Demographic Data from Hittite Land Donation Tablets

GERNOT WILHELM¹
University of Würzburg

Demography evidently is not a central concern of Hittitology. This is easily understandable because demography depends on statistics and on large quantities of structurally homogenous data, and this kind of information is not what we usually get from our Hittite sources. What do we know, for instance, about life expectancy or the rate of mortality by age? What was the marrying age? What can we say about the marriage rate of women? What were the birth rates? What was the total number of the population? Was it stable, or was there increase or decrease in population? Do our sources contain evidence that allows us to catch a glimpse of the demographic dynamics of Hittite society?

Often enough our written sources speak of depopulation and catastrophes, though unfortunately not in the form of a statistically useful microcensus, but in the form of lamentation and complaint:

"O gods, what is this that you have done? You have allowed a plague into Hatti and the whole of Hatti is dying! No one prepares for you the offering bread and the libation anymore! The plowmen who used to work the fallow fields of the gods have died, so they do not work or reap the fields of the gods. The grinding women who used to make the offering bread for the gods have died, so they do not [make] the god's offering bread any longer. The cowherds and shepherds of the corrals and sheepfolds from which they used to select sacrificial cattle and sheep are dead, so that the corrals and sheepfolds are neglected"².

Of course, wars and uprisings, in addition to diseases and epidemics, could result in a decrease in population to an extent that whole regions became depopulated. Hattušili III speaks of "empty countries" (KUR^{MEŠ} \\ dannatta) when referring to north Anatolian countries ravaged by the Kaškeans. As an antidote forced immigration seems to have been practiced at an amazing degree: Annals and *res gestae* speak of tens of thousands of prisoners of war dislocated from their homes and transferred into the very heart of the Hatti land.

In general, however, it is evident that the written sources do not offer much help in answering questions about the demography of the Hittite kingdom. Archaeology might yield more information, and indeed modern archaeological surveys of whole regions or individual towns and cities have collected interesting data, and more is to be expected. Unfortunately, archaeologists have not yet been able to locate and excavate more than a few cemeteries of the second millennium in central Anatolia. In no case do they rival the standard of the demographic data yielded by prehistoric cemeteries in other parts of the

¹ I am grateful to Prof. Jared L. Miller for checking and correcting the English of this article.

² Mursili II's Hymn and Prayer to the Sungoddess of Arinna (CTH 376), KUB 24.3+ ii 3'-13' and dupl., translation by I. Singer, *Hittite Prayers* (Atlanta 2002), 53.

world, especially in Europe. The fact that cremation was an option, as attested, e.g., at Osmankayası, also reduces the chances of uncovering extensive information of this sort.

In contrast to the situation in Mesopotamia the cuneiform texts found in Hittite Anatolia do not comprise many administrative documents. The lists of families assembled by Emmanuel Laroche as *recensements*, census, under CTH 233 are too fragmentary to offer much insight. These and other texts, however, show that the basic unit of larger economic establishments such as the estates of the crown, of magnates or of temples, is the household (É). In the text known as Puduhepa's Vow to the Goddess Lelwani, e.g., several small households are mentioned. Some of them consist of only a woman and her children to whom usually a prisoner of war (NAM.RA, ŠU.DAB) is assigned, presumably in order to help them with heavier work³.

Free or unfree? The terminology of laws and land donations

The most important sources for social structures on the level of village and small town are land donation tablets, especially those that describe not only the real estate as such but also the personnel living and working on it. The donation for Kuwattalla granted by Arnuwanda I. and Ašmunikkal (KBo 5.7) is the most extensive example⁴. Without going into the details of the legal forms of property in real estate it is safe to say that the entire households mentioned in the donation tablets are parts of the donation, and consequently, the personnel of these households had a status of collective dependency. Goetze, in 1933, used the terms "bound to the soil" and "semi-free" and this has been generally accepted: Gurney, in 1952 speaks of "serfs bound to the soil" Güterbock, in 1972, calls them "unfree in the sense of 'serf'" and "glebae adscripti".

These definitions describe a legal status in classical or medieval terms that in the course of modern socio-economic history have gained analytic value. Hittite terminology does not necessarily coincide with these terms. One of the main problems is the meaning and usage of the term "free". The Hittite laws make a marked distinction between "free" and "unfree"

³ H. Otten – V. Souček, *Das Gelübde der Königin Puduḥepa an die Göttin Lelwani*, StBoT 1 (Wiesbaden 1965), 16-19, 28-31, cf. 43-48.

⁴ As early as 1925, J. Friedrich, *Aus dem hethitischen Schrifttum, 1. Heft*, AO 24/3 (Leipzig 1925), 31-32, translated parts of this document including the register of the household of a certain Tiwatapara. This paragraph was regarded as "typical" by O.R. Gurney, *The Hittites* (London 1952), 81 and recently again by T. Bryce, *Life and Society in the Hittite World* (Oxford 2002), 74 to whom Tiwatapara's (once misspelled as Tiwapatara) household serves as an example of "the general pattern of farming in the Hittite world - small pieces of land owned or leased by or allocated to the one person or family but scattered over several or more locations".

⁵ A. Götze, "Kleinasien", in: A. Alt e.a., *Kulturgeschichte des Alten Orients*, Handbuch der Altertumswissenschaften (München 1933), 98: "an die Scholle gebunden", "Halbfreie" (omitted in the second edition: A. Goetze, *Kulturgeschichte Kleinasiens* (München 1957), 105.).

⁶ Gurney, The Hittites, 70.

⁷ H.G. Güterbock, "Bemerkungen zu den Ausdrücken *ellum, wardum* und *asīrum* in hethitischen Texten", in: D.O. Edzard (ed.), *Gesellschaftsklassen im Alten Zweistromland und in den angrenzenden Gebieten – XVIII. Rencontre assyriologique internationale, München, 29. Juni bis 3. Juli 1970 (München 1972), 94f.*

persons. The terms are the akkadogram *ELLUM*, the equivalent of Hittite *arawanni*-, for "free" and, as its opposite, the sumerogram ÎR or ARAD "slave, servant". The problem is that donation deeds do not use this terminology. Güterbock assumes that the personnel mentioned in the donation deeds is "unfree" in the legal sense, i.e. that they are ÎR/ARAD, although not in the sense of a domestic or chattel slave⁸. Gurney, however, thinks that "such conditions were probably exceptional", whereas "the ordinary citizen was free" Bryce apparently shares this view when he refers to "small farmers who worked plots of land as lessees or tenant farmers" Other scholars, such as Igor M. Diakonoff, Fiorella Imparati and Alfonso Archi have assumed a contrast between villages inhabited by serfs dependent on temples or magnates, and village communities whose members were free and the owners of their real estate, but who had to render services and taxes to the palace¹¹.

Both positions seem questionable. Instead, it seems quite possible that the legal and economic status of the non-slave population active in agriculture, trades and crafts did not differ depending on whether they rendered services and paid taxes to the crown or to persons or institutions to which the crown assigned them. An analysis of the donation tablet that is the main object of this paper will show that there are several households among those donated to a magnate that comprise slaves (ÎR/ARAD and GÉME) and their children. This means that the others are not slaves in the same sense. Though the term *ELLUM* or *arawanni*- never appears in the donations, it cannot be excluded that in legal terms these people were "free", *ELLUM* – "free" of course in a restricted sense; such free people were bound to higher authorities by obligations to render services or to pay taxes (if they were not explicitly exempted).

Although this paper focuses on the demography of the rural population, the discussion about the status of the non-slave "ploughmen" and craftsmen of the donation tablets is not superfluous. On the contrary, if their legal status is not that of a minority but the normal status of a broad majority, then the results of a demographic analysis of the donation deeds is representative of virtually the entire rural society outside the higher echelons of the elite and the world of slaves and deportees.

⁸ Güterbock in: Gesellschaftsklassen, 93f., 95f.

⁹ Gurney, *The Hittites*, 70.

¹⁰ Bryce, *Life and Society*, 77.

A. Archi, "Bureaucratie et communautés d'hommes libres dans le système économique hittite", in: E. Neu – Ch. Rüster (ed.), Festschrift Heinrich Otten. 27. Dezember 1973 (Wiesbaden 1973), 17-23. I.M. Diakonoff, "Die hethitische Gesellschaft", MIO 13 (1967), 313-366; id., "The Structure of Near Eastern Society before the Middle of the 2nd Millennium B.C.", Oikumene 3 (1982), 7-100. F. Imparati, "Aspects de l'organisation de l'état hittite dans les documents juridiques et administratifs", JESHO 25 (1982), 225-267; ead., "Die Organisation des hethitischen Staates", in: H. Klengel, Geschichte des hethitischen Reiches, HbOr I 34 (Leiden-Boston-Köln 1999), 320-387; ead., "Palaces and Local Communities in Some Hittite Provincial Seats", in: K.A. Yener – H.A. Hoffner Jr. (eds.), Recent Developments in Hittite Archaeology and History. Papers in Memory of Hans G. Güterbock (Winona Lake 2002), 93-100. For further comments on the social and legal status of members of the lower classes see V. Souček, "Einige Bemerkungen über status libertatis und status servitutis im hethitischen Recht", in: F. Tauer – V. Kubíčková – I. Hrbek (Hrsg.), Charisteria orientalia praecipue ad Persiam pertinentia. Festschrft für J. Rypka (Praha 1956), 316-320; id., "Soziale Klassen und Schichten in der hethitischen Tempelwirtschaft", ArOr 47 (1979), 78-82; id., "Zur Struktur der hethitischen Gesellschaft", ŠULMU 3 (1988), 329-336.

Personnel mentioned in land donation tablets: the sources

Among the donation tablets that were discovered at Boğazköy in 1990 and 1991 several are similar in content to the tablet recording a grant by Arnuwanda and Ašmunikkal. They differ from the normal land donation in so far as they record the personnel that is handed over together with the real estate.

- The oldest tablet of this kind is Bo 91/1602 (StBoT Beih. 4¹², Nr. 15) found in the Westbau; it is sealed with an anonymous Tabarna seal datable to the reign of Telipinu¹³. Only the lower part of the large tablet is preserved, which nonetheless amounts to 57 lines.
- The most interesting tablet is Bo 90/732 (StBoT Beih. 4, Nr. 22), also from the Westbau. We will deal with this tablet here in greater detail.

Several more tablets of this kind are only preserved in small fragments:

- Bo 6964 (StBoT Beih. 4, Nr. 23), published as KUB 48.102 and edited by Riemschneider as LS 26.
- VAT 7767 (StBoT Beih. 4, Nr. 24), published by Güterbock as SBo I 8 and edited by Riemschneider as LS 8.
- Bo 2003/07 (StBoT Beih. 4, Nr. 25), excavated in 2003 in the excavations west of Sarıkale.
- Bo 91/1625 (StBoT Beih. 4, Nr. 31), excavated in the Westbau. This fragment of a tablet from the time of Hantili II is peculiar because it differs from the older tablets: it not only records the names of the heads of the households but also those of each member, including those of male and female infants.
- Bo 90/751 (StBoT Beih. 4, Nr. 40), excavated in the Westbau. This tablet, written in the time of Huzziya II, also lists the personnel by names.
- Bo 84/465 (StBoT Beih. 4, Nr. 47), excavated in Temple 8. This tablet, from the time of Muwattalli I, omits names except those of the heads of households.
 - 549/c (StBoT Beih. 4, Nr. 48) published by Güterbock as SBo I 9.
 - 498/t (StBoT Beih. 4, Nr. 65).

Categories of personnel mentioned in land donation tablets

Let us first have a look at the categories that the lists apply to the persons registered. They distinguish – not very surprisingly – between two sexes; for each sex they use four terms describing age groups; in addition to that they use one term for a physical disability, namely blindness, and one for slaves:

1

¹² In preparation.

¹³ For this and the following texts see G. Wilhelm, "Zur Datierung der älteren Landschenkungsurkunden", *AoF* 32 (2005), 278.

male		female			
LÚ	man	MUNUS	woman		
DUMU.NITA	boy	DUMU.MUNUS	girl		
DUMU.NITA.GABA	male baby	DUMU.MUNUS.GABA	female baby		
^{LÚ} ŠU.GI	old man	MUNUS ŠU.GI	old woman		
	LÚ.MUNUS Š U	.GI ^{MEŠ} old people			
^{LÚ} IGI.NU.GÁL	blind man	MUNUS IGI.NU.GÁL	blind woman		
		DUMU.MUNUS.GABA IGI.NU.GÁL	blind female baby		
ÌR/ARAD	male slave	GÉME	female slave		

In Nuzi, lists of food rations for slaves regularly distinguish between several age groups of children, with the exception of breast-fed infants¹⁴. The Hittite donation tablets from Boğazköy distinguish between boys or girls on the one hand and male or female babies on the other, and they also refer to blind persons. The reason is that the Mesopotamian receivers of rations are registered under the aspect of costs, whereas the donation tablets are interested in labour force.

The sequence of terms values sex more than age. First come men, boys and male babies, then their female counterparts. This, however, doesn't apply to old people, who appear after female babies, but before blind persons, male or female, and slaves. Obviously the sex of old people is considered rather irrelevant; if there are old males and females in a house they are summed up just as "old", ŠU.GI, with the double determinative LÚ.MUNUS.

The land donation tablet Bo 90/732

The land donation tablet Bo 90/732 belongs to the largest and best preserved. 71 lines are nearly fully legible. The tablet is sealed by an anonymous Tabarna seal that displays traits of transition between this type of seal and the seal of Alluwamna. The tablet was written by the scribe Išpunnuma who also wrote the tablet of Alluwamna KBo 32.136 found in Temple 7. Consequently, it belongs late in the reign of Telipinu or early in that of Alluwamna, before the use of his personal seal began¹⁵. The real estate and related

14 G. Wilhelm, Das Archiv des Šilwa-teššup, Heft 2 (Wiesbaden 1980), 22.

¹⁵ The king Tahurwaili should no longer be considered to have reigned between Telipinu and Alluwamna. The seal impressions discovered in the 80ies and early 90ies show that the seals of the post-Telipinu period form two distinct groups: the seals of Alluwamna and Hantili II share stylistic features, whereas all the seals of the following kings (Zidanza II, Huzziya II, Muwattalli I) form another group, with features shared by Tahurwaili's seal. The argument that the king Tahurwaili has to be identified with the Tahurwaili mentioned in the Edict of Telipinu because this name is not attested otherwise, has been invalidated by the find of further attestations in texts of the 15th

personnel that the long-time overseer of the palace servants, Happuwaššu, had destined for his sons is given to the otherwise unknown prince Labarna¹⁶.

More than 400 persons were registered on the tablet. The place where all the people listed in the tablet lived cannot be determined with certainty. Most likely they lived in the land of Tapikka, which is to be located in the region of present-day Maşat. This at least is the location of the extended fields that are listed after the enumeration of personnel. Also the village of Hantišezzuwa mentioned in the same context is likely to be situated in the land of Tapikka since it appears in a list of personnel found at Maşat (HKM 99: 4).

Households

Bo 90/732, like all the other tablets of this kind, does not list the personnel in tabular form. This does not make the comprehension of the text nor the addition of figures easier, though the scribe did amazingly well even with three digit numbers.

The following paragraph may serve as an example for the format of the text:

- 11 É *Pa-a-ap-pa* III LÚ I DUMU.NITA II DUMU.NITA.GABA IV MUNUS III DUMU.MUNUS.GABA I ^{'LÚ}ŠU.GI' XIV 'SAG'.D[U]
- 12 ŠÀ.BA É *Pa-a-ap-pa* II LÚ II DUMU.NITA.GABA III MUNUS I DUMU.MUNUS.GAB[A] I ^{LÚ}ŠU.GI É *Ú-i-li-<u>i</u>a*
- 13 I LÚ I DUMU.NITA I MUNUS II DUMU.MUNUS.GABA É *Zu-ú-'li'-ia*LÚ APIN.LÁ V LÚ III DUMU.NITA.GABA III MUNUS I DUMU.MUNUS [1]

 D[UMU.MUNUS.GABA]
- 14 III LÚ.MUNUS ŠU.GI XVI SAG.DU

Translation:

House of Pappa: 3 men, 1 boy, 2 male babies, 4 women, 3 female babies, 1 old man. 14 persons.

- Among them: house of Pappa: 2 men, 2 male babies, 3 women, 1 female baby, 1 old man, house of Wiliya:
- 13 1 man, 1 boy, 1 woman, 2 female babies, house of the "ploughman" Zuliya: 5 men, 3 male babies, 3 women, 1 girl, [1] fe[male baby],
- 3 old men/women. 16 persons.

How are we to interpret the figures of this paragraph? The house of Pappa according to line 11 comprises 14 persons. In line 12 the house of Pappa is mentioned again with only 9 persons. Then two more houses follow, the first belonging to Wiliya, the other to Zuliya. Wiliya's house comprises 5 persons, Zuliya's house 16.

century: Taḥ-ru-wa-i-li Bo 90/722: 7, 13, 18 and the gardener Ta-ḥur-wa-i-li Bo 90/732: 25.

¹⁶ Presumably Labarna was Telipinu's last crown-prince who died before his father due to natural causes or as victim of the turmoils of Telipinu's last years.

The 5 persons in Wiliya's house make up exactly the difference between the first figure given to Pappa's house -14 – and the second figure -9. If we tabulate the data it becomes clear that Pappa's household comprises two houses, one for himself and one for Wiliya:

	man	boy	male	woman	girl	female	old	old	
			baby			baby	man	woman	
Pappa	3	1	2	4	-	3	1	-	14
Pappa	2	-	2	3	-	1	1	-	9
Wiliya	1	1	-	1	-	2	-	-	5
Zuliya	5	-	3	3	1	1	3	3	16

The numbers show that Zuliya's house with 16 people is not a part of Pappa's estate, but that Wiliya's is. (If the scribe had set a paragraph divider, it would have been much easier for us to understand the list, but that evidently was not his main concern).

The situation of Pappa's family may be interpreted in the following way: Pappa himself lived in a house together with his wife, with a second man who presumably was a younger brother of his, and who presumably was also married. There is a third grown-up woman who might have been Pappa's second wife or the widow of a recently deceased further brother of Pappa's. The number of babies corresponds to the number of women in the house. In addition the old, presumably widowed, father lived in Pappa's house. A third couple lived in the second house of Pappa's estate, presumably another brother and his wife; they had three children, the eldest was a son, followed by two baby girls.

The household of Zuliya, the "ploughman", is quite different from Pappa's. He lived together with four other men, perhaps his younger brothers; at least two men were still unmarried because there are only three grown-up women in the house. It seems that each of them had a baby, and one of them perhaps two, because there are four babies, but only three potential mothers. However, it might be possible that the wife of one of the five men died leaving a baby. In addition, there are three members of the old generation, male and female, among them presumably Zuliya's father.

Bo 90/732 lists 17 households. Among these there are 8 with only one house, 6 with two houses, one with three houses and 2 with four houses.

number of houses per household	attested cases	number of male adults per household	number of female adults per household	male adults exceeding the female adults	female adults exceeding the male adults	children beyond baby age	babies
		1	2	-	1	3	1
		2	1	1	-	1	2
		2	1	1	-	-	2
1	8	2	3	-	1	1	3
		2	2	-	-	-	3
		3	2	1	-	-	2
		4	3	1	-	1	7
		5	3	2	-	1	4

Gernot Wilhelm

		2	3	-	1	2	2
		3	4	-	1	1	5
2	6	3	4	-	1	1	3
		4	5	-	1	3	3
		5	2	3	-	1	3
		12	12	-	-	10	5
3	1	3	2(<)	1?	-?	1<	4<
4	2	4	3(<)	1?	-?	?	5<
		4	9	-	5	2	6
		61	61(<)	11	11	28	60

Statistically the number of adult males is identical to the number of adult females (61), though in most households (15 out of 17) there is a slight imbalance. Only in 6 out of 14 households the number of female adults exceeds that of male, but in each case only by 1. If all the 47 adult men were married, only 6 of them could have had two wives. It is possible, however, that some of the 47 adult men were bachelors or widowers, but it is also possible that some of the women were widows (the last three rows of the table are neglected in this calculation). At any rate it seems likely that monogamy was the rule, though perhaps not exclusively.

The mortality rate among infants seems to be high if we compare the number of surviving older children with the number of babies: less than ca. 50 per cent of the breast-fed infants would have lived long enough to enter the age-group of "boys/girls". Among the breast-fed infants the number of boys exceeds that of girls remarkably (33:27). A slight excess in births of male over female infants is natural; in today's Germany e.g., the relation is 106 to 100. Our figures, however, would result in the ratio of 122 boys to 100 girls. Even if we assume a high error rate because of the small sample the result is astonishing. The figures for children beyond the age of breast-feeding are only slightly more balanced: 15 to 13.

The number of women (61) is nearly identical with the number of breast-fed infants (60). This relation suggests frequent pregnancies at least throughout a good part of the fertility period of women's lives. It may also suggest that babies were breast-fed for more than one year, presumably two or even three years¹⁷.

Nevertheless the reproduction rate seems to be rather low when we compare the number of women of child-bearing age (61) with the total number of children between infancy and adulthood (28). It seems that mortality during childhood was rather high. If we compare the number of male and female adults (without the old persons), namely 122, with the number of children above the age of breast-feeding, namely 28, we notice a rather dramatic imbalance. If these figures are representative they suggest that the society was not able to reproduce itself.

Of course the statistic value of our data is limited due to several reasons: The census is

¹⁷ According to the "Instruction of Ani", children in Ancient Egypt could be breast-fed for three years; see J.F. Quack, *Die Lehre des Ani*, OBO 141 (Freiburg/Schweiz – Göttingen 1994), 315.

selective, and we do not know the age of the children or the age of the women at the moment when our list was compiled.

There are only relatively few old people compared to the 61 men and 61 women of the list; there are 7 (or 6) old men and 15 (or 16) old women. The imbalance presumably is not the result of a higher life expectancy of women, as the high rate of births rather suggests high mortality. The reason for the larger number of old women is likely to be the result of a considerable age difference between husband and wife.

Most of the households manage without slaves. There are, however, 8 households which also have slaves, but the majority of these possess only a few. One female slave lives in the house of the "ploughman" Zuliya; the perfume maker ($^{L\acute{U}}$ Ì.RÁ.RÁ 18) of the same name Zuliya has two male slaves and one female slave, and his colleague in the same profession, Alli, has one male and one female slave.

The households of men who hold the office of a *hilammi* "administrator", show markedly different patterns: Three of them command great numbers of slaves, in one case 74, in another 50, in a third 22. In two cases the list also registers slave children. Unfortunately, we do not learn what kind of work the slaves of the *hilammi* carried out.

The household of the *hilammi* Mišeni displays a strange pattern which is difficult to explain. The ratio of the number of slave children to those of slave women does not suggest that the slave women enjoyed normal family life: There are 43 women and 12 children, including only 6 breast-fed infants. It is even odder that among the non-adults both sexes and both age groups are equally represented, namely 3 each.

In the household of the *hilammi* Āšhazza we get a different picture. Here the numbers of male and female slaves are exactly the same (11 to 11); there are 6 breast-fed infants and 3 children apart from this age group. These figures are closer to the situation of the non-slave population.

hilammi	male slaves	female slaves	boys	male babies	girls	female babies
Mišeni	31	43	3	3	3	3
Āšhazza	11	11	2	1	1	5
Kakka	-	1	-	-	-	-
Kuzzilāla	20	30	-	-	-	-
Pēzzāššu	1	2	-	-	-	-

In most cases the professions of the heads of households are stated, whereas this information is not given for the persons who have a house of their own within the household. 5 out of 17 men are "ploughmen", 5 are *hilammi* "administrators", 2 are

_

¹⁸ This logogramm had previously not been identified in Hittite texts: cf. E. Neu – Ch. Rüster, *Hethitisches Zeichenlexikon* (Wiesbaden 1989), 326, and J. Tischler *Hethitisches Handwörterbuch* (Innsbruck 2001), 232; for another attestaton see KBo 10.10 ii 23'; for its use in lexical and Neo-Assyrian texts see CAD M/II, 218a sub *muraqqû* and CAD R, 173f. sub *raqqû*.

perfume-makers, 1 is a potter, 1 a gardener and 1 a paštu (unknown profession, hapax legomenon).

profession	head of household	size of household (without slaves)	slaves
	Apalla	13<	-
LÚAPIN.LÁ "ploughman"	Zuzzu	12<	-
711 II V. D. I Prougimium	Zulija	15	1
	Šanda	12	-
	Zulija	13	-
LÚL . LÚL .	Mišeni	39	86
^{LÚ} ħilammi, ^{LÚ} ħilammen "administrator"	Āšhazza	5	31
administrator	Kakka	9	1
	Kuzzilāla	7	50
	Pēzāššu	16	3
LÚÌ.RÁ.RÁ "perfume-maker"	Zulija	26	3
	Āllī	17	2
LÚBÁHAR "potter"	Šanda	14	-
LÚNU. GIŠKIRI ₆ "gardener"	Tahurwaili	7	-
^{LÚ} paštu "?"	Tupalli	9	-
	Pappa	14	-
	Kunkumi	8	-

Peasant families are largely homogenous in size – in contrast to *hilammi* families. On the one hand there are rather small *hilammi* families, comparable to those of the gardener and the *paštu* families, even when the administrator supervises a remarkable number of slave laborers. On the other hand, one *hilammi* has the largest family of all.

Singles without household affiliation

Apart from the 236 non-slave persons allocated to households (É), there are 28 persons who are designated by the Akkadian term $\bar{e}d\bar{e}n\hat{u}tu$ "singles". These people are all listed by name. There is only one man among them, but 8 women with 5 breast-fed infants. Old women, blind men and blind women make up nearly 29 per cent of the group of "singles", much more than within the households which comprise only little more than 2 per cent blind and 9.3 per cent old people. Women, old as well as young, and blind people were evidently exposed to a greater risk of losing the social security of a household.

"Singles" (ēdēnûtu)			
male persons without	men	LÚ	1
old and blind persons	boys	DUMU.NITA	5
	male babies	DUMU.NITA.GABA	2
female persons without	women	MUNUS	8
old and blind persons	girls	DUMU.MUNUS	1
id and offid persons	female babies	DUMU.MUNUS.GABA	3
old persons	old men	^{LÚ} ŠU.GI	-
ora persons	old women	MUNUS ŠU.GI	4
blind persons	male blinds	^{LÚ} IGI.NU.GÁL	3
omia persons	female blinds	^{MUNUS} IGI.NU.GÁL	1
			28

Summary

In summary one can say that the majority of the people listed in the donation tablet Bo 90/732 were organized in households. The men worked as "ploughmen" or gardeners, as craftsmen, such as potters and perfume-makers, or as administrators of institutions that sometimes used slave labor on a commercial scale. The size of households varies between 7 and 39, but a standard "ploughmen" household comprised about 14 members. Monogamy seems to have been the rule, though maybe not exclusively. Virtually every woman had a baby while still in the child-bearing period of her life, but there seems to have been a rather high rate of infant mortality. The average number of children beyond baby age was low compared to the number of fertile women. It is unlikely that the (net) reproduction rate¹⁹ was sufficient to keep the population stable. A part of the population lived as singles outside the household structure, mostly old women, orphan boys, blind people and mothers – presumably widows – without a husband.

_

¹⁹ E.A. Wrigley, *Population and History* (New York 1969), 20, gives the following definition of NRR: "A female net reproduction rate measures the number of daughters who would be born to a group of girl babies by the end of their child-bearing period assuming that current age-specific fertility and mortality rates continued unchanged."