1879, Silveira Martins resigned as Finance Minister and was replaced with Afonso Celso of Minas Gerais, who immediately began to work toward reduced drought spending.(36)

With the terrible epidemic in progress in the Northeast and evidence that the rains had failed for the third straight year, the government did not dare suspend aid, but the debates in the parliament over an additional supplement to the relief budget revealed the degree to which the drought coalition had split. Dissident Liberal Martinho Campos of Minas Gerais, who had been one of the most outspoken champions of drought spending while the Conservatives were in power, but who opposed Sinimbu's approach to electoral reform, now loudly demanded an investigation of drought profiteering and suggested that all relief spending should be stopped. In June, the Minister of the Empire was forced to resign over an educational dispute, thereby precipitating Sinimbu into a confrontation with his sponsor, José Bonifácio, the most powerful Liberal in Sao Paulo.

The representatives from the drought provinces were themselves badly divided by that time. Tomás Pompeu had died in 1877 and the most influential Cearense in the parliament was Conservative Senator José Rodrigues, who campaigned incessantly to reduce drought spending and curb profiteering by Liberal commissioners. He was joined by Felício dos Santos of Pernambuco, who had supported the drought bloc earlier, and by the Baron Cotegipe, now the leader of the Conservative opposition in the Senate.(37)

The drought lobby no longer seemed strong enough to persuade the government to maintain relief spending, and Sinimbu himself was heavily preoccupied with efforts to save his electoral reform proposal. Two factors seem to explain why the government continued its relief measures throughout 1879. First, even those who complained about excessive spending hesitated to suspend the large public works projects before they made substantial progress. Second, and perhaps most important, was the Emperor's personal commitment to the public relief responsibility imposed by the Constitution. Although Dom Pedro apparently did not intervene directly in the handling of the crisis, his correspondence and public pronouncements show that he followed it closely and that he was genuinely touched by the horrors in the Northeast. He had instructed Sinimbu personally to "...continue spending until Ceará is well and the Crisis is ended", giving him little choice but to maintain relief measures until the drought gave at least the appearance of being over.(38)

Toward the end of 1879 the Liberal approach to the drought began to resemble the Conservative approach in 1877. Finance Minister Celso prohibited all presidents from opening new relief credits without his express approval, then waited for the opportune time to discontinue spending altogether. In November, Sinimbu's electoral reform was defeated by the Senate and it was apparent that his government was near an end. With the prospects of a normal rainy season in 1880, Northeastern presidents were instructed in January to begin moving refugees back into the interior. By March, the

first normal rainy season in three years was confirmed. In that same month the first section of the Baturité Railway was completed, and Sinimbu's ministry was replaced by that of José Antônio Saraiva. Although there were still thousands of refugees in hospitals and shelters all over the Empire and the need for relief was still great, the time seemed right for the government to liquidate its responsibility. On April 9 the drought was declared ended and all spending ceased.(39)

The tragedy of 1877-1880 permanently fixed the image of the Northeast interior as a region of drought misery, but more than that it taught Northeastern politicians that they could use that image to their regional advantage. During the three year emergency, Imperial expenditures in most of the drought provinces far exceeded provincial revenues for even the best normal years. In Ceará and Rio Grande do Norte, total Imperial spending in the drought was more than the total Imperial revenue from those provinces for the next ten years. Many commercial and agrarian interests had actually gained from the drought, and the transportation system was much improved, with roads newly paved, the Baturité Railway complete as far as Canoa and new railroads from the coast to Sobral and around the Paulo Afonso Falls.(40)

These drought windfalls convinced many that only with large injections of outside money could they continue to develop the interior and conquer their old problems. After 1880 the drought area had a sense of region it had never possessed before. The drought bloc created during the crisis had been fragile and dependent upon outside help for success, but in teaching Northeasterners how to make an industry of the droughts it created a legacy which was to dominate the regional politics for the next century.

FOOTNOTES

1. The drought literature is enormous, and continuous since 1880. The classic account of the drought of 1877-1880, and an obligatory reference for the history of the Northeast in the nineteenth century, is Rodolfo Teófilo, *História da Seca do Ceará (1877 a 1880)*, (Fortaleza, 1882). The last decade of the Empire also saw the beginning of the drought novel, with José do Patrocínio, *Os Retirantes* (1879), Teófilo's, *A Fome* (1885), and Domingos Olympio, *Luzia-Homem* (1882), all based on the drought of 1877. During the Old Republic, the drought image was reinforced by Euclides da Cunha's classic, *Os Sertões* (1903), and such important regional works as Irineu Joffily, *Notas Sobre a Parahyba* (Rio de Janeiro, 1892), Phelipe Guerra, *Secas Contra a Seca* (Natal, 1909), Thomaz Pompeu de Souza Brasil, *O Ceará no Começo do Século XX* (Fortaleza, 1909), and José Américo de Almeida, *A Parahyba e Seus Problemas* (Paraíba, 1923). In the Vargas era, the polemic was carried forward by Rachel de Queiroz in her archtypical drought novel, *O Quinze* (1930) and by a multitude of tracts such as Eloy de Souza, *O Calvário das Secas* (João Pessoa, 1938). This period also produced one of the few works attempting to study the region as a whole, Djacir Menezes, *O Outro Nordeste, Formação Social do Nordeste* (Rio de Janeiro, 1937). Since World War II,

the line has been continued by Joaquim Alves, *História das Secas (Séculos XVII a XIX)*, (Fortaleza, 1953), the best overall work on the history of the droughts, by Thomás Pompeu Sobrinho, *História das Secas (Século XX)*, (Fortaleza, 1953), carrying on a family tradition of three generations, Raimundo Girão, *História Econômica do Ceará* (Fortaleza, 1947), Luís da Câmara Cascudo, *História do Rio Grande do Norte* (Rio de Janeiro, 1955), Rui Facó, *Cangaceiros e Fanáticos* (Rio de Janeiro, 1965), and Josué de Castro, *Geografia da Fome* (São Paulo, 1961). The image has been carried outside Brazil through multilingual translations of the works by Da Cunha, Ramos and Castro, and through such works as Herbert H. Smith, *Brazil, The Amazons and the Coast* (New York, 1879), Pierre Denis, *Brazil* (London, 1911), Alfred A. Hirschman, *Journeys Toward Progress. Studies in Economic Decision Making in Latin America* (New York, 1963), Stefan Robock, *Brazil's Developing Northeast. A Study of Regional Planning and Foreign Aid* (Washington, 1963), and Riordan Roett, *The Politics of Foreign Aid in the Brazilian Northeast* (Nashville, 1972).

2. For example: Alice P. Cannabrava, *Desenvolvimento da Cultura do Algodão na Província de São Paulo (1861-1865)*, (São Paulo, 1951); Fernando Henrique Cardoso, *Capitalismo e Escravidão no Brasil Meridional: O Negro na Sociedade Escravocrata do Rio Grande do Sul* (São Paulo, 1962); Florestán Fernandes, *A Integração do Negro na Sociedade de Classes* (São Paulo, 1965); Victor Nunes Leal, *Coronelismo, Enxada e Voto* (Rio de Janeiro, 1949); Stanley Stein, *Vassouras, a Brazilian Coffee County, 1850-1900* (Cambridge, Mass, 1957), and *The Brazilian Cotton Manufacture: Textile Enterprise in an Underdeveloped Area, 1850-1950* (Cambridge, Mass, 1957); Richard Graham, *Britain and the Onset of Modernization in Brazil, 1850-1914* (Cambridge, 1968); Robert Conrad, *The Destruction of Brazilian Slavery* (Berkeley, 1973); Ralph Della Cava, *Miracle at Joazeiro* (New York, 1970); Joseph L. Love, *Rio Grande do Sul and Brazilian Regionalism, 1882-1930* (Stanford, 1971); Michael Hall, "The Origins of Mass Immigration in Brazil, 1871-1914", Unpublished PhD dissertation, Columbia University, 1969; Eul Soo Pang, "The Politics of Coronelismo in Brazil: The Case of Bahia, 1889-1930", Unpublished PhD dissertation, University of California, Berkeley, 1970.
3. Beginning with H.H. Smith's *Brazil* (1879), the exaggerate figure of 500,000 deaths for Ceará alone has become standard in the drought literature. For detailed estimates of the loss of life in Ceará, see José Pompeu de Albuquerque Cavalcanti, *O Ceará em 1877: Chorografia da Província do Ceará* (Rio de Janeiro, 1888), pp. 145-146, and Thomaz Pompeu de Souza Brazil, "População do Ceará em 1889", *Revista do Instituto do Ceará*, IV (1890), 253-272. Roger L. Cuniff, "The Great Drought: Northeast Brazil, 1877-1880" (unpublished PhD dissertation, University of Texas, Austin, 1971), p. 284, furnishes a projection of deaths for the entire Northeast based on all available statistics.
4. Affonso Celso de Assis Figueiredo, Minister of the Treasury, *Relatório que a S. Ex. O. Sr. Conselheiro José Antônio Saraiva... apresentou ao passar-lhe a pasta em 27 de maio de 1880* (Rio de Janeiro, 1880), Tabela n.º 5, "Demonstração de todas as despesas feitas na corte e nas províncias com a seca por conta dos diferentes créditos... até a presente data 22 de março de 1880". The total Imperial revenue for the years 1877-1878 through 1879-1880 was 339.222: 972/141 according to Liberato de Castro Carreira, *História financeira e orçamentária do Império do Brasil desde a sua fundação* (Rio de Janeiro, 1889), pp. 478-492.

5. Menezes, *O Outro Nordeste*, is a somewhat superficial historical survey of Northeastern regionalism. Eul Soo Pang is at present engaged in extensive research on the regional elite: see the excellent article by Pang and Ron L. Seckinger, "The Mandarins of Imperial Brazil", *Comparative Studies in Society and History*, XIV (1972), 215-244.
6. The classic description of the weakness of the province under the Empire is Aurélio Cândido Tavares Bastos, *A Província* (2nd Ed., São Paulo, 1937), pp. 289-99, 308-32 for financial centralization. The irritation and timidity this system induced are conveyed through the *relatórios* of the various Northeastern presidents in the 1850's, '60's and '70's.
7. Celso Mariz, *Evolução Econômica da Paraíba* (João Pessoa, 1939), pp. 421-422; Teófilo, *História da Seca*, pp. 1-23; Tomás Pompeu de Souza Brasil, *Ensaio Estatístico da Província do Ceará* (Fortaleza, 1867), II, pp. 343-44, 380; John Casper Branner, *Cotton in the Empire of Brazil, the Antiquity, Method and Extent of its Cultivation* (Washington, 1885), pp. 1-25; Denis, *Brazil*, p. 342; Richard Burton, *The Highlands of Brazil* (London, 1867), II, 407-36. For specific information on the new importance of Fortaleza see João Wilkens de Mattos, President of Ceará, *Relatório com que abriu a 1.ª sessão da 21ª legislatura da Assembleia Legislativa Provincial do Ceará no dia 20 de outubro de 1872* (Fortaleza, 1873), p. 421.
8. The 1828 organic law for municipalities gave them first-instance responsibility for the general welfare. The text of the law is appended to João Camillo de Oliveira Torres, *A democracia coroada, teoria política do Império do Brasil* (Rio de Janeiro, 1964), p. 373; for his discussion of the weakness of municipalities under the Empire see pp. 364-70, and Nunes Leal, *Coronelismo, enxada e voto*, pp. 7-49.
9. Oliveira Torres, *A Democracia*, pp. 321-62, and his recent apologia for the Conservative Party, *Os Construtores do Império: Idéias e Lutas do Partido Conservador Brasileiro* (São Paulo, 1968), pp. 19-23 esp.
10. Eul Soo Pang, "The Mandarins" is the best description of this. Lists of all officially-appointed presidents are appended to Brazil, Arquivo Nacional, *Organizações e programas ministeriais. Regime parlamentar no Império* (Rio de Janeiro, 1962), pp. 434-436 for Ceará.
11. The attributes and powers of the provincial presidents and legislatures are summarized in Oliveira Torres, *A Democracia*, 321-62. Article 179 of the Constitution guaranteed the inviolability of the civil and political rights of Brazilian citizens, having as their base "...liberty and the security of individuals and property"; clause 31 of that article stated simply that "The Constitution also guarantees public relief" (appended to *ibid.*, p. 496). Ministerial responsibilities and jurisdictions are outlined in Luiz Antônio Vieira da Silva, "Organização Administrativa do Império", *Segundo Congresso de História Nacional, Rio de Janeiro, 1931* (5 vols., Rio de Janeiro, 1932), II, 666-701.
12. Joaquim Nabuco, *Um estadista do Império, Nabuco de Araújo, sua vida, suas opiniões, sua época* (2nd ed., São Paulo, 1936), II, p. 290. The description of Cotegipe was made on the floor of the Legislative Assembly of Ceará by Deputy Sampaio (*Annaes da Assembléia Legislativa Provincial do Ceará*, Aug. 18, 1877, Appendix E, p. ii.)
13. Joffily, *Notas sobre a Parahyba*, p. 92; Phelipe Guerra, *Secas*, p. 37; Municipal Council of Souza to President of Paraíba, March 4, 1877, "Correspondencia do presidente da província", in the Arquivo Nacional, Secção de Ministérios, Ministério do Império, Paraíba, Vol. 16 (1877), ff. 119-210, hereafter cited as CPP; Antônio Pinto Nogueira Accioly to Senator Tomás Pompeu, Fortaleza, Feb. 22, 1877, in José Aurélio Sa-

- raiva Câmara, ed., *Correspondência do Senador Pompeu* (Fortaleza, 1960), p. 202; Delegate of Police, Telha, to President of Ceará, Feb. 15, 1877, CPP, Ceará (1877), f. 239; President, Municipal Council, Lavras to President of Ceará, *ibid.*, f. 241; President Municipal Council, Imperatriz to Estelita, April 16, 1877, *ibid.*, f. 146; Municipal Council of Souza to President of Paraíba, March 4, 1877, CPP, Paraíba (1877), ff. 119-120; José Paulino de Figueiredo to Minister of the Empire, March 1, 1877, CPP, Paraíba (1877), f. 167; Lt. Plácido Lucas Biar, 2nd Btn. Infantry, Ingazeira, Pernambuco to President of Pernambuco, April 16, 1877, CPP; Pernambuco (1877), f. 50; President of Rio Grande do Norte to Minister of the Empire, May 7, 1877, CPP, Rio Grande do Norte (1877), f. 188; *A Opinião* (Paraíba), April 28, 1877, p. 1.
14. Estelita to Minister of the Empire, CPP, Ceará (1877), f. 103; *O Cearense* (Fortaleza), March 15, 1877, p. 1; President of Paraíba to Minister of the Empire, March 17, 1877, CPP, Paraíba (1877), f. 119; Estelita to Minister of the Empire, April 27, 29, 30, 1877, CPP, Ceará (1877), ff. 118, 119, 120-123; Joffily, *Notas*, p. 95; *O Cearense*, May 13, 1877, p. 1; Municipal Judge, Quixadá, Ceará, to Estelita, April 7, 1877, CPP, Ceará (1877), f. 172; *Jornal do Comércio* (Rio de Janeiro), Jan. 10, 1878, p. 1.
15. Joaquim Gonçalves Lima, Central Relief Commission, Pernambuco, to President of Pernambuco, June 22, 1877, CPP, Pernambuco (1877), f. 130; Municipal Council, São Pedro Ibiapina to Estelita, June 9, 1877, CPP, Ceará (1877), f. 220; *Jornal do Comércio*, Aug. 4, 1877, p. 1. Nicolao Tolentino de Carvalho, President of Rio Grande do Norte, *Falla com que... abriu a segunda sessão da Assembléa Provincial do Rio Grande do Norte em 18 de outubro de 1877* (Recife, 1877), p. 48-49; Relief Commission, Taracatu to Gonçalves Lima, Sept. 1, 1877, Arquivo Público Estadual de Pernambuco, D-7, "Soccorros Públicos", f. 83.
16. Estelita to Costa Pinto, July 8, 1877, Aug. 29, 1877, CPP, Ceará (1877), ff. 15, 122-124; *Jornal do Comércio*, Jan. 10, 1878, p. 1; Teófilo, *História da Seca*, p. 102; *O Cearense*, June 20, 1879, p. 1.
17. Vicar dos Santos, Canindé, Ceará, to Estelita, April 26, 1877, CPP, Ceará (1877), f. 285; Municipal Council, Imperatriz to Estelita, April 28, 1877, Arquivo Público Estadual do Ceará, pacote 852; Thomas José Coelho de Almeida, Minister of Agriculture, Commerce and Public Works, *Relatório apresentado à Assembléa Geral Legislativa na primeira sessão da décima Sexta legislatura* (Rio de Janeiro, 1877), pp. 170-172; André Rebouças, *Diário e notas autobiográficas* (Rio de Janeiro, 1938), p. 55; Manuel Pinto de Souza Dantas, Minister and Secretary of State for Agriculture, Commerce and Public Works, *Relatório apresentado à Assembléa Geral Legislativa na Primeira Sessão da Décima Terceira Legislatura* (Rio de Janeiro, 1867), pp. 143-144. Both the Baron of Ibiapaba (Joaquim da Cunha Freire) and Senator Pompeu, the leaders in Ceará of the Conservative and Liberal Parties respectively, were large stockholders in the railway (*O Cearense*, Jan. 15, 1871, p. 2).
18. Thomaz Pompeu de Souza Brasil, *Memória sobre o clima e secas do Ceará* (Rio de Janeiro, 1877), p. 55; Liberato de Castro Carreira, "A seca nas províncias do Norte", *Jornal do Comércio*, June 6, July 2, 3, Aug. 14, Oct. 19, 1877; *O Cearense*, June 7, 1877, p. 1. For a general account of Spencerianism in the late Empire, see Graham, *Modernization*, pp. 232-51.
19. Joaquim Gonçalves Lima, Chief of Central Relief Commission, Pernambuco, to President of Pernambuco, Aug. 16, 1877, Arquivo Público Estadual de Pernambuco, D-27, "Soccorros Públicos", ff. 72-73.

20. *Relatório e contas da subscrição promovida em favor das victimas da secca do Ceará pela Comissão Central Cearense, organizada nesta Corte em 7 de maio de 1877* (Rio de Janeiro, 1879); Liberato de Castro Carreira wrote a running commentary on the drought which appeared regularly in the *Jornal do Comércio* as "A seca nas províncias do Norte", and served to keep the crisis in public view.
21. Tristão de Alencar Araripe to Senator Pompeu, Rio de Janeiro, April 4, 17, 1877, in Saraiva, *Correspondência*, pp. 152, 153.
22. Raimundo de Menezes, *José de Alencar, literato e político* (São Paulo, 1965), p. 384.
23. *Annaes da Câmara dos Deputados Brasileiros*, May 15, 1877, p. 187; Estelita to Costa Pinto, May 21, 1877, Ceará (1877), f. 186.
24. The debates on the project are in the *Annaes* of the Chamber of Deputies for April 24, May 2, May 14-15, 1877, pp. 315, 39, 159-68, 186-90.
25. Costa Pinto to Estelita, May 6, 1877, in Brazil, Arquivo Nacional, Secção de Ministérios, Ministro do Império, 1.^a Directoria, "Minutas de officios e avisos, abril-junho, 1877", f. 342; Carlos Leôncio de Carvalho, Minister of the Empire, *Relatório apresentado à Assembléa Geral Legislativa na primeira sessão da décima sétima legislatura* (Rio de Janeiro, 1878), p. 117.
26. *Annaes do Senado Brasileiro*, June 26, 27, 1877, pp. 235-54; Tristão de Alencar Araripe, *Discurso sobre as providências relativas às seccas do Ceará, proferido em sessão da Câmara dos Deputados em 27 de junho de 1877* (Rio de Janeiro, 1877), pp. 3-31; *Jornal do Comércio*, Aug. 4, 1877, p. 1.
27. Pompeu, *Memória*, pp. 52-60; *Diário Oficial*, Jan. 19 e 20, 1878; "Actas da sessão extraordinária em 18 de outubro de 1877", in *Revista do Instituto Politéchnico*, XI (1877), 10, 11, 13-6, 28-34; Minutes of Administrative Council, Associação Brasileira de Acclimação, Oct. 20, 1877, printed in André Rebouças, *Soccorros Públicos. A secca nas províncias do Norte* (Rio de Janeiro, 1877), pp. 961-114; "Providências que devem ser aconselhadas pela Sociedade Auxiliadora da Indústria Nacional", in *ibid.*, pp. 117-118, *Jornal do Comércio*, Nov. 17, 1877.
28. "Instrucções para direcções dos trabalhos da comissão encarregada pelo governo Imperial de proceder aos estudos concernentes à adopção dos meios efficazes para prevenir ou minorar os efeitos da secca em algumas províncias do Norte do Império", in *Diário Oficial*, Dec. 12, 1877; Carlos Leôncio de Carvalho, Minister and Secretary of State for Agriculture, Commerce and Public Works, *Relatório... apresentado a Assembléa Geral Legislativa na primeira sessão da décima sétima legislatura* (Rio de Janeiro, 1878), p. 178.
29. Sinimbu to Pompeu, Rio de Janeiro, Jan. 9, 1876, in Saraiva, ed., *Correspondência...*, pp. 104-105.
30. "Atas do Conselho de Estado Pleno, 1875-1880", sessions of March 30 and April 10, 1878, Arquivo Nacional, Ramo de História, Cod. 307, Vol. 9, ff. 55-60, 69-70; Tobias Monteiro, *Pesquisas e depoimentos para a história* (Rio de Janeiro, 1913), pp. 43-45.
31. Decree 6918, June 1, 1878, with Sinimbu's justifications, in *Diário Oficial*, June 2, 1878, pp. 1-2.
32. Francisco de Carvalho Soares Brandão, President of Alagoas, *Relatório com que... ao Dr. José Torquato de Araújo... passou a administração das Alagoas... em 26 de novembro de 1877* (Maceió, 1879), 8-11; "Relatórios apresentados pela Comissão de Soccorros Públicos da Villa de Teixeira ao Illmo. Exmo. Sr. Dr. José Rodrigues Pereira Jr., dando conta do modo porque tem procedido relativamente a distribuição dos soccorros, 15 de outubro de 1879", CPP, Paraíba (1879), ff. 503-511; José Júlio de

- Albuquerque Barros, *Falla... Ceará... 1 de novembro de 1878* (Fortaleza, 1878), p. 50; "Demonstração da despeza effectuada na Thesouraria da Fazenda da provincia do Ceará pela verba Socorros Públicos... no período decorrido de 1 de setembro a 2 de dezembro corrente, exercício de 1877-1878", CPP, Ceará (1878), f. 5; "Demonstração da despeza realçada pela Thesouraria da Fazenda de Pernambuco com soccorros as victimas da sêcca durante o período decorrido de abril de 1877 a julho de 1879", CPP, Pernambuco (1879), ff. 126-129. See footnote n.º 4, above.
33. Albuquerque Barros, *Falla... Ceará... 1 de novembro de 1878*, p. 37, and *Falla com que abriu a 1.ª sessão da 25ª legislatura da Assembléa Provincial no dia 1.º de julho de 1880* (Fortaleza, 1880), pp. 12-20; Carvalho, *Relatório... Império... 1878*, p. 120; see the characterizations of greedy drought commissioners in José do Patrocínio's, *Os retirantes* (Rio de Janeiro, 1879), pp. 123, 221-222, and Domingos Olympio, *Luzia-Homem* (2nd ed., São Paulo, 1949), p. 49.
 34. Albuquerque Barros, *Falla... Ceará... 1.º de julho de 1880*, p. 49; Ulisses Machado Pereira Viana, President of Paraíba, *Relatório apresentado à Assembléa Legislativa da Parahyba do Norte... em 1.º de janeiro de 1879* (Paraíba, 1879), p. 57; Sancho de Barros Pimentel, President of Piauí, circular to relief commissions, April 18, 1878, Arquivo Público Estadual do Piauí, Vol. 678, "Socorros Públicos" (1878).
 35. See footnote n.º 3, above.
 36. See especially *Annaes da Câmara dos Deputados Brasileiros* for Jan 11, 1879 (pp. 417-424), Jan 21, Jan. 23, Feb. 11 (pp. 459-465), and Feb. 14 (pp. 530-535); see the *Annaes do Senado Brasileiro* for Jan. 9, 1879 (p. 119), Jan. 23 (p. 277), Feb. 7 (pp. 62-66) and Feb. 13 (pp. 113-115). For detailed accounts of the splintering of the Sinimbu ministry over the electoral reform issue, see Tobias Monteiro's chapter, "Os Liberais e a eleição direta", *Pesquisas e depoimentos*, pp. 34-54, and Philip Evanson, "The Liberal Party and Reform in Brazil, 1860-1880", (unpublished PhD dissertation, University of Virginia, 1969), pp. 136-150.
 37. For attacks on drought spending in mid-1879, see *Annaes* of the Chamber of Deputies for May 19 (p. 241), May 26 (pp. 374-5), June 5 (pp. 12-16), June 20 (pp. 173-177), July 18 (pp. 527-564), and the *Annaes* of the Senate for June 18 (pp. 162-208), June 26 (pp. 235-236), and July 8 and 9 (pp. 88-125).
 38. The quotation is from a letter to Dom Pedro from Guilherme Schüch de Capanema, Jan. 17, 1879, Museu Imperial, XLXXI, 8294, reminding the Emperor of his words. The correspondence between Dom Pedro and Sinimbu in the Museu Imperial leaves no doubt that Pedro was closely concerned about the condition of his subjects in the Northeast, but it does not reveal precisely what his role was in the way the crisis was handled. There is no evidence that he intervened directly, nor is there any record of his famous offer to sell the crown jewels in order to continue sending aid to the region (see Rodolfo Teófilo, *Sêccas do Ceará (segunda metade do século XIX)* (Fortaleza, 1901), p. 30. Sinimbu was know to be a "man of the Court" rather than a strong party leader, more likely than another Council President might have been to follow the Emperor's wishes, even to the detriment of his party.
 39. Albuquerque Barros, *Falla... Ceará... 1.ª de julho de 1880*, p. 49; Baron Homem de Mello, Minister for Empire, *Relatório apresentado à Assembléa Geral Legislativa na terceira sessão da décima sétima Legislatura* (Rio, 1880), p. 84; Circular n.º 2267, in AP. Secção de Ministérios, Ministério do Império, "Primeira Directoria, Avisos abril-junho, 1880",

Gama Abreu, Pará, to Mello, Aug. 5, Sept. 5, Dec. 6, 1880, CPP, Pará (1879-80), ff. 335, 336, 503.

40. For tables on Imperial revenues from the various provinces see Amaro Cavalcanti, *Resenha financeira do ex-império do Brasil* (Rio de Janeiro, 1890), pp. 19-20; for evidence on the merchants who profited, Fábio Alexandrino dos Reis Quadros, Special Treasury Commissioner, Ceará, *Relatório apresentado ao Illmo. e Exmo. Sr. Ministro e Secretário de Estado dos Negócios da Fazenda Affonso Celso de Assis Figueiredo* (Rio de Janeiro, 1880), Table n.º 4; also, "Relação dos negociantes e mais pessoas que obtiverão saques em pagamento de varios contos de generos, passagens e roupas feitas fornecidas aos 'socorros publicos' no exercicio 1877-78", Arquivo Nacional, Secção de Ministérios, Ministério do Império, "Correspondencia da Thesouraria da Fazenda", Ceará (1875-79).