

Land Tenure Induced Deforestation and Environmental Degradation in Ethiopia: The Case of Arbagugu State Forest Development and Protection Project (A Historical Survey ca 1975-1991)

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Abstract

Conventionally, different factors like lack of technology, population explosion, a search for arable land, the need for construction materials, the expansion of commercial farms, and others are considered to be causes of deforestation in Ethiopia. This being true, however, the much neglected but crucial aspect of environmental degradation and a sequel to environmental malaise is not yet given the attention it deserves. The objective of this paper is to explore the cause and impact of this overarching problem by focusing on Arbagugu State Forest Development and Protection Project, North East Arsi in between 1975-1991. This work is a case study of environmental history and is qualitative with both analytic and narrative approaches. Data for this study are culled both from primary and secondary sources as well as published and unpublished materials found in different places. To corroborate the written documents, information gathered through interview from oral informants contemporary to the event is used. For a better understanding of the historical events unfolding in the region I have employed the degradation narrative. The finding shows the causal factors are the ineffective land tenure systems followed by the different governments of Ethiopia.

Key terms: *Deforestation, Ecological malaise, degradation, Natural Resources, State forest Reserve*

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Background of the Problem

Arbagugu is an *Awraja* consisting of six districts namely Marti, Asako, Jaju, Chole, Guna and Gololcha in North east Arsi (in post 1991 administrative readjustment Guna is subsumed under Marti, Chole and Asako making the districts five, the size of the *Awraja* remaining intact). The *Awraja* is bordered by West Hararge in the East, East Shawa in the North and parts of the rest of Arsi in the South and West. Astronomically, it is located between 8° 42' to 8° 01' North and 39° 31' to 40° 23' East. According to available data the total area of the *Awraja* is 419,760 hectares (Sahilu 1962:152). The *Awraja* enjoys a moderate climate, ample rainfall and a fertile soil that enable the growth of a variety of food crops. It thus supports a relatively large population.

Four decades ago, most of Arbagugu area was covered with thick forest of different species of trees which have been serving as a habitat for different animals. Today, however, this forest reserve is dramatically decimated by large-scale unrestricted deforestation. Here, in the *Awraja* a state forest project called the Arbagugu State Forest Protection and Development Project was established in 1975. The forest project based in Asako, Guna and Marti districts has a total area of 34,173 hectares. About 30,000 hectares of the total area of the project was covered with natural forest while the remaining was covered by man-made forest planted with indigenous tree species such as *Zigba* (*Podocarpus*), *Tid* (*Juniperus procera*) *Bissana* (*Corton macrostachyus*) and others. Exotic species like *Copressus lusitania* and eucalyptus tree are also widely grown. The average altitude of the project area ranges between 1000-3000 meters A.S.L. (Hailu 1993:1).

The project has undergone through numerous nomenclatures. Before 1975, it was termed as Arbagugu Forest Protection and Development Office and was directly administered by the regional agriculture and development office based at Assala. From 1975-1978, it was called Arbagugu State Forest Pilot Area. From 1980-1981 it was named Arbagugu *Awraja* Forest Protection and Development Office. From 1982 onwards, it is termed as Arbagugu State Forest Development and Protection Project (Bonna 1999:2).

The main reason for its establishment was to keep the forest from destruction and make a sustainable use of the forest resources. Accordingly, for about a quarter of a century, the project has carried out multifaceted activities. It produced seedlings and distributed them to individual Peasant Associations and various government offices. It has also been beating up, weeding, planting, and thinning the seedlings, protecting the forest reserve from man-made and natural damages. In spite of these successes, however, the project faced different problems, one of which was deforestation.

Prior to 1975 the Arbagugu forest was divided into state forest and private forestlands. The Imperial government controlled state forest reserve while private forest reserves were owned and used by individuals granted by the state. Some of the private owners of forestland in Arbagugu were *Ato Ketema Yifru*, the then Foreign Minister, who had nine hectares of forest land in Guna; and *Ras Abebe Aregay*, the then Defense Minister¹. In 1965 due to the accelerated deforestation on private forest reserves, the government transferred 8,880 hectares of private forest in Guna and Asako to government ownership. Later on, the 1975 land proclamation nationalized the private forest reserve and controlled it through the supervision of Peasant Associations. This condition continued until the project reorganized its structure and took its responsibility in administering the forest from peasant Association in 1982 (Bonna 1999:2).

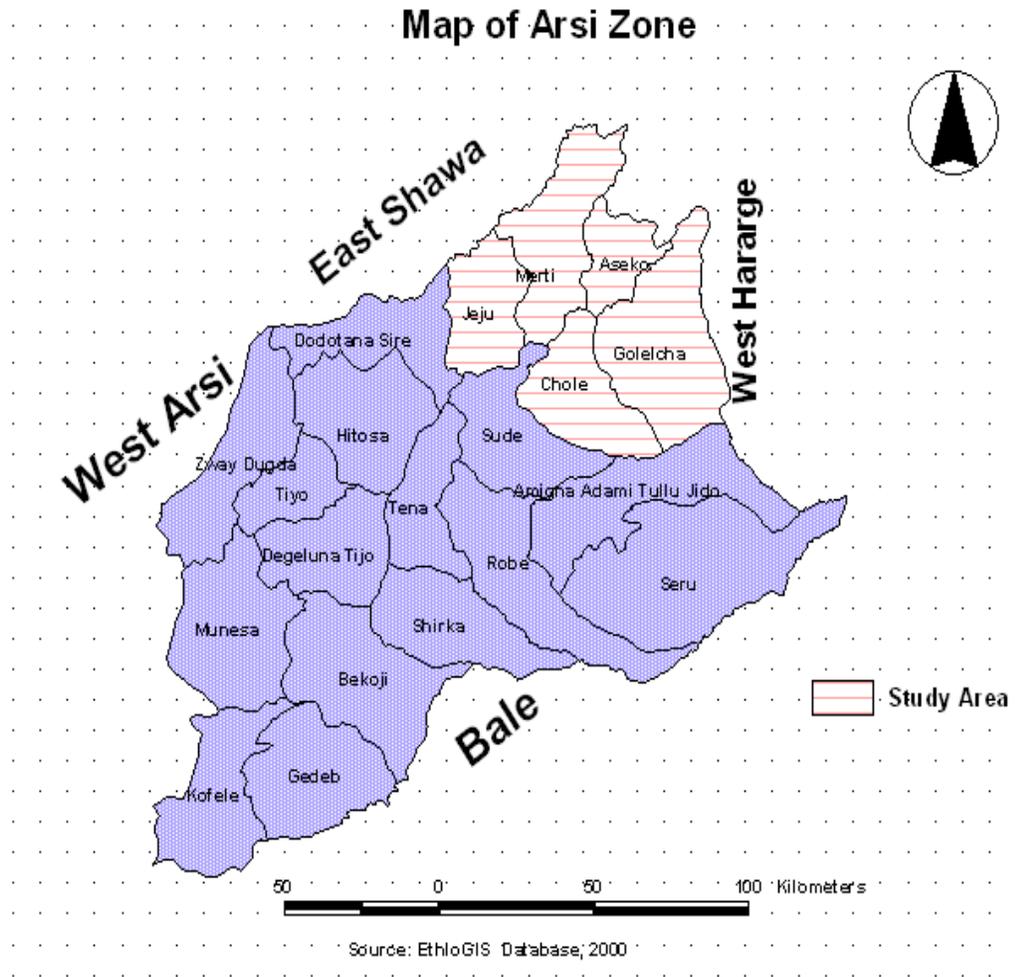
According to the pilot study conducted by forestry professionals, between 1983 and 1992 the project had lost 2,657.25 hectares of forest due to different factors. The annual deforestation rate was found to be 265.7 hectares per year. Seen from the point of view of the factors, deforestation in search of new agricultural land was 80 percent, deforestation by fire was 15 percent and other factors five percent. On the basis of the same study from 1968-1991, the project lost 62,642m³ of forest reserve because of firewood and marketable home materials (Hailu 1993:11-19). More than that amount of forest was cleared between 1968-1991 for the search of arable land and other related factors such as the expansion of commercial agriculture along both banks of the Awash River. The figure on the extent of deforestation from 1941 onwards was not found. But it is clearly established from the archives consulted for the purpose of this work that land grants by the Imperial government and the subsequent expansion of agricultural activities have resulted in large-scale deforestation in the region². A survey of extant literature also asserts this and other related factors for the decimation of forest resources in Ethiopia (Gizachew 1994:21-33). What is missing, nevertheless, is the analysis of these causal factors from the perspective of land tenure policy. Therefore, the main aim of this paper is to analyze critically the negative correlation of deforestation and land tenure policy.

By taking Arbagugu state Forest in North East Arsi as a case, this paper argues that the different land tenure policies of the past Ethiopian regimes from 1975-1991 have alienated the local community from property ownership and use right of resources from their environment. In the absence of any viable environmental protection policy and strategy, these land use policies have failed to

¹. Weldemesqel Tariku Memorial Research Center, folder No 2220, File No 249522.

². Weldemesqel Tariku Memorial Research Center, folder No 2220, File No 249522.

preserve the forest reserves from damage. As a result, degradation in the form of deforestation, soil erosion, depletion of water resources continued unabated.



Methodology

This research is fundamentally a historical and hence is qualitative with both analytical and narrative approaches. It is a case study of environmental history in

north East Arsi. Larger bodies of materials used for this study are drawn from archival sources. These primary data are culled from the former Arbagugu *Awraja* Administration Office, from the Forest Project's Archives found in Abomsa, the *Awraja* capital, and archival materials from Walda Masqal Tariku Memorial Research Centre (a branch of Addis Ababa University Library) which is found to be indispensable.

Besides, secondary sources such as books, monographs and journal articles pertaining to the subject under study are meticulously consulted. Furthermore, narrations of some contemporary events were collected from informants for they provide data as the deforestation unfolds. Metrological data were also collected from Ethiopian Meteorological Agency for some selected stations in Arbagugu with the intention to understand the impact of deforestation on the microclimate of the *Awraja*. One other material which is appropriate to such kind of study is the use of satellite imagery and photographs to understand the landscape change in time sequence. Unfortunately, however, since this research work is an independent, self initiated academic exercise, I did not afford to cope with the practical limitations that I faced.

Towards a better understanding of the complexity of environmental degradation in Arbagugu, this paper adopts degradation narrative as a framework of analysis for ecological causation and agency. In more specific terms, the narratives of environmental degradation employed here revolve around deforestation. Currently, degradation narrative has been severely criticised for its inherent weaknesses such as its exaggeration of the rate of deforestation. Critiquing degradation narrative, Allan Hoben cited in Melissa Leach and Robin Mearns for instance writes:

... historically grounded, culturally constructed paradigms that at once describe a problem and prescribe its solution....Rooted in a narrative that tells us how things were in an earlier time when people lived in harmony with nature, how human agency has altered that harmony, and of the calamities that will plague people and nature if dramatic action is not taken soon... (Leach and Mearns 1996:7-8).

No matter what degradation as a master narrative has a tendency of exaggerating the rate and impact of deforestation in Ethiopia, I do not believe that the data given by scholars to corroborate its impact in Arsi was solidly established. It is true that the studies of James McCann (1995), Allan Hoben (1996) and others have established no significant change in the tree cover in northern highland landscapes in the 19th century. To his credit James McCann

undertook an empirical investigation on two ecologically diverse areas- Ankober and Gera (Southwest Ethiopia) - and came up with the finding that no significant change in the forest cover of the two regions occurred. Moreover, he indicated that the contribution by farmers in the preservation of the forest was remarkable (McCann 1997:79-107). Yet no independent research work was found that can establish this fact in Arsi in general and in Arbagugu in particular. The focus of this paper is to indicate degradation, specifically deforestation, in Arbagugu resulting from ill-informed and bad land tenure policy followed by the succeeding Ethiopian governments. In order to make the narrative more applicable in the case of Arbagugu, I have tried to modify one of its problems i.e. ignoring the role of farmers in indigenous resource management practices such as terracing, conservation of soil from erosion, and using manure. As such this work attempts to consider the positive role farmers played in environmental stability. In this regard James McCann also aptly puts the role of “farmers” as “...managers of the environment over their relations to the state.” (McCann 1995:7)

Literature Review

In the current dynamic world, environment is increasingly becoming a center of analysis for the development of third world countries. The two dynamic but opposing forces that dominate the broad canvas of the history of degradation of environment in general and deforestation in particular are conservation and exploitation. Conservation is more of demanding with rewarding future while exploitation is an easy task compromising the needs of the future generation. The tension between them is symbolized with the struggle between life and death. As a third world continent, African environmental discourse entered the global debate under the rubrics that emphasized the most salient features like desertification, deforestation, drought and famine (Basset and Crummy 2003:1).

Such kinds of environmental debates in Africa were commonly observed during the colonial period and were purely sponsored by European capitalism which aimed at exploiting environmental resource to the maximum. Writing from a Marxist perspective of environmental history Donald Worster has amply demonstrated how capitalism resulted in ecological disaster in America in the 1930s. Worster claims that there are some environmental catastrophes which are purely nature's work, others are the results of ignorance accumulated over many years. But the dust bowl, which occurred in the Southern plains of USA in the 1930s, was the result of the ambitions of capitalism that set for itself the task of dominating and exploiting the land for all it was worth and that was the ethos of

capitalism in conceiving land. Ultimately, the expansive energy of US capitalism faced a volatile, marginal land destroying the delicate ecological balance (Wortser 1979:5-7).

Bringing the ethos of capitalist exploitation in African environmental history, two issues pervaded the policy of “re-defining” African Agrarian systems: firstly the access and control of land by African farmers (land tenure) and secondly the issue of environmental protection (land conservation). Colonial administrators strongly intervened in reorganizing African agricultural production in their attempt to maximize their economic exploitation. Their interventions were based on the belief that “modernizing” backward and inefficient cultivation methods of African peoples were a top priority. Their analysis and findings on environmental change were focused more on the intervention of farming and herding communities with their “traditional” and “primitive knowledge” that remained unhelpful to preserve the natural resources of Africa. It was assumed that these traditional and primitive ways of preserving the natural resources were the basic causes of African environmental degradation. In this dichotomy of tradition versus modernity the colonial state in Africa virtually considered itself as an agent firmly committed on the side of modernity (Zamponi 2008:1, Basset and Crummy 2003:4).

For instance, towards the end of the 19th Century, Britain and France brought the environmental baggage picked up during their earlier experiences in Asia, the Indian sub continent and the Caribbean (Basset and Crummy 2003:13). This ensued in the belief that the relationship of their “native” subjects with the environment was destructive. African hunting, livestock raising and farming practices were labeled with pejorative connotations that denigrated the African communities. It was stated that colonial administrations adopted a series of policies aimed at “Saving” African soils, forests, rangelands and animals from “further degradation” (Zamponi 2008:4, Basset and Crummy 2003:14).

To spell out a few examples, in South Africa by the middle of the 19th Century the influence of the British experience in India was expressing itself in concerns for “watershed protection.” In 1907, the society for the preservation of wild fauna of the empire was founded. Policies of alienating Africans from their lands were also introduced. Africans were separated from access to grazing, forest and game reserves. In Southern Africa, where colonialism was characterized by massive land expropriation, presenting African agriculture as ecologically irresponsible created the political space for the exercises of a “paternalistic authoritarianism (Zamponi 2008:4-6, Basset and Crummy: 16-17). This ideology of conservation gave legitimacy for colonial intervention in African environments which is the motive of European capitalist adventures for profit making grandeur and its zeal for the control of the rich African agricultural and mineral wealth.

In Eastern Zambia, the dual impact of capitalism and European colonialism resulted in a major ecological catastrophe since 1895. Here, out of the 10,000 square miles of the concession reserves, a total of 3,500 square miles of infertile land were reserved for more than 150,000 Africans; about 6,500 square miles of the best land was allocated to 80 European settlers and those expected to follow them. Since 1896, the Africans were forcibly removed to the new reserves which were quite beyond the carrying capacity of the native population who were supposed to settle on. Hence, after 1925, while the land reserved to Europeans were reverted to bush, the land assigned to the natives became devastated due to overuse, severe soil erosion, deforestation and a falling water table (Vail 1977:136-138).

Similarly in Meru and Usambara mountains of Tanganyika, the Germans alienated land from the natives and reserved forests by 1910 in support of white settlement. In Kenya, too, forest preservation began as early as 1911. The French organized their African forest services in 1923 and in 1924 while the British established an imperial forestry institute in Oxford. The Belgians began to implement a forest reserve policy in the Congo (Basset and Crummy 2003:15). The post independence African governments' environmental issues are similar with the colonial interventionist conservation policies of the colonial masters which were implemented with little modifications. All environmental malaise is considered as being caused by human intervention and "unscientific utilization" of the natural resources (Basset and Crummy 2003:13-17, Leach and Mearns 1996:19-20).

The general picture of environmental conservation, utilization and degradation we have observed above is also at work in Ethiopia. Allan Hoben states that before the expansion of the Ethiopian state southwards, the farming systems of indigenous Southern Ethiopia were more sustainable (Hoben 1996: 190-191). As examples, he mentions the farming practices of the *enset* culture in southwestern Ethiopia, the agro pastoral peoples of Arsi and Bali where there was extensive forest areas, the southwestern parts in Wellega, Illubabor, Jima with agro pastoral and shifting cultivation. With the expansion of the Ethiopian state southwards towards the end of the 19th century many of these practices were changed bringing new pressures on the environment. Natural forests which were extensive had been reduced and grasslands brought under the plow by different but complementary factors such as conquest, small-scale farmers' migration, government sponsored resettlement, the expansion of private commercial and state farms and state sponsored exploitation of forest resources (Hoben 1996: 191).

In discussing the impact of degradation in Ethiopia, Dessalegn's work is worth mentioning. Although his work focused more on Wallo province, he discussed that around two billion tones of soil is being carried away on annual

basis, a large amount of it from the highland parts of Wallo, Gondar, Tigray, Gojam and Shoa. From this total amount of fertile soil, approximately 10 percent is irreversibly lost since it is carried out of the country by rivers from the highland parts of northern Ethiopia. The rest is redeposited as sediment in different places of the country often in areas which are not worth agriculturally. Consequently, many highland soils have lost their nitrogen content, thereby losing their agricultural productivity (Dessalegn 1988:55).

In areas especially prone to famine but with the potential of grain cultivation, an average of about 100 tones of soil per hectare per year is permanently lost. From this figure, the highest rate of erosion occurs in Wallo and the highland parts of the province contributed most to the destruction of the ecology than the lower part. According to Dessalegn, the main reason for this massive destruction of natural resources is human agency fully assisted by nature. But he fully acknowledges the fact that the land use practices, slope cultivation, deforestation and overgrazing are also the chief causes for such ecological malaise (Dessalegn 1988:55-56).

In Arsi, inhabited predominantly by the Arsi Oromo, it was in the 19th Century that the imperial army of Emperor Menelik conquered and introduced an alien land tenure system. Since then new dynamics causing environmental stress has set in, which the Ethiopian Imperial state seems to have inherited from the European colonial powers in Africa that duplicated the exact form of the European colonial assumptions, an attitude of “know it all” that offered the justification for state intervention and hence imposing a policy from the center (Bahru 2008:466). The Ethiopian imperial state considered indigenous knowledge system and value of farmers such as agro forestry, planting leguminous plants, fallowing, using dung (all in the highland parts) and transhumance (commonly observed in the lowlands of the *Awraja*) as “useless” and their ways of life unhelpful to preserve the natural resources of the region. Accordingly, new systems of forest preservation and land use policy were introduced. Such hasty generalization has failed to consider the dynamics of environmental change at the intersection of the political economy and ecological process.

Causes of Deforestation

Land Grants for the War Veterans and State Dignitaries

Long before the establishment of the Arbagugu forest project, deforestation was already a serious problem in the region. One of the main causes for this was the local historical development. There was an influx of 1001 war veterans in the

1940s in Arbagugu because of the land grant by the government of Emperor Haila Sillassie.¹ Indeed, during the Imperial era private ownership of land was allowed through purchase, grants and other arrangements. Private ownership of land was predominantly found in the southern provinces that were incorporated, of which Arsi is part, in the last quarter of the 19th century and the dominant means of acquiring private tenure was through government expropriation from the local chieftains and peasants (Dessalegn 1984:20-21). The grants were made through official government proclamations. One of these proclamations, the 1941 (Mahtemesillassie 1962: 124; Gabrawold 1948: 92) decree, was pertinent for Arbagugu's case: it allowed *rist* land grant for more than 1,600 war veterans on private basis.

According to the archives these military colonies were given a total of 1,300 *gashas* of land. However, the government did not make any prior surveys on the ownership status and the agricultural potential of the land granted. Archival sources and contemporary informants unanimously agree with the fact that the war veterans were given arable land in the dense forest of the region based on their rank and status. But before the deployment of the patriots the region was covered by dense forest which the local community used as grazing land and game reserve.²

Nevertheless, some of the grantees complained as they were granted the land on an area that was arid, malaria infested and inconvenient for agriculture. In subsequent years i.e., in the 1950s, new grants were made to the south of Abomsa Town, where the forest reserve was dense. The forest reserve was considered as limitless and even as an obstacle for agricultural activities. Hence, the less favorable ecological conditions in the hot lowland region of Arbagugu perhaps in combination with an agricultural predilection in the economic outlook of the soldier settlers seem to have pushed the latter to the dense forest zone in the highland parts of Arbagugu. Thus, some of the families of the grantees were involved in deforestation while some of them pressed against the indigenous peasant holdings that in turn were forced to leave their plot of land after repeated but frivolous appeals to local government officials. These peasants also engaged themselves in an illegal act of clearing forests in search of new arable land.³

¹ Weldemesqel Tariku Memorial Research Center, folder No 2220, File No 249522.; Informants: Kadir Jima, Baykenaw Setegn, Aragaw Zeleke, Getachew H/ Masqal.

² Weldemesqel Tariku Memorial Research Center, folder No 2220, File No 249522.; Informants: Kadir Jima, Baykenaw Setegn, Aragaw Zeleke, Getachew H/ Masqal.

³ Waldamasqal Tariku Memorial Research Center. Folder No 2220, File No 249522; Informants: Abdo Jilo, Aliyi Kabir Tilmo. Kedir Jima.

Moreover, the government of Emperor Haila Silassie granted forestland to some of its loyal and dignitary state officials. From among many, the two famous grants were made in the 1960s. As we have already mentioned, the then foreign Minister, *Ato Ketema Yifru* was granted a forestland of about nine hectares in the former Guna district. Likewise, *Ras Ababa Aregay*, the then Defense Minister, was also granted a forestland in the same district.¹ Such kind of private forestland ownership was common during the imperial era. In fact, a considerable percentage of the country's national forest was owned by the private sector. Even some scholars argue that the trend for tree plantation was encouraging, had it not been abated after the 1975 land reform (Gizachew 1994: 27). However, this, assertion seems unlikely for Arbagugu state forest. In contrast to such an assertion archives and the narration from informants strongly indicate that the individual forest owners have contributed little to the protection and development of tree plantation. They rather contributed to the deforestation process by selling raw trees to sawmills established in the forest zone.²

Deforestation was accelerated due to the establishment of sawmills in the hub of the forest zone. Totally there were seven sawmills established in the forest zone out of which foreigners owned six. These were Abajama Re'e, Hussa Kosobankola, Qorogugu, and Etero. All of them were named after the places they were installed except Homba and Qorogugu which were founded in Marti and Guna districts respectively.³ These factories were provided with unprocessed trees by private forest owners and by the government although they did not play any role in the preservation of the forest reserve. From all these factories, the Etero sawmill had served for a long period and had a very damaging effect on the forest reserve. It was established in 1968 by two Italian nationals - Singor Jovani Valentine and Mr Rosseti. The factory had been operating by buying the raw trees from forestland owners, *Ato Ketema Yifru* and *Ras Abebe Aregay*.⁴

During the 1974 revolution, the factory owners were prohibited from processing and were obliged to close their factories upon the decision by the government until 1979. When it commenced production, the factory had the potential of processing for 24 hours in which 15m³ timber were processed per day. According to informants, the factory was operating in its full capacity until 1991 when it faced shortage of timber and was forced to lay off most of its workers

¹ Waldamasqal Tariku Memorial Research Center. Folder No 2220, File No 249522; Informants: Abdo Jilo, Kedir Jima.

² *Etero Enchat Masantakiya* M/A N0.64.; Informants: Abdulkerim Ute, Kedir Jima.

³ *Etero Enchat Masantakiya* M/A N0.64.; Informants: Abdulkerim Ute, Kedir Jima.

⁴ Arbagugu Awraja Administration Office, *Dan limat*, File No.,221/68 E.C.; Informants: Abdulkerim Ute, Kedir Jima.

except a few technical workers.¹ This in part indicates the dwindling forest potential of the region.

The measures taken by the *Dargue* government also seem lenient and timid. Although we do not have much information on the imperial regime, the *Dargue's* position on the factory seems conflicting and self-defeating. Some of the archival documents consulted clearly reveal that the government wanted the factory to produce wood products for different constructions such as schools, offices and others without assuring proper afforestation. Moreover, the government wanted to collect sales and turnover taxes from the factory and that might have inhibited it from having a firm stand against the factory.² On the other hand, at different times the *Dargue* openly stated its demand in closing down the factory due to its impact in exacerbating deforestation. However, it was unable to take concrete measure, and irreversible damages continued.

The region has also witnessed imperial land grants on the right bank of Awash Valley specifically around Marti and Nuraera, in what is today Upper Awash Agro Industry Enterprise. Such prominent figures like Hadis Alemayehu, Aklilu Habtewold and Asrate Kassa secured land on private basis and expanded private commercial farms. This grant established cotton plantation after the land was cleared by the grantees. This in turn became the cause for large-scale deforestation and the eviction of Arsi and Karayu pastoral and agricultural communities³.

Later, with the nationalization of land in 1975, the Upper Awash Agro Industry was established. (Peoples' Democratic Republic of Ethiopia, Ministry of State Farm Development Nura Era Agro Industry 2000). Gradually, the state farm expanded its hold by evicting the surrounding farmers and pastoralists. The evicted peasants and pastoralists remained a source of instability for the state farm. Within the farmstead, there were frequent fire set in forestlands and tree clearing by the disgruntled surrounding communities. Thus, a large-scale forest clearing was seen in Jaju and Marti districts. According to archival sources, in 1988 between 170-180 acacia trees were cleared within a day in Tibila Peasant Association. The local government officials tried to curb the situation only through the state's bureaucratic maneuvers, which, however, remained ineffective (*Addis Zaman, Yekatit 24, 1983 E.C*)

¹ Arbagugu *Awraja* Administration office *Dani Tibaqa*, File NO2/ 1981 EC.; Informants Kedir Jima Abdulkarim Ute.

² Arbagugu *Awraja* Administration Office, File No 4696/70.

³ Waldamasqal Tariku Memorial Research Center. Folder No 2220, File No 249522. Informants: Kebede Fesese, Kedir Ware, Kedir Jima.

As far as the Ethiopian governments are concerned, there was a general tendency of marginalizing pastoralists in land tenure issues, and little attention is given to pastoral resources in policy. For instance, the 1975 land reform proclamation discusses issues related with pastoral lands in only four articles (*Negarit Gazeta* 1975 no. 31: 93-101) There was also the pre-eminence of state rights in the tenure proclamation on the pastoral communities, which gives unclear group use rights to the resources with poor legal protection from pastoral competitors or agricultural expansion into the grazing lands (Gizachew 1994: 30). All these left the pastoralists on the banks of the Awash River disadvantaged.

This was the cause for a series of conflicts among the pastoral communities; especially the Arsi and Karayu were fighting over meager grazing and watering niches. Contemporary oral informants narrated by telling stories on the Arsi-Karayu conflicts until 1991 and all have their deep-rooted causes in the search for dwindling resources along the banks of the Awash river, which they formerly used, though competing, as watering and grazing grounds.¹

During the *Därgue* regime, a number of land tenure issues have aggravated forest clearing. Here, any discussion on land tenure and policy issues during the military regime needs a focus on the 1975 land reform. This is so not only for what it succeeded in but also for what it ought to have introduced but failed. From the point of view of scholarly works, the 1975 land reform and its subsequent legislations have generated a considerable research output. As a result, Ethiopian and Ethiopicist scholars have produced various works on the land policy and its impact on environment. Some of the more relevant for our purpose are used in this work.

According to Dessalegn, the 1975 land reform failed to involve and consult Ethiopian peasants in decision-making, policy implementation and management. This has then resulted in failure to promote peasant autonomy through the popular control and management of local resources including land and all resources out of it (Dessalegn 1994: 465-466). This defective policy can be manifested in different facets. The most glaring impacts of the policy are lack of tenure security, absence of empowerment in resources benefits and its highhanded nature and protectionist approach that needlessly aggravated forest decimation.

¹ Informants: Kadir ware, Abdo Jilo, Aliyi kabir tilmo.

Lack of Security

The proclamation does not clearly guarantee individual farmers to plant and use forest trees on their farmyards. This would have built peasant confidence and create self initiation in planting trees and increase the supply of fuel wood, satisfy construction requirements, and create awareness on peasant responsibility in protecting resources. Owing to lack of security on planting trees, most farmers were forced to plant trees in their homesteads rather than on their farmsteads. To satisfy their day-to-day fuel supply and construction demands, however, peasants were encroaching on the existing state forest reserve legally or illegally. This was because farmers lack tenure security for planting trees and decreased self-initiation to increase tree plantation by individual farmers. Farmers have no incentive to make long-term awareness agricultural investments on the particular fields they were farming (Gizachew 1994: 26-27, Dessalegn 1994:467, Hoben 1996:190). In short, peasants control over particular fields was insecure. This does not necessarily mean that granting tenure security would automatically guarantee forest protection. Indeed, granting security need to be augmented through creating and technical support.

The proclamation of mixed economic policy by the *Dargue* in 1990 had also exacerbated deforestation by enticing peasants who did not develop forests due to lack of security (Gizachew 1994:27). It initiated the peasants to encroach on state forest reserves and take illegal advantage of the resource before somebody else did so. Indeed, this proclamation was wrongly interpreted by the peasants in Arbagugu in that peasants have the right to use forest resource the way they liked. Although peasants had the right to use their own forest resources they developed in their own backyards, the anomalous ownership status of state forest in Arbagugu, however, made the forest a victim of unmitigated forest decimation with the proclamation of mixed economic policy.

Absence of Empowerment in Resource Use and Management

The *Dargue* initiated a program called “Community Forestry”. This was a participatory program in which local communities were involved in management activities like pitting, thinning, weeding, and protecting the forest (Gizachew 1994:27). In line with this, the project set out producing seedlings in 1976 at Etero in the former Guna district. From 1976-1991, the project planted seedlings that covered 2,955 hectares of land with man-made forest. It also distributed 2,361,615 seedlings to peasants and 403,765 seedlings to government organizations. To facilitate distribution of seedlings to peasants through the peasant associations, the project established eleven distributing sites in Marti, Jaju, Asako and Chole

districts. Besides, the Peasant Associations that received technical and material assistance established seedling sites in a number of *qabales*. Moreover, after the completion of villagization, the project tried to distribute seedlings to each district.¹ However, ultimately, the local communities were not the beneficiaries of the products of the “Community Forest.” This was because of the undefined objectives and ownership status of these forests. As a result, most of these “Community Forest” areas ended up in destruction in the early 1990s. With regard to this, archival documents and eyewitness oral accounts indicate that the project and the province administration officials failed to stop forest clearing because of the assertive use rights of the local communities.²

The Highhanded and Protectionist Approach of the Government

Some socio-economic studies have unequivocally established that the government was paternalistic. It exercised exclusive control over the use and protection of forest resources by denying peasant associations and individual farmers use right. This was considered as one factor that accelerated deforestation and losses of natural resources as peasants encroached on the forest reserve in search of arable land, grazing land, fuel wood, timber etc (SFPPD 1993; SFPDD 1990; Gizachew 1994:26). Instances of each of this forest clearing in Arbagugu will be discussed here under.

Forest Clearing in Search of Arable Land

Historically, Ethiopia has undergone unperceived and complex, but mutually reinforcing processes of socio-economic activities and ecological disaster. These aspects include rapid population growth, decline in productive capacity of the land, and recurrence of drought and famine. Any analysis in the interface of these factors need to consider population growth when all accessible arable land is cultivated, while there was failure to introduce new techniques of cultivation and any alternative employment opportunities are absent. In Ethiopia, between 1900 and 1984, there had been a growing population with high annual birth rate (Fasil 1993:158). This is also true for Arsi zone, where total population increased dramatically in the 1980s and the 1990s. One fact that makes the figure glaring is that the rural population is dependent on land much more than the urban

¹ Arbagugu Awraja Administration Office, File No.; *Dani Tibaqa*, File No.2/1981 E.C.

² Arbagugu Awraja Administration Office, File No.; *Dani Tibaqa*, File No.2/1981 E.C. Informants: Aragaw Zeleke, Hamda Biftu, Kadir Jima.

population. According to the 1984 Central Statistical Authority (CSA) report, the total population of Arsi was 1.6 million. Of this, 1,529,000 were rural while 133,100 were urban (CSA 1984:15). The population is in constant increase shrinking the holding size of land per family.

Some findings indicate that in Arsi there was relatively less pressure of demand for arable land, but there was a real and growing demand for arable land in Arbagugu especially in the late 1980s and early 1990s. This was because of the growing population due to natural increase (The Muslim Arsi Oromo can marry more than one wife hence having the possibility of more children) and immigration (due to the settlement of soldiers, the state bureaucrats and their family). As a result, deforestation was associated with the resultant need for arable land. To substantiate this mere fact on the bases of some available data, in 1960, the population of Arbagugu was estimated to be 165,807; in 1984 it rose to 351,844 and in 1994 to 442,199(CSA 1984:101;1996:115; Sahilu 1962:152). From this population, 92 percent was found to be rural. In view of the average national growth rate, i.e. 2.9 percent, the rural population would likely double in the near future. On the other hand, the total area of the province is about 10,494 *gashas* (Sahilu 1962:152). The fixed cultivable land was found to be smaller in any event of redistribution.

Over population caused a dire shortage of arable land among the sedentary agriculturalists of the highland Arsi Oromo in Arbagugu. To mitigate the shortage of cultivable land, clearing forests had resulted in degradation on the biodiversity and ecology of the environment. The encroachment of farmers into the forest ecosystem for the much-needed arable land and other resources such as charcoal and construction materials has witnessed large-scale forest decimation. It became also a source of conflict between the local communities and the state forest.

To deal with the problem, the government made new allotments from grazing lands, unsettled or vacant lands. The absence of these resources in Arbagugu state forest forced government agents to allocate new arable land to new claimants in the forest. In their capacity to do "Justice" for the growing demand, the PAs (Peasant Associations) have moved into forest reserves which undermined the power of the forest project. In some cases, families may share part of their holds to landless members of the family who were either war returnees, as commonly seen in the late 1980s, or school dropouts. In both cases, the outcome was making a new peasant family. Without technological improvement and techniques of farming, this process of making new peasant families definitely contributed to the process of natural resources depletion. A pilot study by forest professionals under the auspices of the project in 1990 indicated that the annual deforestation rate caused by the search of agricultural land was 265.7 hectares (Hailu 1993:11).

The Search for Grazing Land

In some of the letters the project manager wrote to the province administration office claiming that in some of the project's forest reserves such as Gora, Angada and Arjousa, the PA member residents have "deliberately" grazed their cattle which wiped out seedlings planted on 32 hectares of land. Such problems were noticed also in some of the districts such as Asako.¹ Here, lack of a clear-cut boundary between peasant holdings and the project's possession might have caused illegal encroachment that the project manager labeled as a deliberate act. Indeed, it was a deliberate act, but it indicates that the peasants' livelihood might have been threatened since the project limited their grazing lands. On top of this, Peasant Associations that exercised much power than the project shrouded the project's power and mandate and the peasants were ready to follow instructions from PAs than the project.

Forest Clearing to Generate Supplementary Income

Some peasant households tried at least in the short term, to mitigate the impact of dry seasons by selling firewood, charcoal and some wooden home utensils. Especially the demand for wooden home materials like bed was so acute to the extent that smuggling wood from the forest reserve to the nearby towns became prevalent in the 1980s and early 1990s. Even there were households which entirely based their survival on selling wood products. To mitigate the ongoing challenge the project shifted its head office in 1987 from Abomsa to Abajama, where large-scale deforestation took place. It also established customs posts (*kellas*) on the gates of Abomsa and on the exits of Abajama and Angada towns to supervise or discourage the illegal trade in forest product, which was prevalent.² However, the smugglers still continued making their living by producing wood products. They were continuously changing the mechanism of smuggling. In some cases, they were armed and moved through the night to elude capture by state officials and the project forest guards. There were times when military shootouts occurred between the guards and smugglers, which occasionally resulted in deaths. A crosscheck of informants and archives remarkably elucidate the case in point. In some cases, individual smugglers were caught red-handed while clearing forests and transforming unprocessed wood. These criminals were brought to courts at various levels but since the court procedures were too protracted, the project did not follow up the case to its end and individual criminals were set

¹ Arbagugu Awraja Administration Office, *Dan Tibaqa*, File No.2/1981 E.C.

² Arbagugu Awraja Administration Office, *Dan limat*, File No.,31/82 E.C.

free.¹ According to the pilot study conducted by the project from 1968-1991, the project lost 62,642m³ of forest reserve because of firewood and marketable home materials.

Forest decimation due to fire was also commonly seen. Most often the peasants set fire on forests to have agricultural lands, but it can also occur due to lack of precautions and proper management. The fire in Guna and Chole in 1988 was set on while peasants were producing honey, which went out of control unwittingly. Sometimes, however, fire set on forests by individuals deliberately produces a lot of damage. For instance, in Golocha a certain Habte Tafara has set fire on the forest in 1988, which destroyed a large size of forestland and agricultural plots. Along with this, commercial crops like *Chat (Cata edulis)*, banana and coffee plantations belonging to individuals and large areas of coffee plant of the Arbagugu coffee plant were destroyed.²

Some of the government policies during the *Dargue* regime have also accelerated the process of forest desiccation. One of these was the villagization campaign that commenced in Arbagugu in December 1985. In rhetoric, the village site to be selected by the technical committee has to be free from shortage of land for village expansion and other problems, practically some of the villages, especially in Guna and Asako districts, were established at the center of natural forest and accelerated forest decimation (Villagization campaign in Arsi 1978:29).

While all these decimations have occurred, attempts by the local government and the community to curb the damages were minimal. Especially before 1967, no co-coordinated attempts were made. The too little efforts, if at all existed, were also ineffective. During this time, the government demanded private forest owners who produced unprocessed woods to plant five seedlings for every tree they cleared. However, the available evidences strongly suggest that the private owners have only theoretically accepted the instruction, as indeed they did not have any concern for the environment. For instance, in the archives it is demonstrated that in 1959 at a place called Homba, 5000 foreign *Tid* seedlings were brought from Addis Ababa to be planted and replace the lost forests. But the seedlings were not given proper follow up after being planted and were lost. Similarly, the same species with 5000 seedlings were brought from Assala to be planted around Kossobankola and Mire in Guna, but the private owners of the forest uprooted the

¹ Arbagugu *Awraja* Administration Office, *Dan limat*, File No., 31/82 E.C.; Informants: Kadir Jima Abdulkirim Ute.

² Arbagugu *Awraja* Administration Office, *Dani Tibaqa*, File No., 2/1981 E.C

seedlings. The owners took such measure probably in fear of the ownership debate that would likely follow after the seedlings grew up.¹

After the establishment of the Arbagugu state forest and protection project, there were attempts to control and develop forest resources. The activity of the project seems to be co-coordinated and involved not only in protection, but also in developing the forest resource through afforestation by producing seedlings and distributing them to peasants and government organizations.²

The project's failure was not to be attributed solely as its own. Partly the local government decision and activities seem to have exacerbated the matter. A case in point could be for instance, the illegal forest clearing and fire that continuously went on. The province and district officials repeatedly masked the incidents that dissipated forest, as they were instances of anti-government and banditry activities of some armed groups. Even in some cases, peasants were accused of having relations with the OLF (Oromo Liberation Front) guerilla bands. But there were no hard evidences that can establish the alleged alliance between organized political parties and peasant activities, though some peasants were involved in mass clearing of forests like in Guticha and Washaba in Jaju, Nano, Hecho in Guna, Magna in Chole.³

Impacts of the Deforestation

In the foregoing discussion, we have established that in the past half century Arbagugu has experienced large-scale deforestation. This environmental hazard resulting from carelessness and lack of concern has multifaceted impacts. At this level, the overall effects of the process may not be discerned. But there are visible impacts such as soil erosion through the removal of the topsoil, shrinking of wild life presence, a change in the micro-climate of the region, and drying of some permanent rivers such as Koso Bankola and Arba Dima. Of all these, the two most serious challenges deserve discussion.

Removal of the Topsoil through Erosion

According to recent research findings, the rate of soil erosion in Ethiopia is found to be extremely high from all types of land cover like cropland, wood and bush

¹ Arbagugu Awraja Administration Office, *Dani Tibaqa*, File No.,2/1981 E.C.

² Arbagugu Awraja Administration Office *Dani Limat*, File No 222/78E.C.

³ Arbagugu Awraja Administration Office, *Dani Tibaqa*, File No., 2/1981 E.C.

land cultivated, uncultivated grazing and forestland. From forest-covered land, the rate of soil loss is found to be 4 million tons per year (Hurni 1988:10). There is also a general consensus, in spite of their opposition to the degradation narrative, by Melissa Leach and Robin Mearns that there can be no doubt that there are serious problems of soil erosion in highland Ethiopia although they do not provide specific figures (Leach and Mearns 1996: 12). Dessalegn (1988:55) gives high annual rate (100 tones per hectare per year) of soil erosion from highland parts of Northern Ethiopia where grain production is the specialty of the farmers. So is the probability for Arbagugu where grain production is the mainstay of the farmers. If this situation is allowed to continue unchecked, the average income from crop and livestock production will dramatically fall in the coming few decades.

I have outlined earlier that half a century ago, Arbagugu was covered with dense forests that firmly protected the soil and other natural resources. This made the topsoil rich and fertile for the humus content of the soil, which is of vital importance in providing nutrients for plant life and in retaining the moisture near the surface was constantly replenished by leaf litter from the canopy of trees. Wherever deforestation occurred, a disastrous cycle of rapid ecological deterioration on the fertile topsoil occurs. In addition, in the absence of a layer of humus near the topsoil, rainfall penetrates downwards rapidly into the subsoil, leaching the surface of many available nutrients, thereby drastically diminishing its utility for agricultural purpose. In this regard, Lofchie and Stephen have the following to say:

... Without a covering blanket of trees the soil no longer benefits from a continuous replenishment of its humus content. Soils have a high level of micro-organic activity. The residual humus in the topsoil tends of microbial decay. African tropical soils are so unstable in this respect that they can lose their arability almost completely in a matter of years. (Lofchie and Stephen 1984: 231)

Fluctuation in Rainfall Pattern and Drought

Based on the data collected from the National Meteorological services Agency, we can evaluate the general trend of the microclimatic change in the study area by taking some selected metrological sites. Accordingly, the average annual temperature in Abomsa rose from 19.4 in 1981 to 21.93°C in 2000. Similarly, the average annual temperature in Guna rose from 14.4 in 1981 to 14.7 in 2000. Based on the same data the annual average rainfall declined in Abomsa from 90.1 ml in 1977 to 64.5 ml in 2000 while in Guna it decreased from 129.6 ml in 1972

to 97 ml in 2000 (National Metrological Services Agency “Data on Some Selected Metrological Centers in Arbagugu). The situation in other sites like Asako and Jaju also appears to have the same trend thus having no guarantee in curbing or mitigating in the near future. Here, a number of factors might have been working for the rise in the temperature of the *Awraja* in the two decades; but it can be safely argued that the impact deforestation placed was serious.

Another major feature of this meteorological data is the fact that it had drastically disrupted rainfall patterns and caused fluctuation of the rainfall seasons. This, in turn, has jeopardized productivity by intensifying drought conditions in the region. The continuing drought condition has also affected crop production through shortage of rainfall and its associated livestock losses. This has severely affected the Arsi pastoralists of lowland Arbagugu.

The drought in the 1970s and 1980s in the region was traceable to this ecological disruption. What was more, the uncovered series of famines in the 1980s that claimed the lives of thousands of citizens and hundreds and thousands of cattle population in the region might have probably been traceable to this environmental malaise. In fact, it is a paradox for Arsi, the grain granary of the country to suffer from the tragedies of famine which none of the extant literature uncovers alike events in the rest of the country. Particularly, the famines of 1983-84, 1987-88 and 1989-90 were so severe that Arsi province Natural Disaster and Prevention Committee tried to mitigate the impacts of famine with some minimal success.¹

A number of archival documents reveal the attempts made by the province’s Disaster Prevention and Preparedness Committee to mitigate the crisis. For example, between 1982-1985 the archives consulted for the purpose of this work illustrate that 13 *qabales* from Chole, 7 *qabales* from Marti, 12 *qabales* from Asako, 30 *qabales* from Jaju, 5 *kabales* from Gololcha were affected by drought followed by famine due to absence of rain for five consecutive harvesting seasons. The striking feature of this problem was that only from Gololcha *warada*, 480 people died due to famine. Besides, thousands of peoples were forced to leave their villages in search of food and aid.²

In another letter, the government officially acknowledged the full extent of the problem and emphasized that a total of 20,508 peoples were affected by famine. Indeed, famine is not necessarily a metrological and natural phenomenon. It is more of a sociopolitical phenomenon. That is why its socio-political

¹ Arbagugu *Awraja* Administration Office, *ya Tafatiro Dirq Inna Saw Sarash Chigiroch Maquaquamia*, File Nos, 1 and 2, 1987 E.C.

² *Ibid.*

ramification made the hidden famine to claim more lives than what would have been otherwise. In this particular instance a number of aid organizations, foreign and domestic, participated in delivering aid to the famished. But due to man-made factors such as corruption, negligence, sabotage, lack of commitment on the part of local officials, the delivery was not addressed to the needy and this exacerbated the crisis.¹

Conclusion

Arbagugu was once highly forested with a rich cover of trees protecting and nurturing the soil beneath. Within half a century, however, the region has experienced diminishing resources, increasing vulnerability and growing rural poverty. This natural resource has been irreversibly damaged with no hope of replenishing. It was the land tenure and land use policies of the Ethiopian governments that caused the saddening process.

Specifically, the land tenure policy of the Imperial era remained too complex. The series of generous land grants to the soldier settlers and dignitary state officials contributed to the deforestation process. On the other hand, the proclamation by the military regime remained self-defeating, at times contradictory, which merely served its purpose. Its protectionist approach and highhanded nature of controlling land and its resources have excluded peasants from ownership and use rights, which forced the peasants to opt for other illegal and destructive approach to use any resources.

There is strong reason for peasants to be convinced that the resource is theirs. Indeed, there is an urgent need to make policy issues participatory in the protection and use of land resources. Because the present land tenure policy dictates the needs and requirements of the peasant community rather than emanating from the needs of the community. In short, it was a top-down approach being imposed and dictated by the government. Although, this particular work is not concerned in providing alternative land use policy, as its scope is too specific, there is a need to look into possible alternative policy issues. This requires an empirically well-informed field survey covering all parts of the country with similar problems and possibly any outside experience on the subject.

¹ Ibid.

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List of Informants

S. NO	Name of Informant	Date & place of Interview	Age	Remark
1	Abdo Jilo	10,11/02/2011 Abomsa	64	One of the best known and well-informed oral historians in Arbagugu. He narrated the land tenure patterns in the present forest area.
2	Abdulkarim Ute	16,17,/02/2011 Abajama	41	He had been one of the temporary workers of Etero sawmill. He was laid off when the factory reduced some of its workers. His information on the historical foundation and growth of the sawmills in the forest area is pertinent and credible.
3	Aliyi Kebir Tilmo	12,13/02/2011 Abomsa	63	Born in Jaju and lived in Abomsa for more than 14 years. As a tailor he had a wider communication with peoples from different backgrounds. He demonstrated a good understanding on the forest areas especially in Jaju district during both Haila Silassie and the <i>Dargue</i> regimes.
4	Argaw Zalaka	17,18/02/2011 Abajama	54	He had been one of the guards of Arbagugu state Forest Protection and Development Project in the 1980s. He narrated the activities and the challenges the project faced. Especially his narration on the illegal trading and smuggling of forest products as well as the challenges they faced is live.
5	Baykenaw Setegn	02,03/08/2010, Abomsa	81	He is one of the few surviving 1001 patriots who have founded the town of Abomsa. As one of the grantees, he discussed in detail about the settlement pattern, the allocation of land and related land matters in Abomsa and its surroundings.
6	Hamda Biftu	10,11/08/2010 Abomsa	54	He was born in Getera, approximately 12 km to the south of Abomsa, where the forest project has its dense forest. He had

				served as the chairman of the <i>Awraja</i> Peasant Association for many years. He narrated the roles, activities and other details of the <i>Awraja</i> PA. Other activities such as villagization, and resettlement which have their impact on the forest activities are also discussed.
7	Getachew H/Masqal	11,12/02/2011 Abomsa	78	Born in Wallaga, but grew up in Gololcha. He came to Abomsa in 1964 and worked as a civil servant in different government offices. He narrated how the emperor called the town of Abomsa as Tinsae Birhane, because the patriots were rescued from malaria after they were settled on the present site of the town.
8	Kebede Fesese	10,11/08/2010 Abomsa	69	He lived in Abomsa for more than 38 years. He is a well known and highly regarded resident in Abomsa. He served as a <i>Bete Rest Shum</i> for Arbagugu <i>Awraja</i> in the 1950s and the 1960s. Due to this position he knew the land allocation to government officials and patriots. At one time, he opposed the eviction of peasants from their holdings by writing letter to the <i>Awraja</i> governor.
9	Kadir Jima	07,08/08/2010 Abajama	73	One of the most well known oral informants. He knew the customary laws of Arsi Oromo. His father was a <i>ballabat</i> during the Haila Silassie regime. He was also elected two times for the parliament in the House of Deputies and represented the rural constituency of Guna district. He knew the land allocated to state officials along with the forest area, the different sawmills established in the forest. He died in early 2011.
10	Kedir Ware	13,14/08/2010 Bole,Nuraera	70	The late Kadir Ware was a well known and respected oral historian. He had a fresh memory on the origins, traditions and cultures of the Arsi Oromo. He was involved in the peace process of the Arsi - Karayu conflict on several occasions and succeeded in 1991. He has served as the lawyer of Upper Awash Agro Industry

Mohammed Hassen

				until his retirement. He narrated a lot on how the industry evolved from private land ownership into state farm during the <i>Dergue</i> period. Died in 2010 shortly after my interview
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