

ORIGINAL ARTICLE

The Nexus between Environment and Society in Sätit Humära, Northwestern Ethiopian Borderland, 1960s-1991

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Abstract

This study examines resettlement practices and the resultant environmental changes, recurring droughts, and famines that plagued Sätit Humära a borderland in northwestern Ethiopian in the second half of the twentieth century. Prior to the 1950s, Sätit Humära, situated between the River Sätit in the North to River Angäräb (Bahrä Sälam) in the South remained uninhabited. However, following the expansion of commercial agriculture in the borderlands in the late 1950s, Sätit Humära gained state attention and became a hub for agrarian communities that came from highland areas of Bägemedder and Semén, Eritrea, and Tigray. Between the mid-1970s and late 1980s, the Ethiopian government conducted an extensive resettlement scheme in Sätit Humära, resulting in significant deforestation, drought and famine. These cumulative activities left repercussions on both the population and the environmental landscape of the Borderlands. In producing this paper, the researchers consulted provincial archives kept in Gondar Town and aerial photographic and satellite imagery data that depicts forest cover in Sätit Humära in the second half of the twentieth century. Additionally, focus group discussion and in-depth interviews were conducted in the study area.

Keywords: society, environment, resettlement, deforestation, commercial agriculture

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1. Introduction

Environment and society have always been interlinked.⁴ As the global human population burgeoned, the escalation of human needs ensured, triggering the initiation of exploitation of nature and its natural resources to meet ever-expanding demands. Advances in science and technology have led to the depletion of resources and environmental degradation. This has led to the need for sustainable development, balancing economic and social progress with environmental concerns and the meticulous use of natural resources.⁵

Historically, the human population manipulated the natural environment, for food and shelter to survive in small groups.⁶ As time went on, the interaction between human beings and the natural environment evolved into a more agrarian setup, focusing on farming. Agriculture-based societies have led to increased environmental impact due to persistent cultivation causing land clearing, plant and animal degradation, and extinction.⁷

Commercial farming is the process of transforming an agrarian society into large scale mechanized farming. It involves extensive restructuring and reorganization of the economy to produce large-scale items using mechanized machinery.⁸ Mechanized agriculture leads to increased environmental degradation.⁹ Natural disasters like flood, drought, and landslide are products of human intervention, making it difficult to distinguish between natural and man-made disasters because of ecological changes.¹⁰

Commercial farming in Sätit Humära district began in the 1950s.¹¹ Located in an isolated border region, Sätit Humära is a contested region located between the interfaces of eastern Sudan, southwestern Eritrea, and northwestern Ethiopia.¹² Historically it

4 John Barry, *Environment and social theory*: (Routledge: 2007), 16, and Gopalkrishnan R. Iyer, "Business, consumers and sustainable living in an interconnected world: A multilateral ecocentric approach." *Journal of business ethics* 20 (1999), 284.

5 Jackson Jack, *Environment and Society: Major Themes in Sociology: An Introductory Text* (2017), 582, and Emilio F. Moran, *Environmental social science: human-environment interactions and sustainability*. John Wiley & Sons, 2011, 8.

6 Mark Q. Sutton and E. N. Anderson, *An introduction to cultural ecology*: (Routledge: 2020), 12, and Andrew S. Goudie, *Human impact on the natural environment: Past, Present and Future*, Eighth Edition, John Wiley & Sons, 2018, 10.

7 Paulinus C. Aju, et al. "Our forests, our environment, our sustainable livelihoods." *Eur. J. Acad. Essays* 2, no. 4 (2015): 6-19, and Mulugeta Lemenih Kassaye, "Review of the Historic Trajectory of Deforestation, its Drivers and Implications in Ethiopia." (2024), 1-21.

8 Herman Southworth, "Farm Mechanization in East Asia.": (1971), 5, and Kay Sharp, and et al., "Commercialization of farming in Ethiopia: which pathways?" *Ethiopian Journal of Economics* 16, no. 1 (2007), 52-54.

9 Seife Ayele, "The resurgence of agricultural mechanization in Ethiopia: rhetoric or real commitment?" *The Journal of Peasant Studies* 49, no. 1 (2022), 147, and Prabhu L. Pingali, and et al., *Agricultural mechanization and the evolution of farming systems in sub-Saharan Africa*. 1987, 173.

10 John W. Bruce, Allan Hoben, and Dessalegn Rahmato, "After the Därg: An assessment of rural land tenure issues in Ethiopia": (1994), 35.

11 Alemayehu Erkihun Engida, "Dynamics of border security and border governance between Ethiopia and the Sudan, 1940s-1974: Sätit-Humära, Mätämma, and their environs in focus." *Africa: rivista semestrale di studi e ricerche: NS VI, I, 2024* (2024), 7.

12 Friew Kelemu, "Agricultural mechanization in Ethiopian: Experience, status and prospects." *Ethiopian Journal of Agricultural Sciences* 25, no. 1 (2015), 48.

belonged to the administration of the Wälqayét sub-province, Bägemeder and Semén Governorate General. Driven by state policy to increase production of the cereal crops for domestic consumption and export purposes, the Ethiopian government launched large scale commercial agriculture in Sätit Humära. Mobilizing local resources and credit received from the western powers, including the USA, World Bank and FAO (Food and Agriculture Organization), the imperial government launched commercial agriculture in Sätit Humära.¹³ Eventually, Sätit Humära drew the state's attention and became granary of the commercial crops. The rise of commercial agriculture and borderland development initiatives in Sätit-Humära left a legacy of far reaching consequences on the natural environment of the borderlands.¹⁴

Expansion of commercial farming led to misappropriation of natural resources. A rapid expansion of farming practices took place between 1963 and 1968.¹⁵ In December 1968, commercial agriculture of Sätit Humära development in the third five-year plan showed significant economic growth.¹⁶ These intensive farms focused on large-scale cultivation of commercial crops such as sesame, sorghum, and cotton.¹⁷

In the mid-1970s, a large-scale resettlement program was conducted in various localities of Sätit Humära such as Maikadra, Hilägen, Bäwale, and Hager-Hiwot. The resettlement project was state sponsored, chiefly run by the Relief and Rehabilitation Commission's (RRC), and caused significant damage to the area's natural resources in the resettlement sites. The government relocated large numbers of farmers from drought affected parts of Wollo, Gayint and northern Ethiopia. This inevitably caused the destruction of natural resources and climate change in the area.¹⁸ While, in the 1980s, resettlement involving the movement of people from the famine and drought affected areas of northern and north-central Ethiopia to more fertile areas was politically motivated and the government's response to the cases of famine.¹⁹

13 Luca Puddu, "Extraversion and Development in Northwestern Ethiopia: The Case of the Humära Agricultural Project, 1967-1975." In *Poverty Reduction Strategies in Africa*, edited by Toyin Falola and Mike O.Odey, page 268-282. Great Britain: Routledge, 2018), 268-269.

14 Institute of Ethiopian Studies (IES), Addis Ababa, Yägätär Limaté Derejetoč aṭägn Committee, Yä ErŠha Lematé derejetoč Yä Sära Wutäté gämägäma ena YäGätäre Lematä Yäwodeféte aqetača, May, 1971 E.C.: 3.

15 IES, Folder No. 19, Addis Zämän, Newspaper, January 1/1951 E.C. (Ethiopian Five Years Development Plan), James C. McCann, "A great agrarian cycle? Productivity in highland Ethiopia, 1900 to 1987." *The Journal of Interdisciplinary History* 20, no. 3 (1990), 392-393, and Agriculture Projects Department, International Bank For Reconstruction and Development International Development Association, Humära Agriculture Development Project Ethiopia, Report No. PA – 30A, April 7, 1970, 2.

16 CGAZA, a letter written from Solomon Abraham, YäEthiopia Niguse Nägäst Mängest, Yagär *Gezate* Minister Administration Minister of State, Addis Ababa to Lieutenant Colonel Tamrat Yegezu, Bägemeder and Semén Province Regent, Gondar, Folder No ልዩ ፋይል ቁጥ/6, File No.13 File No 89/4664, Dated 1 December 1961 E. C.

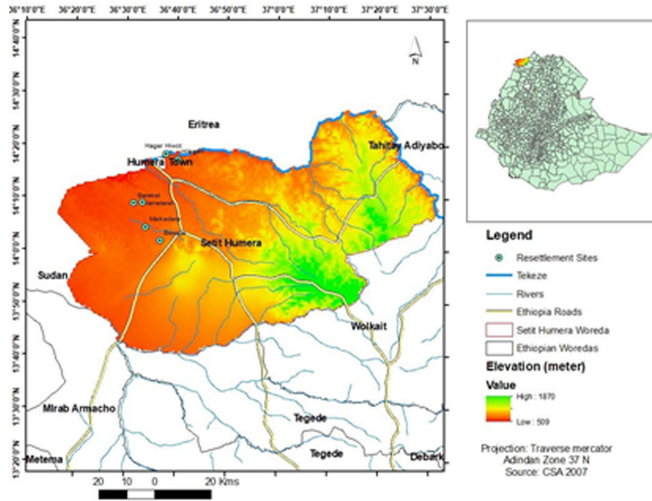
17 Amanuel Kussia, and et al. "Size, Distribution, and Practices of Large-Scale Agricultural Investment in Ethiopia: Past and Present." *Ethiopian Journal of Development Research* 44, no. 1 (2022), 11.

18 CGAZA, a letter written from Adane Mamuye Socialist Ethiopian Provisional Military Government in Aid Coordination and Establishment Commission, Gondar Provincial Office Commission Respondent, Gondar to Commissioner, Addis Ababa, Folder No. ሠ/ጠ/12, File No. 0710/4/1/66, Dated .30 June 1973 E. C.

19 Alula Pankhurst, Resettlement and famine in Ethiopia: The Villagers' experience. Manchester and New York: Manchester University press, 1992, 11, and Giordano Sivini, "Famine and the resettlement program in Ethiopia." *Africa* (1986), 220.

In 1984 and 1985, the Ethiopian government embarked on a large-scale resettlement program, relocating people from drought affected areas of northern, north central and central Ethiopia to less affected and sparsely inhabited areas.²⁰ Sätit Humära district was one of the resettlement sites, where the Därg government relocated large numbers of people from various drought and famine affected districts of northern and north central Ethiopia. It is fertile and ideal for agriculture.²¹

Therefore, commercial farming practices and resettlement programs in Sätit Humära district influenced environmental sustainability. Eventually deforestation, charcoal production and farming activities accelerated the environmental stress.



Map 1: Map of Sätit Humära District

Source: CSA 2007 Projection Transverse Mercator Adindan: This map is the map of Sätit Humära District before 1991, showing the relative location of Sätit Humära in relation to Sudan, Eritrea, (Tahitay Adiyabo District) Tigray, Wägära *Awraja* (Ṭägädie and Wälqayêt), (West Armacheho, Mättäma), Gondär *Awraja*, and Semén *Awraja* (Debark).

The Sätit Humära District, part of the fertile northwestern lowlands, is located on the northwestern edge of Ethiopia. The region extends from the Täkäzè (Sätit) to the Armacheho Woräda (District) lowlands. It is a contested border region located between the interfaces of Sudan and the southwestern section of Eritrea, but historically it belonged to the administration of the Wälqayêt sub-province, Bägémeder and Semén, Governorate General. The River Sätit separated Sätit Humära from Eritrea in the north, but in the west, it shares a contested boundary with Sudan. The eastern section of Sätit Humära is part of Ethiopia's Semén Mountain massif. The Woräda (District) has an international

²⁰ Dessalegn, Rahmato, "Resettlement in Ethiopia: the tragedy of population relocation in the 1980s": (FSS Discussion No. 11, Forum for Social Studies: Addis Ababa, June 2003), 1.

²¹ CGAZA, a letter written from Zämän Abate, The Interim Military Government of Social Ethiopia, in Wogära *Awraja* Sätit Humära Woräda Chief Administrator, Humära, to Gondar Provincial Administration Office, Gondar, Folder No. $\lambda\theta/28/\theta$, File No. 865/12/71, Dated 2 February 1971 E. C.

border of ninety-five kilometers with Sudan.²² The district is situated two hundred fifty kilometers from Gondar City and nine hundred and seventy-seven kilometers from Addis Ababa.²³

The vegetation of the district is mainly found along the Tākāzè River Basin and in various *kebeles* (localities) consists of diversified plant species, including *Incense* (□□□), *Humer* (*Homer*), and various *Acacia* trees, which are used by local communities for home construction and firewood.²⁴ The district of Sätit Humära is home to different kinds of wild animals, such as elephants, lions, leopards, hyenas, and gazelles.²⁵

The major revenue source in the Sätit Humära district is mixed farming (a combination of crop production and livestock rearing). The agricultural products such as sesame, sorghum, and cotton are some of the crops produced.²⁶ However, crop production was the main livelihood activity for most residents of the study area.²⁷ Cotton, sesame, and sorghum were the primary marketable commodities in district farmland areas, accounting for their cultivation.²⁸

2. Resettlement Practice

Ethiopia has been practicing resettlement schemes since the imperial period.²⁹ The resettlement programs have been implemented in response to land degradation, recurrent drought and famine. Resettlement schemes were predominantly undertaken in lowlands, where population densities were low and unutilized land was supposed to be found.³⁰

The recurrent drought caused enormous economic and human losses in Ethiopia. To address this situation, several measures have been taken. In 1974, the Därg regime of Ethiopia established the Land Reform and Administration Agency responsible for the

22 CGAZA, a letter written from Wagayehu Sahlu, Chief Governor of Gondar Province, Gondar, to Minister of State Administration, Addis Ababa, Folder No. ገ/8, File No. ስ11/17ጠ, Dated 1 April 1977 E. C.

23 CGAZA, a letter written from Kasaw Webeté, Sätit Humära district administrator, Humära to the provincial administration office in Gondar, Folder No. ጠ/59, File No.፱3/737/79, Dated 6 August 1979 E. C.

24 Roy L. Donahue. *Soils of Equatorial Africa and Their Relevance to Rational Agricultural Development: Personal Notes and Documentations*. Institute of International Agriculture, College of Agriculture and Natural Resources, Michigan State University, 1970, 27.

25 CGAZA, Däjazmach Kfelé Ergtu Imperial of Ethiopian Government Minister of Interior Teqedamé Minister Addis Ababa - To Honorable Major General Derese Dubale Commander-in-Chief of the Police Army Addis Ababa, Folder No. ፉ9/7/49, File No. 16709/14, Dated 21 August 1956 E.C., and Gary, Munson. *A narrative of environment and hunger in Ethiopia: A conversation-based interpretive inquiry*. University of San Francisco, 2005.

26 CSA (Central Statistical Agency), Agricultural Sample Survey 2014/15 (2007 E.C.) Report Vol. 1. Statistical Bulletin 578. Addis Ababa. 2015, 9-15.

27 Kassahun, G. The Role of Small Towns for surrounding Rural Development: The case of Mätäma Town, North West Ethiopia. Open Access Library Journal, on December 18, 2017, 2014, 6.and, CGAZA, a letter written from YäEthiopia Niguse Nägest Mängest Minister to Läato Habtu Abbabayru Addis Ababa, Folder No. ገጠ 35/ጠ, File No. 4048/25/15/05, Dated 12 February 1954 E.C.

28 Dessalegn, R., Ethiopia: agricultural policy review in Digest of Ethiopia's national policies, strategies, and programs edited by A Taye. Addis Ababa: Forum for social Studies, 2009, 4.

29 Kassa Belay. "Resettlement of peasants in Ethiopia." *Journal of Rural Development/Nongchon-Gyeongje* 27, no. 4 (2004): 225.

30 Ibid.

resettlement program.³¹ Eventually, resettlement was strengthened in two phases. The first phase was undertaken from 1974 to 1983, in which forty-six thousand households were resettled at eighty-eight sites in eleven administrative regions, while the second was conducted after the 1985 famine, in which over half million people were relocated from drought-stricken parts of northeastern and central parts to the west and southwest parts of the country.³²

The government planned to settle two thousand people in Sätit Humära in the 1980s. To this end, different levels of authorities cooperate with governmental and public organizations, in identifying the areas affected by natural problems or drought; identifying the right people to be resettled; and providing education and advocacy on the identified people about the purpose and benefits of settlement.³³

The settlers of the Sätit Humära district had to move before they could register people who wanted to settle and ensure that the following points were fulfilled before recruitment: who is willing to live in a settlement, willingness and inclination of potential resettlers to engage in agriculture as their livelihood, and to participate in and work for cooperative associations. The fact that the resettles would be willing or unwilling to be organized in cooperative association and be prepared to work. Whether their age was between eighteen and forty-five, they were able bodied and healthy, and whether they were willing to settle with their family. Finally, the concerned authorities made preliminary arrangements to facilitate gathering the recruited people in one central place according to the above criteria.³⁴

The resettlement sites of Sätit Humära district such as Hilegen, Bāwale, Maikadera, and Hager-Hiwot, were important to help and establish people who had suffered from drought and famine. Therefore, due to the fertile and wide land in the district, people came from different places incur high costs and help in collecting new resettlement stations have been established in the districts of the Sätit Humära area.³⁵

Hilegen, situated between the Tākāzè River in the north, Humära Town in the west, and Adebai *Kebele* (locality) in the south and in the east, was one of the sites for resettlement programs in Sätit Humära district.³⁶ Bewäle was a resettlement site; now

31 Alula, Pankhurst. 1992, 14 - 15

32 Pankhurst and Pinguot, "Moving people in Ethiopia: development, displacement & the state." (2009), 1-22.

33 CGAZA, a letter written from Tamrat Kebede, Socialist Ethiopia Provisional Military Government Aid Coordination and Establishment Commission, Gondar to Gondar Administrative Region RRC Branch Office, Gondar, Folder No. *፱/፳/12*, File No. *፬24/1/35/5509*, Dated 16 September 1977 E. C.

34 Ibid.

35 CGAZA, a letter written from Damāna Mākonnān, the Provisional Military Government of Socialist Ethiopia Relief and Rehabilitation Commission's Gondar Regions Office Director to Agriculture and Technology Department, Addis Ababa, Folder No. *፱/28*, File No. *፬79/1/01/1*, Dated 3 April 1978 E.C.

36 CGAZA, a letter written from Adane Mamuye Provisional Military Government of Socialist Ethiopia Relief and Rehabilitation Commission Gondar Regional Office to Lā Sätit Humära Worāda production and planning office, Humära, Folder No. *፳32/፳*, File No. *፬710/16/1/2* Dated 28 August 1976 E.C.

it is surrounded by Sharifa, Mehar, Shelala, and Maikadra *Kebeles*, settlement sites in the Sätit Humära district. Maikadra resettlement station, situated in the fertile Ethio-Sudanese borderlands of the Sätit Humära district, has been home to the State Farming Development Organization since 1979. This resettlement station is located in the area bordering Sudan.³⁷ The Hager-Hiwot resettlement site is also another resettlement site in the Ethio-Sudanese borderlands in Sätit Humära districts that was established in 1980.³⁸ Since the imperial period, resettlement efforts in the Sätit Humära district have been driven by national policy, land degradation, recurring droughts, and famine.³⁹

Different guidelines were applied to resettle the communities in each area. Among them, three levels can be distinguished regarding the use of different mechanisms. At the provincial level, forced resettlement was carried out for political reasons other than the resettlement of famine victims. At the local level, targets have been turned into quotas by officials competing to demonstrate excessive diligence. Third, peasants were forcibly resettled due to disputes with union leadership, particularly over land ownership, the inability to pay taxes, or personal grievances.⁴⁰

The conditions to carry out readmission or registration of settlers were marked by bureaucratic steps. A prospective settler had to be willing to re-establish; willing to engage in agricultural works; had to be physically fit; family heads should have been between 18 and 45 years of age; and had to be willing to move all family members together.⁴¹ The above guidelines were based on the earlier resettlement experiences of the RRC, where unemployed people living in urban areas were forcibly relocated to other areas.

The Provisional Military Government of Socialist Ethiopia of Därg sponsored resettlement projects caused environmental change.⁴² The communities that came from different areas during the settlement continuously killed and destroyed the abundant life in the area where they settled. Large tracts of forest have been cleared, wildlife have been displaced.⁴³ Often indiscriminately or involuntarily, indigenous peoples of the regions, which called the Wälqayét and Tägädie were displaced and resettled.⁴⁴

37 CGAZA, a letter written from Habtä Täsfaezgie, Socialist Ethiopia Provisional Military Government of Gondar Province Production Campaign, District Administration Production Conference Chairman, Humära to Wogära *Awraja* Production Campaign Plan Assembly Office, Dabat, Folder No. ገጠ212/ጠ, File No. ሠፀፀ11/199/17/75, Dated 21 August 1975 E. C.

38 CGAZA, a letter written from Adane Mamuye Woräda administrative resettlement manager Humära to Wogära *Awraja* Administrator Office Dabat, Folder No. ገጠ28/ጠ, File No. ጸጸጸጸ, 15/2/41/1154, Dated 5 January 1972 E.C.

39 Ibid.

40 CGAZA, a letter written from Tamrat Kebede, Socialist Ethiopia Provisional Military Government Aid Coordination and Establishment Commission, Gondar to Gondar Administrative Region RRC Branch Office, Gondar, Folder No. ሠ/ጠ/12, File No. ሰ24/1/35/5509, Dated 16 September 1977.

41 Ibid.

42 Mulugeta Lemenih, and et al., "Resettlement and woodland management problems and options: a case study from North-western Ethiopia." *Land Degradation & Development* 25, no. 4 (2014), 305-307.

43 CGAZA, a letter written from Zämän Kassa, Yä Kefelä Hagär Meketele Administors and YäMerete Zemecha Plan Department vice Chairman and secretariat to Lä Gondar Kefelä Hagär Branch one office, Folder No. ገጠ208/ጠ, File No. ገጠ/12/85/ጠ, Dated 10 June 1973 E. C.

44 CGAZA, a letter written from Lieutenant Colonel Tamerat Yigezu, the Bägemedder and Semén



Map 2: 5

Source: Central Gondar Administrative Zone Archives, Report Gondar RRC Branch Office from establishment up to July 1985.

The resettlement program in Sätit Humära district was aimed at introducing social and economic change and pursuing socialist transformation by encouraging people to move during drought conditions.⁴⁵ However, the resettlement program caused drought,⁴⁶ and environmental degradation.⁴⁷ As a result, the resettlement process in the community caused significant damage to natural resources.⁴⁸

3. Environmental Changes

In the late 1980s, symptoms of environmental changes were witnessed in the resentment sites such as Hilegen, Bäwal and Maikadra.⁴⁹ It was reported that in the Hilegen resettlement site there was a shortage of rain. However, according to the plan issued in 1982/1983, a different experience was registered.⁵⁰ The table below shows the estimated plan.

Endärasé, Gondar to Däjazmach Adan Mekonne Yä Wogära *Awraja* Administrator, Folder No. 1/7, File No. 14/546/59, Dated 25 February 1959.

45 Gebru Tareke, *The Ethiopian Revolution War in the Horn of Africa*, Yale University Press New Haven & London, 2009, 148-149.

46 Getachew Woldemeskel, "The consequences of resettlement in Ethiopia." *African Affairs* 88, no. 352 (1989), 359.

47 Michael Stahl, "Environmental degradation and political constraints in Ethiopia." *Disasters* 14, no. 2 (1990), 140.

48 Asrat Tadesse, "The Dynamics of Resettlement with reference to the Ethiopian Experience." *Research and Perspectives on Development Practice* 5 (2009), 7.

49 CGAZA, (Resettlement and farming practice in Hilegen, Bäwal and Maikadra), Folder No. ጠ212/ጠ, File No. 11/199/17/75, Dated 12 August 1975 E. C.

50 Ibid.

Crop Names	It is intended to be cultivated per in hectares.	Estimated production quantity per in Quintal	The quantity of the obtained product is per in quintal
Sesame	165	495	89.83
Sorghum	495	2457	1760.93
Cotton	50	500	28.36
Corn	3	30	30.00
Turmeric	5	30	17.90

Table 1: The table illustrates the differences and outcomes of the plan and production of workers in the Hilegen resettlement station during the 1982–1983 seasons.

Source: CGAZA, Folder No. *ኸ*212/*ጠ*, File No. *ሠዐዎ*11/199/17/75

Due to the failure of the existing garden watering pump, the service provided to the settlements and surrounding areas was interrupted. Due to the cessation of vegetable production, provided to society, whose income had stopped.⁵¹

On the other hand, in the Bāwale resettlement site, there was erratic rain that resulted in low yield. Moreover, the heavy rain that fell in mid-July 1982 washed the entire land, causing loss of fertility. Due to the lack of shelter, the low yield combined with the natural weather, resulted in huge failure is the crop harvest produced during the 1982–1983 production season.⁵²

Types of Crops	It is intended to be cultivated per in hectare.	The quantity of the obtained product is per in Quintal
Sesame	108	140
Sorghum	291	290
vegetables	18	48
Cotton	18	Its yield were under cultivation, and all but cotton is lost

Table 2: The table compares the planned production per hectare at the Bāwale settlement site with the production volume during the 1982-1983 seasons.

Source: CGAZA, Folder No. *ጠ*212/*ጠ*, File No. *ሠዐዎ*11/199/17/75

The natural land in Maikadra site is very wide and fertile. There were four hundred thirty-

51 Ibid.

52 Ibid.

seven household farmers in Maikadra. A total of eight hundred forty-one settler farmers and their four hundred four families were organized and engaged in their agricultural activities. As this res settlement station was newly established and under construction, they were usually supervised by the Relief and Rehabilitation Commission (RRC).⁵³ However, production was above the expected level during the 1982–1983 periods. The problem was climate change, weather disturbance, and erratic rainfall. The main cause of climate change was the human impact on natural resources, which were taken as the main cause of climate change.

4. Impact of Resettlement on Environments

In the 1960s and 1970s, commercial farming and the resettlement program, respectively, in Sätit Humära district have caused various damages to natural resources in the area.⁵⁴ Degradation of natural resources involves the depletion of resources as well as the destruction of ecosystems and the loss of biodiversity.⁵⁵ This incident has been occurring for years in the 1960s and 1970s in natural resources as part of the resettlement rehabilitation program in the Sätit Humära district. This is because the area is growing due to the government's agricultural development and reclamation and the increasing number of people who have flocked to the area. As a result, there has been a mismatch between natural resources and the high demand of resettlers in the sites.⁵⁶

The resettlement program in Sätit Humära district in the 1980s has significantly reduced natural resources, leading to soil erosion, biodiversity loss and poor health. The increase in the human population has further intensified the depletion and destruction of these resources.⁵⁷

The topography and soil fertility of the Sätit Humära district have contributed to the high crop production. However, to produce sufficient crop production, society makes a lot of effort to use natural resources properly because settler farming communities burn land with the thought of increasing the fertility of the soil to increase production and, only to apply shifting cultivation. At this time, fire destroys the uncultivated forest, leaving the cultivated forest, and this problem is caused by the settlers. As a result, the local climate has changed, the amount of rainfall has decreased, and clean drinking and irrigation water has been insufficient.⁵⁸

53 Ibid.

54 Ayalew Gebre, "Pastoral development and policy orientation in Ethiopia: an appraisal of policies and experiences." *Agricultural Policy in Ethiopia's Economic Development: Scope, Issues and Prospects* (2003), 111.

55 Ibid, 43.

56 De Waal, Alex, *Evil days: Thirty years of war and famine in Ethiopia*. Vol. 3169, no. 69. Human Rights Watch, 1991, 167-168.

57 Mengistu Woubé, "Southward-northward resettlement in Ethiopia." *Northeast African Studies* 2, no. 1 (1995), 93-98.

58 Ann K. S. Lambton, "Ethiopia: an approach to land reform1." *Bulletin of the School of Oriental and African Studies* 34, no. 2 (1971), 233-235.

Natural resources especially forests in the Sätit Humära district have been used for various purposes. They used to produce incense, alcohol and soap, but this natural resource has been depleted by the government's expansion of agricultural development and the establishment of resettlement programs. It also causes climate change. The forests of the Sätit Humära district are home to both natural and man-planted forests. From the 1960s to 1991, approximately thirty years of continuous deforestation were recorded in the Sätit Humära district. The rapid decline in forest cover and land quality has led to increased demand for timber, charcoal, construction timber, agricultural inputs, and crop products, leading to deforestation.⁵⁹

From the early 1970s to the late 1980s, extensive restoration works have been carried out in the Sätit Humära district, the district has a warm climate and is home to various aquatic and terrestrial animals. However, since the government wanted the area for agricultural development and settlement programs, it became a reason for the various wild animals that lived in the area to disappear and migrate. Apart from this, the settlers who settled in the area wiped out many wild animals in the form of hunting. In addition, the settler farmers believed the natural resources in the area were suitable for building houses and firewood.⁶⁰

In 1971, different types of disease appeared in the district of Sätit Humära. Diarrhea and vomiting, food poisoning occurs because of the environmental change. Since the outbreak of the disease in Sätit Humära, forty-five people have died.⁶¹

According to Teferi Wendé, Minister of Health, Wogära *Awraja* in Sätit Humära district, sixteen thousand people died in 1976 from malaria. This is one of the most serious problems facing resettlers in the area. It was observed that conflicts and crimes were increasing in local communities, and there were problems during operations, resulting in more harm to patients. Because they were simply moving from place to place, they were unable to get proper medical treatment.⁶²

In addition, various types of disease locally known by different names such as *Woz*, *Shuftier*, *Ganja*, and *Fufu* affected the communities in the area in 1976. These diseases not only affect people living in the settlement areas but also in the towns and villages of other neighboring areas. A medical team was sent immediately to examine the condition of the patient and provide the necessary treatment. However, it was impossible to address

59 CGAZA, a letter written from the office *Niguse Negest* Endärasē of Eritrea - Asmara - to Sätit Humära District Province Humära, Folder No. 71182/11, File No. 323/49, Dated 30 September 1949 E. C.

60 CGAZA, a letter written from *Šhaläka* Gezaw Gedlegiorgis, General Manager of the Wildlife Management and Conservation Organization of the Monarchy of Ethiopia in Addis Ababa, to the Department of the Minister of Agriculture for the Province of Eritrea in Asmara, Folder No. 11/41, File No. 179/37/60, Dated 25 September 1960 E. C.

61 NALA, a letter written from Fitawrari Bekele Zelelew, Bägänder and Semén Governorate General Office Mekätle Endärasé, Gondar, to Imperial Ethiopian Government Minister Interior, Addis Ababa, Folder No. 11006/73, File No. 62/+97/34-2/42, Dated 13 May 1963 E. C.

62 CGAZA, a letter written from Hailu Mehari, Assistant Head of Main Station Gondar to Sub Station Office Malaria Control Organization Humära, Folder No, 11006/73, File No. 9/09/68, Dated 19 March 1968 E. C.

the situation.⁶³

Since June 1978, the Sätit Humära district has been suffering from the worst desert locust invasion affecting major crop-producing parts of the area. The desert locust was a major food security threat in the lowland areas of Sätit Humära district.⁶⁴ On October 28, 1985, a swarm of locusts appeared in Sätit Humära districts to destroyed crops grown in the area. This swarm of locusts destroyed not only crops of the farmers but also the fodder of the cattle. As a result, the communities living in the area were severely affected.⁶⁵

In 1986, settlement sites were infested by various crop pests. Locust, which cause damage to crops when they sprout destroyed fifty hectares of sorghum in Hilegen forced farmers to turn it over and replanted it as the result. Unfortunately, the pest damaged again; and consequently, the society was affected by famine.⁶⁶

5. Conclusion

The Ethiopian government relocated large numbers of farmers from drought affected parts of Wollo and Gayinet to Sätit Humära in the 1960s. By 1980s, various localities of Sätit Humära such as Maikadra, Hilegene, Bäwal, Berket, Hager-Hiwot, and Central kebeles (localities), which were inhabited by a huge number of farming communities, has caused a lot of damage to natural resources. This has essentially caused environmental degradation. Forests were destroyed for commercial agriculture, charcoal production, etc. In the past three decades, the study area has shown a significant decrease in natural resources such as forests, and other natural resources. The settlers caused significant damage to natural resources to satisfy their needs. Population growth has forced residents to clear new forests and grasslands for agricultural activities which are the main reasons for environmental degradation. These rapid expansion of agricultural lands as the result of settlements, coming of investors to the areas, and expanded government farms resulted in excessive cutting of trees for fuel and construction, forest fires, and conversion of woodlands to cropland. The findings of this paper clearly implicated the above realities in the district of Sätit Humära.

⁶³ CGAZA, a letter written from Tefera Banté, The People's Republic of Ethiopia, by the Police Army of Bägémdar and Semén Provincial Police to the Provincial Administration Office in Gondar, Folder No. $\lambda\theta32/\theta1$, File No. 462/144/12265, Dated 3 Paqumie 1968 E. C.

⁶⁴ CGAZA, a letter written from Shambel Yilma Demeke Head of Coordination Department, Addis Ababa to Gondar Provincial Administration Office Gondar, Folder No. $\eta28/\eta$, File No. $\lambda\theta/4/810$, Dated 2 June 1970 E. C.

⁶⁵ CGAZA, letter written from Atnafu Teshome, Head of Gondar Administrative Region Food Affairs Coordination Department, Gondar, to Socialist Ethiopia Provisional Military Government Agriculture Minister, Addis Ababa, File No: $\eta\theta10/15/73$, Dated 23 November 1978 E. C.

⁶⁶ CGAZA, a letter written from Tefera Gebru-Shambel, Socialist Ethiopia Provisional Military Government in Gondar State Public Security, Protection, and Security Office, Gondar, to Gondar State Administration Office Gondar, File No. $\theta2/14/\eta/1692/78$, Dated 24 July 1978 E. C.

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References

I. Primary Sources: Archives

A. Central Gondar Administration Zone Archives (CGAZA)

1. About natural resources used for various purpose: Folder No. ገጠ182/ጠ, File No. 323/49, Date 30/1/949.
2. About contagious disease (*Tegemate, Tiwokiya*): Folder No ከጠ6/73, File No. 6ፈ/797/34-2142, Date 13/9/63; Folder No. አፀ32/ወ1, File No. 462/144/12265, Date 3/13/68.
3. About malaria disease: Folder No. ከጠ6/73, File No. 9/09/68, Date 16/7/68.
4. Locust invasion: Folder No ገጠ28/ጠ, File No. አፀ/4/ፈ10, Date 2/10/70, File No: ከጠ10/15/73, Date 23/1978.
5. Crops damaged by wild animals and pests: Folder No. ጠ/41, File No. 14/አ568/1/13, Date 5/2/60.
6. Resettlement and farming practice: Folder No. ልዩ ልዩ ሆ/6, File No 89/4664, Date 1/4/1961; Folder No ገጠ37/ጠ, File No ገጠ37/166/ጠ, Date 30/10/75; Folder No ገጠ212/ጠ, File No ወወጠ11/199/17/75, Date 21/12/75; Folder No ወ/ጠ/12, File No ዕ24/1/35/5509, Date 6/1/77
7. Resettles crops damaged and eating by *Beni-Amer* people Cattles: Folder No. ገጠ28/ጠ, File No. አአጣጥ 15/2/4/1154, Date 1/5/72.

B. Institute of Ethiopian Studies (IES)

1. About Ethiopian First Five Years Development Plan, Addis Zāmān, Newspaper, No. 19 (December – April), January 1/1951 E.C.
2. About Agricultural Development Organization evaluation the work results, the future directions of rural development (research report), Study Committee of Rural Development Organizations, May 1971 E. C. (አርሻ ልማት ድርጅቶች የሥራ ውጤት ግምገማና የገጠር ልማት የወደፊት አቅጣጫ (ጥናታዊ ሪፖርት) - የገጠር ልማት ድርጅቶች አጥኝ ኮሚቴ, ግንቦት 1971 ዓ.ም.).

II. Secondary Sources: Journal Articles, Books and Research papers

Agriculture Projects Department, International Bank for Reconstruction and Development International Development Association. (1970). Humāra Agriculture Development Project Ethiopia, Report No. PA – 30A.

Aju, Paulinus C.et al. (2015). “Our Forests, Our Environment, Our Sustainable Livelihoods.” *Eur. J. Acad. Essays* 2, no. 4.

Alemayehu, Erkihun. (2024). “Dynamics of border security and border governance between Ethiopia and the Sudan, 1940s-1974: Sātīt-Humāra, Mātāmna, and their environs in focus.” *Africa: rivista semestrale di studi e ricerche: NS VI*, 1.

Amanuel, Kussia et al. (2022).”Size, Distribution, and Practices of Large-Scale Agricultural Investment in Ethiopia: Past and Present.” *Ethiopian Journal of Development Research* 44, no. 1.

Asrat, Tadesse. (2009). “The Dynamics of Resettlement with reference to the Ethiopian Experience.” *Research and Perspectives on Development Practice* 5.

- Barry, John. (2007). *Environment and social theory*. Routledge.
- Bruce, John W. et al. (1994). "After the Därg: An assessment of rural land tenure issues in Ethiopia."
- CSA (Central Statistical Agency). (2015). Agricultural sample survey 2014/15 (2007 E.C.) Report, Vol. 1. Statistical Bulletin 578. Addis Ababa.
- De Waal, Alex. (1991). *Evil days: Thirty years of war and famine in Ethiopia*. Vol. 3169, no. 69. Human Rights Watch.
- Dessalegn, Rahmato. (2003). "Resettlement in Ethiopia: the tragedy of population relocation in the 1980s." FSS Discussion No. 11, Forum for Social Studies, Addis Ababa.
- _____. (2009). Ethiopia: agricultural policy review in Digest of Ethiopia's national policies, strategies, and programs edited by A Taye. Addis Ababa: Forum for social Studies.
- Donahue, Roy Luther. (1970). *Soils of Equatorial Africa and Their Relevance to Rational Agricultural Development: Personal Notes and Documentations*. Institute of International Agriculture, College of Agriculture and Natural Resources, Michigan State University.
- Friew, Kelemu. (2015). "Agricultural mechanization in Ethiopian: Experience, status and prospects." *Ethiopian Journal of Agricultural Sciences* 25, no. 1.
- Gebre, Ayalew. (2003). "Pastoral development and policy orientation in Ethiopia: an appraisal of policies and experiences." *Agricultural Policy in Ethiopia's Economic Development: Scope, Issues and Prospects*.
- Gebru. Tareke. (2009). *The Ethiopian Revolution*: Yale University Press.
- Getachew, Woldemeskel. (1989). "The consequences of resettlement in Ethiopia." *African Affairs* 88, no. 352.
- Goudie, Andrew S. (2018). *Human impact on the natural environment: Past, Present and Future*, Eighth Edition, John Wiley & Sons.
- Iyer, Gopalkrishnan R. (1999). "Business, consumers and sustainable living in an interconnected World: multilateral ecocentric approach." *Journal of business ethics* 20.
- Jack, Jackson. (2017). "Environment and Society." *Major Themes in Sociology: An Introductory Text*.
- Kassa, Belay. (2004). "Resettlement of peasants in Ethiopia": *Journal of Rural Development/ Nongchon-Gyeongje* 27, no. 1071-2019.
- Kassahun, G. (2014). "The role of small towns for surrounding rural development: The case of Mätamma Town, North West Ethiopia." *Open Access Library Journal* 1, no. 6.
- Kassaye, Mulugeta Lemenih. (2024). "Review of the Historic Trajectory of Deforestation, its Drivers and Implications in Ethiopia."
- Kiya, Gezahegne. (2019). *Movements, Relations, and Land Contestations along the Ethio-Sudan Border in Mätamma Yohannes*. Organization for Social Science Research

in Eastern and Southern Africa (OSSREA).

- Lambton, Ann KS. (1971). "Ethiopia: an approach to land reform1." *Bulletin of the School of Oriental and African Studies* 34, no. 2.
- McCann, James C. (1990). "A great agrarian cycle? Productivity in highland Ethiopia, 1900 to 1987." *The Journal of Interdisciplinary History* 20, no. 3.
- Moran, Emilio F. (2011). *Environmental social science: human-environment interactions and sustainability*. John Wiley & Sons.
- Mulugeta, Lemenih et al. (2014). "Resettlement and woodland management problems and options: a case study from North-western Ethiopia." *Land Degradation & Development* 25, no. 4.
- Munson, Gary. (2005). *A narrative of environment and hunger in Ethiopia: A conversation-based interpretive inquiry*. University of San Francisco.
- Pankhurst, Alula. (1992). *Resettlement and Famine in Ethiopia: the villagers' experience*. Manchester University Press.
- Pankhurst, Alula, and Francois Piguet. (2009). "Moving people in Ethiopia: development, displacement & the state."
- Pingali, Prabhu L. et al. (1987). *Agricultural mechanization and the evolution of farming systems in sub-Saharan Africa*.
- Robbins, Paul et al. (2022). *Environment and society: a critical introduction*. John Wiley & Sons.
- Seife, Ayele. (2022). "The resurgence of agricultural mechanization in Ethiopia: rhetoric or real commitment?" *The Journal of Peasant Studies* 49, no. 1.
- Sharp, Kay et al. (2017). "Commercialization of farming in Ethiopia: which pathways?" *Ethiopian Journal of Economics* 16, no. 1.
- Sivini, Giordano. (1986). "Famine and the resettlement program in Ethiopia." *Africa*.
- Sørensen, Birgitte Refslund. (1996). *Relocated lives: displacement and resettlement within the Mahaweli project, Sri Lanka*. Amsterdam: VU University Press.
- Southworth, Herman. (1971). "Farm Mechanization in East Asia."
- Sutton, Mark Q., and Eugene Newton Anderson. (2020). *An introduction to cultural ecology*. Routledge.
- Stahl, Michael. (1990). "Environmental degradation and political constraints in Ethiopia." *Disasters* 14, no. 2.
- Terefe, Geremew, and Mulugeta Atnaf. (2012). "Importance of Informal seed system in sesame technology scaling up in Ethiopia." AT Wold, A. fikre, D. Alemu, L. Desalegne, & A. Kirub (Eds.), *The defining moments in the Ethiopian seed system*.
- Woube, Mengistu. (1995). "Southward-northward resettlement in Ethiopia." *Northeast African Studies* 2, no. 1.