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## THE LOCUST INVASIONS IN THE ISLAND OF CYPRUS AND ITS SOCIAL AND ECONOMIC AFFECTS (1750-1840)

Kıbrıs Adası'nda Çekirge İstilaları ve Sosyo-Ekonomik Etkileri (1750-1840)

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#### Abstract

The island of Cyprus, which has a strategic location in the Mediterranean, has been attacked by locusts at different times. Due to the damage to the vegetation and agricultural products on the island, the people of the island have experienced great distress. The island, which was under the rule of the Ottoman Empire in the period under review, tried to take a series of measures with the encouragement of the central administration in order to overcome the problems. Due to the insufficient measures taken, the locusts continued to exist in swarms on the island and continued to damage agricultural areas and plants. A Christian living in the region, who did not mention his name, reported how to fight locusts on the island in a report he wrote to the center. In this study that we discussed on the information in this report, the information in the archive records and the research works related to the problems caused by the locusts on the island have been evaluated.

**Keywords:** Cyprus, Locusts, Struggle Against, Famine. Öz

Akdenizde stratejik konuma sahip olan Kıbrıs Adası, farklı dönemlerde çekirge istilasına maruz kalmıştır. Adada bulunan bitki örtüsüne ve tarım ürünlerine zarar vermeleri nedeniyle Ada halkı büyük sıkıntı yaşamıştır. İncelenen dönemde Osmanlı İmparatorluğu hakimiyetinde bulunan ada, sıkıntıları aşmak amacıyla merkezi idarenin teşvikiyle bir dizi önlem almaya çalışmıştır. Alınan önlemlerin yetersiz olması nedeniyle çekirgeler adada sürüler halinde varlığını sürdürmüş ve tarım alanları ile bitkilere zarar vermeye devam etmiştir. Bölgede yaşayan fakat ismini belirtmeyen bir hristiyan adada çekirge ile nasıl mücadele edilmesi gerektiğini merkeze yazmış olduğu raporla bildirmiştir. Bu raporda yer alan bilgiler üzerine ele aldığımız çalışmada, ayrıca adada çekirgelerden dolayı oluşan sorunlar ile ilgili arşiv kayıtlarında ve tetkik eserlerde yer alan bilgiler değerlendirilmiştir. Anahtar Kelimeler: Kıbrıs, Çekirge, Çekirge İle Mücadeler, Kıtlık.

### 1- INTRODUCTION

Cyprus, located in the east-mediterranian is the third one of the biggest islands in the mediterranian, after the Sicily and Sardunia. Cyprus has a 9.251 square kilometre arable land. Cyprus is located 70 km far away from the Turkish sea-side and 100 km far from Suriye, 370 km from Egypt, 400 km from Rhodes and 800 km far away from Greek coastal line (Osmanli İdaresinde Kıbrıs, 2000: 3). As starting with Kormakiti peninsula, northern

part of the island Girne-Karpas Mountains, rarely passes the 1.000 altitude height lays throughout the Carpas peninsula, in the South Trodos mountains raised. Whole shores of the island contain delta plain valleys, combined with alluvial soil. In addition to that Maserya alluvial plain rests 1.900 square kilometers wide between the Girne Mountins and Trodos mountains (Gözlü, 2011: 159).

Strategic importance of the Cyprus gives some privilages to the island and unique occupation in the region alongwith some disastrous problems in history. One of the suffrages of the island was natural disasters. In historical archiaval sources offers many different types of the natural disasters in the island as the searches goes on and estimated a vast scale of harassment, caused by the any kind of disasters in the region. One of these disastorious events, had been occcured in the island was the locust invasions. The locust invasions, scheduled on the category of the the biological disasters have been detected in the vide areas of the earth's habitable places during the history (Erler, 2012: 88). The locust invasions, so far having been witnessed can not directly harm the human life. However the locusts give a reall trouble to the humans by annihilating the food stocks, in need of the living within the arable lands. Therefore the inhabitants of the island Cyprus took some precautions against the locust invasions but failed to eliminate the threat. Nevertheless these precautions, though could not prevent the trouble relieved the affects of the locust invasions to some degree.

The world wide locusts show different attitudes due to their kind of types. According to the moving speciality of the locusts bears the ability of walking, climbing, jumping and flying. One of the different features of the locusts is to jump after one another. The thrust of the locust while jumping may change the range of distance between 10 and even 40 times of their body weight according with the types of the locust. The locusts, depending on how mature can jump 115 or 200 time over and over without resting. Thus the locusts can hastly change their places in short distance and also reach the highest places without having any obstacle (Lodos, 1991: 152-153).

Locusts, from India travel to Yemen and from there crossing the golf of Aden to Somalia then reach to Sudan. These locust swarms flies from Sudan by using the winds, created by heat changes of the wheather on the deserts. These insects can fly 1.500 km upto 2.000 km depending to the ghusts speed (Demirsoy, 2003: 395). When the locusts landed in a place wherever they can find suitable habitat (rain fall, heat, clay soil, herbs and deserted areas) lay their eggs and multiple their population in a short time of

life circle. The locusts, which cannot fly long-distance between seven and ten days after leaving their larvae, gather together from ten days and begin to fly long-distance in search of food. (Brown, 1886: 6). Their life circle is starting with as larva and caterpillar then mature one. These vast numbers of locusts in a very soon emerge locust swarms in the area in where they reched by the hand of the wind and their prejectail wings. Once they gather their swarm tended to live in a vast numbers.

The locusts were carried to long distances with the winds, caused by heat waves during the sunny day. When it turns dark and the night fall arrives then the wheather gets chilly causing the winds callm down. Therefore the locusts reached to long distances with the winds during the day time and then they lay down durng the night fall. These migrant herds reach with the density of 200 locusts per square with 7-8 cm body-lenghth at where they landed. It can be calculated that 200,000,000 locusts within the one kilometer to per square means an enormous density for these nasty pests. Occasionaly when it is happened within a mass of ten kilometers' locust herds wipes out the all crops. It is limited considering the large fields but devastating as a natural disaster. Some records prove that when these locust herds rise and stalk on the air hinders the sun-shine to reach the earth (Erler, 2002: 195-204).

Locust invasions, caused by desert crickets and crickets of Morocco initially emerged as a devastating disaster. These spicies of Morocco and of the deserted areas of Sudan vanishes the crops on where they landed and invaded (Erler, 2002: 196). One of these species, identified as the desert locust of Sudan expands its herds in a vast area from the western front of The islands of Canaria towards to the east covering Morocco, Algeria, Tunisia, Egypt and Suriya, Iraq, Southern Iran, Southern slopes of Hımalaya. Last but not least the Sudan locust herds also reach its existence from Spain and Portugal in the north towards France, Sweden, Southern Germany, Austria, Hungaria, Sothern Russia, and Central Asia in the east (Özer, 2016: 18). As comes for the locusts of Morocco this spicy covers and invades the area, starts from the Canaria Islands in the west towards Central Asia in the east. It also enlarges its living area from Morocco, Algeria, Suriya, Iraq, and Iran in south towards Spain, Southern France, Italy, Greece, Western shores of the Black sea, Caucasus, Crimea and western shores of the Caspian Sea in the north. These species makes some stations of constant nest for their eggs for the new generations at the vast area in where they scattered (Balamir, 1952: 13).

Cyprus posseses large plains with fertile arable lands as that of allow

the locust to lay down their eggs and increase their population in a short time. Alluvium soils, in the island became a suitable nest for the locust eggs, preserving them any harassment. Increasing burst of the "Desert Locust", in number caused a local disaster that of annihiliates the crops and any of plants regardless if it is cultivated or natural in the island of Cyprus. Initial source that informs about the locust invasion of the island was written up by Leontios Machaeras from Cyprus. Machaeras records that the first locust invasion in the island occurred in 1351 (Jenning, 1987: 315). The impacts of the 1351, locust invasion in the island must have been too devastating that of the other contemporary chronicles of this age did also give an exclusive importance to the event of the locust disasters. The chronicles of Florance Villani registered that the locust herds devastated the greens and the herbages of the Northern Africa in 1354 and same calamity happened to the island of Cyprus in 1355.

The island was invaded by the locust herds in 1409 and eaten up any green plant even to the leaves of the trees. The invasion was not limited with off the one, happened in 1409 and carried its endurance even in 1910 and the falllowing year of 1411 but decreased its devastating affacts in the year of 1412. The locust invasion throughout the year of 1409 up to the year of 1412 in the island the vineyards, the orange gardens and sugar cane gardens were ruined by the locust herds. Aftermath of this disaster the island turned to a wrecks (Kızılkaya & Akay, 2017: 175). Due to the locust invasion in 1510, the cultivated areas were destroyed and the people could not obtain the wheat they needed. For this reason, wheat was demanded from Syria to meet the needs of the people. However, due to the insufficient amount of wheat being sent from Syria, there was hunger among the people (Jennings, 1987: 323). Nevertheless another locust invasion in Cyprus had a start on 1572 and having continued throughout the year of 1576 (Kılıç, 2002: 725). The locusts thus caused a famine, reasoned by their four year devastating endurance in the island (Kandemir, 2014: 47).

# 2- THE LOCUST INVASIONS IN THE ISLAND OF CYPRUS (1750-1840)

The locust herds and their invasion in the island have occurred in diversity of different times. Having caused the scarcity of the food stock by consuming the plants, the locust herds have provided a hostile environment to the islander as to obtain food. The state regulated the agricultural overproduction, diverting to the needy places during the Ottoman legislation. However the islanders disobeyed this regulation at the time when the scarcity of agricultural product, due to the locust invasions and have

rejecting to send any grain to abroad.

The indigenous of the island could produced the sufficient enough agricultural product to save themselves because of the locust invasion and the drought in 1748. The legitimate state allowed the merchants of Sayda, Akka, Lazkiye and Sur in where the crop scarcity emerged to trade the grain yields of Cyprus. However the residents of Cyprus did not sell the crops that they yielded due to the decrease in the harvest. Therefore the merchants of Sayda, Akka, Lazkiye and Sur complained the event to the sublime-port reporting that the farmers and traders of Cyprus did not sell any grain to abroad. The sublime-porte of Constantinople hence warned and issued a decree to the residents of Cyprus so as to sell their grain to the merchants from where the famine struck (15 Numaralı Kıbrıs Şer'iyye Sicili, s. 191-193).

Another locust invasion from the island was recorded in 1791. According to the Ottoman text, written in 1791; Colonel of the Cyprus, named El-Hac (performed the pilgrim) Mehmed was deceased and his endownments of that his house, furnutures, belongings, coins, animals and his concubines were being registered by the Ottoman officials. The Ottoman officials' record indicates that his grains and his cottons in three separate farms was not gathered due to the bad harvest, caused the locust invasion but only cotton saved to a certain amount from the disaster (21 Numaralı Kıbrıs Ser'iyye Sicili, s. 212, B.496).

English doctor William Wittman visited island to record another locust invasion in 1800 of 28 of the Jun. He traveled with Sinyore Demetrio Nikolo Frankuli around the vicinity of Limassol and witnessed the bleak condition of the territory. According to what he was told that Limassol was attacked by the locust herds that of being covered as 30 cm. thicknesses on the ground, a week ago before their arrival. Locusts consumed all the green plants of Limassol including the orange and lemon trees' leaves (William, 2011, 68). The tax objects of the island had faced a great difficulty to pay their burden because of the crops' failure, caused by the locust invasion in the cultivated farms of the island.

The islanders requested a discount on their taxes from the state authorities but this demand refused and instead of discount, been giving an easy payment schedule (Cevdet Tasnifi, C.İKTS.: 1851. Baytimur & Tatar, 2020: 331). The authorities in 1801 summoned from the islander to submit 160.000 *kile* (bushel) of barley, 10.000 *kantar* (56,449 kg) of wheat and 25.000 *kantar* of *peksimet* (biscuits) for the need of the army. The governor

of Cyprus, named as Osman thus requested to have been exempted from any burden or taxes since the locust invasion annihilates the crop yields. Further correspondence between the local authorities and the governor of Cyprus indicates that the issue was maintained and remained intact. The sublimeporte forced the local authorities to gather the army needs by paying extra fee for the demanded crops. The authorities in Istanbul refused to give any excuse for the burden and wanted the local authorities in Cyprus to solve the matter without harassing the locals by offering them the extra payment for the needed amount of food-stock (22 Numaralı Kıbrıs Şer'iyye Sicili, s.59-60). The local authorities insisted seriously in their report to the Sublime-Porte that of the farmers were really in crisis and no product to compensate the needed amount of the army. It thus the needed amount of food-stock, recorded for the share of Cyprus as a burden was decreased to 40.000 bushels barley and 20.000 kantar biscuits. The overall remaining part of previously demanded amount of food-stock was excused (22 Numaralı Kıbrıs Şer'iyye Sicili, s.62-63).

Ali Bey who visited Cyprus in 7 March of 1806 stated that he came across with two main grievances. He states that the initial of these grievances, which also the most dangerous one was the snakes of the island. According to his statement the secondary one of these grievances was the locusts that populate constantly and fast. Ali Bey offered his aid coping with the locusts. It thus would have been easy task to cope with the locusts, contrary to what it is considered as difficult (Domingo Badia, 1816: 304). Nevertheless the locust invasion had preserved his existence for a couple of years more even in the year of 1809 along with the draught (26 Numaralı Kıbrıs Ser'iyye Sicili, s.128, B.270.) The subsistence of Istanbul and of the army that off had been taken as grain from Cyprus could not been obtained in the year of 1818 because of the famine, caused from the locust invasion. The inhabitants of Cyprus informed the Sublime-Porte stating that they did not have any grain due to the catastrophy of the locust invasion and asked being exempted from any burden. It hence was accepted, excusing them from any kind of taxes (Coruh, 2008: 35).

In the year of 1822 was witnessed another drought and locust invasion failing the inhabitants once more to pay the amount of burden, fixed as grain and biscuits (30 Numaralı Kıbrıs Şer'iyye Sicili, s.113). Some other territories of the Ottoman lands women wear baggy pants (shalwar) to avoid the locust and snakes. It can be assumed that women wearing baggy pants (shalwar) also could be marked in the island of Cyprus due to the snake and locust occurrences (Erler, 2010: 337).

#### 3- COOPING WITH LOCUST INVASION

There were different kinds of detected methods to cope with locust invasion in the world. Some of these applications to annihilate the locusts were derived its' source from the local traditions. Whereas other half of the application against the locusts were feeded from the religious biases. Therefore Ottomans were not differing from the world as for struggling with the locust herds. The inhabitants of the island of Cyprus within the Ottoman realm thus applied traditional and religious methods as for struggling with the locust invasions. However any of these attempts applied by the islanders was failing to make the disaster to kneel down. Nevertheless the aim of the struggle to cope with the locust invasion was to bring its' end but never known if it was fully successfull to annihilate.

The most preferred way to anniliate the locust herds was to keep the locust population under control. First of all the farmers intended to dig up the locust eggs which were laid 2-10 cm beneath the soil in pods so as to stop the rising in locust population. Each female locust lays 2-3 pods and every single pod contains utmost 60 eggs during her life-ime. The main target of the farmers had been destroying the locust nests. The nests contains locust pod that was sealed with a frothy plug that provides moisture and protection. The people could detect the locust nests by looking in to these frothy plugs. When they detected the nests they used two ways as to destroy the locust eggs. One of these ways was that once they detected the locust nests the area that contains locust pods was to spread the soil so that of sending the eggs down to decay in time. The second way of destroying the pod was to crash the eggs with the rollers (Kandemir, 2004: 75-76).

Nevertheless Ottoman state has had also various kinds of ways to destroy the locust nests as a local application especially suits for the territory. Therefore the state ordered some instructions to the judge of the highest local court of İznik, Yenişehir, Akhisar and Geyve while coping with the locust invasion.

One of these instructions was off about warning against the locust' pods had been laid beneath the soil previous year during the invasion. Next to that warning the state officials were also invited to take precaution so that of gathering the locals and put them on the grounds in where locust laid their eggs and crash them before they flied away (Demirtaş, 2004: 40). It can be assumed that state officials summoned the local farmers to crash the locust eggs under their foot or with brooms.

Another traditional method used for the fight against locusts was to

dig deep and wide pits. In this method, which was also applied in different regions, wide and deep pits were dug in front of the high barricades placed in the direction of the locusts' incoming route (Yazıcı, 2016: 850). Locusts, which got stuck on the barricades or fell directly into the pits, could not fly due to their piling up and were allowed to gather in the pits. A large number of locusts were collected in the pits and they were destroyed by covering them with soil (Biddulph, 1889: 711-712). In the following periods, zinc layers were used in the barricades placed behind the pits (Candeger, 2016: 2128).

The islander in Cyprus had a miserable life caused from the locust invasions, occurs quite often. An official commission, to cope with the locust invasions was established so as to give a relief to the miserable conditions for the inhabitants. This commission was embodied all in all from nine members. Three of these members were from Lefkoshe and the rest of them from Tuzla and from the various towns of Cyprus contain quays. Nine of these members of the locust commission were chosen among Muslim and Non-Muslim of the island, who has to stay in where they charged a duty. The authority, charged to cope with locust invasion constructed four storages, located different places in where the gathered locust' pods were kept under control. The commission requested a well-paid staff appointment from the rulers. This storages' staff was defined as off that a consul, storage watchman, quill-driver, weigher and porter for each storage. The commission also asked from the managers of the island to pay 25 coins during the summer time and 23-25 coins during the winter time for each bushels to those who gathered locust's pod. It was also made clear that there was no certain ending time or devised expenditure for gathering the locust eggs. Nevertheless the inhabitants of the island burn the locust eggs but this method of coping was not sufficient to destroy the invasion (Erler, 2002: 200-201. Baytimur, S.O. & Tatar, 2020: 331. Cevdet Tasnifi, C.İKTS: 1851).

The most striking Ottoman way to cope with the locust invasion was using the domestic birds such as starling and other wild ones alike crow, stork, swallow. Especially starlings swallow crickets up to several times of their body weight. Ottoman tamed the starlings to attack over the locusts with the instruction of their tamer, named as "Starling' Sheyh". These birds, since they annihilate the locusts were being called as "Birds of Mohammed" according to a mystic belief (Erler, 2002: 197).

The holy water or "Starling Water" was used against the locust herds according to another mystic belief. The Starling Water emerged as a spring

in the village of Sheyhs, town of Yabanabad tied to Ankara Sub-Province. It was believed that the water, kept the locust and other insects away was prepared by the experts who were regarded as the descendants of Caliph Omar. The water was send by the state officials to where the locust invasion was occurred (Ali Emiri Tasnifi, AE.SSLM.III: 14721). It thus we came across with the text that deals with the water that was used against the locust invasion in Cyprus.

Another manuscript, written by one of the settlers in Cyprus on 31.12.1832 and sent to Mustafa Reshid Pasha, addressing to the Sultan Abdulmecid mentioned about the locust invasion. 1 In this manuscript the writer, describes himself as a "poor subject of the Sultan" states out that he was not eligible to Turkish and had to written his report in Greek and French. In his report he mentioned about the troubles that was caused due to the locust invasion in the island. At last but not least he described his opinions about the ways of coping with the locust in his report. At the beginning of his report the author described the bleak conditions of the island due to the locust invasion as pointing out that: "The Cyprus, belonging to the unique endownment of the Sultan, the Emperor was suffering from the locust invasion for years. The reporter who loyal to the state requested from the Sultan to take care for the report that explains how to cope with the devastating locust invasion..." He then carried out his text was stating about the ways to struggle with the locust herds in the island (Hariciye Nezareti, HR.TO.:633).

# 4- THE SOCIAL AND ECONOMIC EFFECTS OF THE LOCUST INVASIONS IN THE ISLAND OF CYPRUS

The locust invasions, occurred in Cyprus had caused lots of miserable events, ended with disasters within some years. The locust invasions were looked like never ending catastrophy if once started. The locust herds increased their crowd density in time and stopped the agricultural living in the island during the locust invasion. The locusts attacked to any green plant or trees in the island causing the decline of the animal husbandry along with the cultivation. The texts, deals with the locusts' invasion within the judicial court notebooks mentioned the economic decline of the island as a main issue. The inhabitants of island of Cyprus were bothered either with the taxes or with the demanded

<sup>&</sup>lt;sup>1</sup> In the report the given date was registered as 31.12.1832 that Mahmut the second on the reign. Whereas Sultan Abdulmecid reigned 1 July 1839. Therefore there must be a mistake of the given date in the text.

agricultural portion for Istanbul. The taxes, levied on the islanders and also the agricultural product, demanded for the Istanbul's provision could not be afforded due to the scarcity, caused from the locust invasion (Cevdet Tasnifi, C.İKTS: 1851. Baytimur, S.O. & Tatar, 2020: 331). One of the investigation reports, sent to the central administration depicts the gloomy condition of the island stating that; "Locusts was devastating everywhere, vanished the all agricultural cultivations and harmed the state treasure, causing the decline in the revenue" (Hariciye Nezareti, HR.TO.:633). The state in this case of disasters occasionally applied the tax exemption and freed the subjects from the charges of any duty, concerning the provision. It thus be witnessed in the Cyprus that the inhabitants of the island benefited from the same application of exemption, regulated by the state canons (Erler, 2002: 203).

In so far it can be defended that the locust invasion had also caused to ruin the provisional chain, devised by the state. According to the Ottoman regulations, the richest places in where abundant harvest yielded had to send the needed amount of their agricultural surplus to defined territories as provision. The needed place in where had been strocked by the scarcity in the harvest received regularly enough provision from wherever had the agricultural surplus within the large territories of the Ottoman sovereignity. Especially the capital of the Ottoman, Istanbul and other coastal towns' had drawn the agricultural provisions from the Cyprus in time of emergency crisis in the harvest. There were food shortages during the locust invasions hindering the devised provision by the state. The state re-regulated the shares of provision to new territories causing another famine in different areas (Çoruh, 2008: 35. 30 Numaralı Kıbrıs Şer'iyye Sicili, s.113, B.342). The draught areas were badly affected from this regulation since the island of Cyprus, offers easy access both for transportation and for cheap food stock during the normal seasons (Erler, 2012: 86). The prices of inadequate basic foods has risen sharply in the island of Cyprus and its' vicinity after the locust invasions in wherever occurred. In this time of calamity the basic foods diminished for selling and the price of scarcely available food stock has risen too much (22 Numaralı Kıbrıs Şer'iyye Sicili, s.59, B.136). Expenditures and difficulties in living, caused by the locust invasion disordered the routine of the inhabitants and their comforts. The people who lived in the rural areas survived with what they obtain from their limited cultivations and animal husbandry on the pasture. The urban and suburban along with rural settlers of Cyprus could not have afford to pay their taxes, levied up on them since the locust invasion wiped out any profitable business living.

In the investigation survey on the island indicates that "The farmers, in the island puzzled how to cope with the locust whereas they had previously succeeded to overcome the harassment of any kind of harmful animals and insects. The farmers, suffered from the locust invasion had to barrow money with the highest rates to look after their families. They hence could not afford to pay back their debts selling all their properties and desperately leaving their home-land for another place bowing down before the wrath of the nasty insect herd. There was no other unlucky place within the Ottoman realm except biggest, most beautiful and most fertile island of Cyprus in where cute and calm peoples live that suffering enormous crowd of locusts. The inhabitants of Cyprus who were hard-working people had to leave their home-land and were become lazy since devastating locust invasions. If no plausible remedy was found to solve this insect problem the island soon or later would have been turned deserted." (Hariciye Nezareti, HR.TO.:633). Though the bleak condition of the agricultural facilities, farmers of the island struggled to carry out the sugar-cane and cotton production to some extend but failed sustaining this profitable farming in time of disasters. Therefore the farmer of the island eventually left cultivating the cotton and sugar-cane. This failure in agriculture caused the decline of welfare of the islander leaving its place to the miserable poverty.

The locust invasion badly changed the demography of the island. The rural settlers who farmed the fertile valleys migrated to survive because of having difficulty to obtain the daily basic food-stock to feed themselves and also their animals. Some of these migrations appeared from the rural areas into the urban towns causing the urban life expanded but dragging the rural area into a deserted place. Wheras some of the migrants also preferred to leave the island for a better life or for a fertile and prosperous land. The human mass-traffic triggered other population problems in where the migrants of Cyprus, due to locust inclined to settle down (Hariciye Nezareti, HR.TO.:633). As a consequences of the islanders' miserable locust problem the Ottoman state voluntarily gave up from his right of sovereignty on Cyprus for the sake of England at the eve of Berlin Congress, ceased the war between Russia and Ottomans in 1879.

### 5- SUMMARY

Grasshopper invasions, which have been seen in many parts of the world in the historical process, have also been seen on the island of Cyprus, located in the east of the Mediterranean. The grasshopper invasions, which became more frequent in different periods between the years 1750-1840, which we examined, put the people living on the island into great trouble.

Grasshopper invasions took place on different dates that we could detect in the region. The grasshopper invasions in 1748, 1791, 1800, 1806, 1809, 1818 and 1822 caused great problems in Cyprus. In the memoirs written by those who visited the region during the period we are examining, it is mentioned that the grasshoppers piled on top of each other form a layer 30 centimeters high. The biggest damage cause by the grasshoppers to the region is the destruction of cultivated and planted areas in order to meet their food needs, caused famine in the region. In addition, the grasshopper, which destroyed the green areas and pastures, also caused other animals living on the island to starve. The decrease in food stocks on the island also led to the deterioration of the economic order. Due to the increase in the prices of basic necessities, people have had difficulties in meeting their needs. In addition, the taxes collacted by the Ottoman administration from the region could net be collected and the state treasury was also indirectly affected by this situation.

Various measures have been tried to be taken in order to eliminate the problems arising from to grasshopper invasion on the island of Cyprus. In this context, firstly, the basic needs that could not be produced due to the grasshopper invasion in the region were provided. Care was taken to provide the basic needs of the people, especially grain and similar products, from different regions. In addition to meeting the needs of the people, it has also been a Pioneer in the struggle of the island people against grasshoppers. In fact, the fight against grasshoppers on the island is not different from other regions. In order to destroy the grasshoppers, it was first tried to prevent their reproduction. Soil was plowed in order to destroy the grasshopper eggs placed under the thin soil layer, thus allowing the grasshopper larvae to rot in the soil. Another method used in the fight against grasshoppers is to trample the soil or to pass over it with a roller. Thus, the egg larvae under the thin layer of soil were crushed and destroyed. Another method used in the fight againist grasshoppers was to make use of birds that feed on grasshoppers. Birds brought to the region, especially starlings, crows, swallows and storks, had an important place in the fight against grasshoppers. In addition, holy water was used in the fight against grasshoppers in different regions of the Ottoman Empire.

According to a mystical belief, the water prepared in Şeyhler Karyesi located in the Yabanabad district of Ankara sanjak was used in the fight against grasshoppers. It is believed that this water, which was handed down from generation to generation by people claiming to be descended from Hazrat Omar, drives grasshoppers and other harmful pests away from

the region. This water was sent to every region infested with grasshoppers and the birds were made to drink.

None of the most effective methods fort the destruction of grasshoppers has been to destroy the grasshoppers by opening pits. The grasshopper, which hit the layers placed behind the pits opened parallel to the movement direction of the grasshoppers filled the pits. Due to the loss of mobility here, the grasshoppers could not escape and the wells were covered and the grasshoppers were destroyed. In some cases, the grasshoppers that filled the wells were destroyed by burning.

The Ottoman administrative structure also took various measures in this regard. A nine person commission consisting of Muslims and non-Muslims from different parts of the island was formed. With the contributions of the commission members working in the regions they live in, the fight against the grasshoppers was carried out in a more organized way. In addition, four warehouses were created in different regions for the collected grasshoppers cocoons.

One of the important documents in the fight against the grasshopper is the report that a non-Muslim living on the island of Cyprus sent to Mustafa Reşit Pasha on 31 December 1832 and addressed to Sultan Abdülmecid. This person, whose name was not included in the report and who used the phrase "your helpless servant" instead of his name, states that he does not speak Turkish and therefore wrote his report in Greek and Franch. In his report, the person in question stated that the grasshopper invasion on the island had caused serious problems.

In the report he wrote, this person also expressed his own thoughts on what kind of method should be followed in the fight against grasshoppers and what precautions should be taken.

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Çatışma beyanı: Makalenin yazarı bu çalışma ile ilgili taraf olabilecek herhangi bir kişi ya da finansal ilişkileri bulunmadığını dolayısıyla herhangi bir çıkar çatışmasının olup/olmadığını beyan eder.

**Destek ve teşekkür:** Çalışmada herhangi bir kurum ya da kuruluştan destek alınmamıştır.