# The taming of the wilderness: marshes as an economic resource in 3<sup>rd</sup> millennium BC Southern Mesopotamia<sup>1</sup>

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### **Abstract**

The marshy environment of Southern Sumer in the 3<sup>rd</sup> millennium BC surely had an impact on the local economy that can be sought in the written sources. The perception of marshes was however twofold: as a prosperous environment in literary compositions and as a place to be tamed for regular, state-controlled exploitation in royal inscriptions. The great majority of attestations of marshes in economic documents refer to field names, thus, probably referring to agricultural units in drained marsh areas. On the other hand, typical marsh resources, such as reeds, fish and fowl, are widely attested in the economic documentation from 3<sup>rd</sup> millennium BC, although we can rely on very little information as to their provenance. To conclude, both literary and economic texts give hints for an interpretation of the professional figure known as 'enku(d/r)', usually interpreted as 'tax-collector' or 'inspector of the fishery', as an official connected with the management of wetland resources.

# **Key-words**

Marshes; Sumer; 3<sup>rd</sup> Millennium BC; Drainage Interventions; Exploitation of Marsh resources.

Recent studies have underlined the importance of marshes in the economic landscape of Southern Mesopotamia in the 4th and, to lesser extent, the 3<sup>rd</sup> millennium BC (Pournelle, 2003; Pournelle 2013; Wilkinson 2013). This peculiar ecosystem implied a broad spectrum of economic resources, in particular reeds, salt grasses, and several kinds of fish and birds. Such a variety of resources is well attested since the very beginning of the cuneiform tradition at the end of the 4th millennium, as well as in 3<sup>rd</sup> millennium sources, such as entries of lexical lists, or as storable goods in economic accounts. Nevertheless, as we will see, the connection between this range of goods and marshes is barely reflected in the broad 3<sup>rd</sup> millennium Mesopotamian documentation.

'Ambar' and 'sug' are the Sumerian terms denoting the particular type of wetland, which can be identified as a marsh or swamp.

Both 'sug' and 'ambar' are readings of the sign SUG = LAGAB×A, a sign representing enclosed water.





Late IV mill. SUG La

SUG Late III mill. SUG

Later Old Babylonian lexical tradition will compare 'ambar' with  $app\bar{a}ru$ , a Sumerian loanword in Akkadian,<sup>2</sup> and 'sug' with  $susc{a}u$ , a term that in the later literature will be used as poetic term for  $app\bar{a}ru$ .<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Composite texts and single sources quoted in this contribute may be consulted in CDLI (Cuneiform Digital Library Initiative, <a href="http://cdli.ucla.edu">http://cdli.ucla.edu</a>). Literary compositions may be specifically consulted in ETCSL (Electronic Text Corpus of Sumerian Literature, <a href="http://etcsl.orinst.ox.ac.uk">http://etcsl.orinst.ox.ac.uk</a>). Abbreviations follow the CDLI List of Abbreviations (<a href="http://cdli.ox.ac.uk/wiki/abbreviations">http://etcsl.orinst.ox.ac.uk</a>). I am grateful to Ryan Winters for his help with the English of this article. Obviously, I alone am responsible for any mistakes and inaccuracies.

<sup>&</sup>lt;sup>2</sup> See CAD A/II, s.v. *appāru*.

<sup>&</sup>lt;sup>3</sup> See CAD Ş, s.v. şuşû. Moreover, the later tradition will compare the Sumerian word 'umah' (LAGAB×U+A), with the Akkadian agammu or mihşu, "waterlogged ground marsh". However, 'umah' is never attested in the third millennium sources.

In any case, the occurrence of written casus-suffixes suggests that 'ambar' was the word used in most cases during the 3<sup>rd</sup> millennium.

Readings of SUG

Period of Attestation		sug-ga/sug-ge	ambar-ra/ambar-re		
III Mill.	III Mill.				
ED IIIb	c. 2500-2340 BC		6 adm. texts from Ĝirsu (i <sub>7</sub> ambar-ra)		
Lagaš II	c. 2200-2100 BC		2 royal inscr. (Gudea Cyl. B)		
Ur III	c. 2100-2000 BC	1 adm. text from Ur	1 adm. text from Ur		
		(a-ša <sub>3</sub> gaba sug-ga)	(i <sub>7</sub> ambar-ra)		
II Mill.					
EOB	c. 2000-1900 BC		1 lit. composition from Nippur		
OB	c. 1800-1600 BC	8 lit. compositions	26 lit./royal compositions		

As shown in the chart, at the end of 3<sup>rd</sup> millennium, both terms occur in texts from the city of Ur. We have a field name, 'a-ša<sub>3</sub> gaba sug-ga', "field before the marsh", and a canal name, 'i<sub>7</sub> ambar-ra', "canal of the marsh".

Moreover, a reading ambar at the beginning of the third millennium is suggested by the occurrence of the personal name Ambaresi<sup>4</sup> (in its defective writing: Ambar-si) in the Early Dynastic sources from Ur.

### Ambar-re2-si

	Period o	f Attestation	Ambar-si	Ambar-re <sub>2</sub> -si
	ED I-II	<i>c</i> . 2900-2700 BC	1 text from Ur	
Ī	ED IIIb	<i>c</i> . 2500-2350 BC	5 texts from Ĝirsu	3 texts from Ĝirsu

Anyway, there is apparently no typological differentiation between the two terms in 3<sup>rd</sup> millennium sources; the Sumerian expression 'ambar ĝeš du<sub>3</sub>-a', "marsh planted with wooden trees", denotes what can be considered properly a swamp. A clear differentiation occurs instead between marsh and canebrake, Sumerian 'ĝeš-gi', especially in literary texts.

Here, marshes are mainly described as a source of fish, and canebrakes as a source of reeds.

In the Cylinder B of Gudea, for example, the ruler refers to the fish of the marshes and the reeds of canebrakes:

# Cylinder B of Gudea

(Lagaš II, c. 2200-2100 BC)

11. 268-269:

268: ambar-bi ku6HI+SUHUR ku6suhur u3-de6

tr.: About the marshes (of Lagaš), after they had brought forth carp and perch(?),

269: **ĝeš-gi sig**<sub>7</sub>-ga-bi <sup>gi</sup>ha-bu<sub>3</sub>-ur<sub>2</sub> u<sub>3</sub>-de<sub>6</sub>

tr.: and about the green canebrakes, after they had produced new shoots of reed.<sup>5</sup>

An abundance of fish in marshes and of reeds in canebrakes acts as a sign of a land's prosperity and corresponds to a well-defined literary *topos*. Indeed, it occurs in what can be considered a standardized list of fertility elements, a literary motif attested in various compositions, most often in connection with the god Nanna (Michalowski 1989, 106, with previous literature). Needless to say, most of the

<sup>4</sup> Literally "Der den Sumpf(?) ausfüllt". See Balke 2017, 97.

<sup>&</sup>lt;sup>5</sup> After the adapted translation by G. Zolyomi in ETCSL t.2.1.7 (The building of Ninĝirsu's temple Gudea [cylinders A and B], ll. 1082-1083).

compositions attesting to this list date back to the 2<sup>nd</sup> millennium, except for Nanna's journey to Nippur, which, according to Wilcke (1974, 180), originated during the time of Ur-Namma, first ruler of the Third Dynasty of Ur, therefore at the end of the 3<sup>rd</sup> millennium.

As shown in the following chart, each fertility element of the list is associated with a specific landscape, among them, different kinds of fish in marshes, and old and new reeds in canebrakes.

# Standard list of fertility elements in Nanna's Journey to Nippur (Ur III, c. 2100-2000 BC)

i <sub>7</sub> -da a-eštub	in the canals, carp-flood
a-ša <sub>3</sub> -ga še gu-nu	in the fields, speckled barley
ambar-ra ku <sub>6</sub> -da suhur <sup>ku6</sup>	in the marshes, kuda-fish and perch(?)
ĝeš-gi gi sun <sup>gi</sup> henbur	in canebrakes, old reed and new shoots
geštir-geštir-ra seg9 seg9-bar	in the forests, deer and wild ram
an eden-na <sup>ĝeš</sup> maš-gurum	in the high plains, mašguru-trees
pu <sub>2</sub> <sup>ĝeš</sup> kiri <sub>6</sub> lal <sub>2</sub> ĝeštin	in the orchards, syrup and wine

From the 2<sup>nd</sup> millennium on, literary compositions start adding birds to the fertility elements of the marshes; as for example in the Lament for Sumer and Ur, where the same literary motif is present: fish and fowl in marshes and old reeds and new shoots in canebrakes.<sup>6</sup>

# Lament for Sumer and Ur<sup>7</sup>

(Early Old Babylonian Period, c. 2000-1900 BC)

11. 501-502:

501: ambar-ambar-re ku<sub>6</sub> mušen tum<sub>3</sub> An-ne<sub>2</sub> nam-kur<sub>2</sub>-re

tr.: that the marshes support fish and fowl may An not change it

502: **ĝeš-gi gi sun <sup>gi</sup>henbur mu<sub>2</sub>** An-ne<sub>2</sub> nam-kur<sub>2</sub>-re

tr.: that old reeds and new shoots grow in the canebrake, may An not change it.

Birds and fishes, sharing their natural habitat in the marshes, were also associated with the goddess Nanše, daughter of Enki, whose main temple stood in the marshy area between sea and land in the Niĝin territory (Velhuis 2004, 24).

However, in royal inscriptions, this picture of wild resources in a generous landscape can turn into one of a place to be tamed.

In one inscription of Enmetena, the Early Dynastic ruler of Lagaš, we can find mention of drainage interventions in a marsh area. Here there is indeed mention of 1.62 km² field drained by Enanatum, 8 the father of Enmetena, in the marsh area of Niĝin:

# Enmetena's Inscription<sup>9</sup>

(Early Dynastic IIIb, c. 2500-2350 BC)

<sup>&</sup>lt;sup>6</sup> Not all the literary compositions reflect the partition of fertility elements of the standard list; in the 'Debate between Bird and Fish', for example, 'ambar' is described as the place where reeds grow, while 'umah' as the place where fishes and birds thrive

<sup>&</sup>lt;sup>7</sup> From the composite text in ETCSL 2.02.03.

<sup>&</sup>lt;sup>8</sup> For this interpretation, see also Hruška 1998, 65.

<sup>&</sup>lt;sup>9</sup> With regard to this inscription, see Frayne 2008, 220-222; Marchesi & Marchetti 2011, 176-178. It is interesting to note that the inscription belongs to a statuette dedicated to Enlil which was found in Ur among the debris in a gateway in the southwest wall of the temenos leading into the ziqqurrat enclosure of Nabonidus. Inscriptions of Enmetena have been found at Uruk and Ur. The exact significance of these finds is however hard to determine.

### 11. 68-71:

68: 25.0.0 iku En-an-na-tum $_2$  SUR  $^d$ Nanše e-ta- $e_{11}$ 

tr.: 1.62 km<sup>2</sup> Enanatum drained (let emerge) in the border<sup>10</sup> of Nanše

69: 11.0.0 iku IM.KA gug<sub>4</sub> (ZI+ZI.ŠE<sub>3</sub>)<sup>11</sup>

 $tr.: 0.7 \text{ km}^2 \text{ of } ... \text{ of rushes}$ 

70: aša<sub>5</sub> ambar Niĝin<sup>ki</sup>-ka

tr.: fields in the marsh area of Niĝin

71: pa<sub>5</sub> ku<sub>3</sub>-ge us<sub>2</sub>-sa

tr.: bordering on the Holy Canal<sup>12</sup>

A clear celebration of the drainage of a marsh area can be found in one inscription of Ur-Namma, the founder of the Third Dynasty of Ur.

Here, the ruler claims to have brought out from the water the surface of a swamp planted with palm seedlings and measuring more than 200 km<sup>2</sup>, by creating a new artificial stream. He underlines that, despite the presence of planted trees, specifically date palms, it was an actual swamp, suggesting a negative picture of that landscape. He claims then that he made it **as a lasting treasure** for the city of Ur, the capital of his kingdom.

# Ur-Namma's Inscription<sup>13</sup> (Ur III. *c.* 2100-2000 BC)

(----, ------

1. <sup>d</sup>Nanna

tr.: For Nanna,

2. dumu-saĝ

tr.: the first-born son

3. dEn-lil<sub>2</sub>-la<sub>2</sub>

tr.: of En-lil,

4. lugal-a-ni

tr.: his king,

5. Ur-<sup>d</sup>Namma

tr.: Ur-Namma,

6. nita kala-ga

tr.: the mighty man,

7. lugal Uri<sub>5</sub><sup>ki</sup>-ma

tr.: the king of Ur,

8. lugal Ki-en-gi Ki-uri-ke4

tr.: (and) king of Sumer and Akkad,

<sup>&</sup>lt;sup>10</sup> It seems plausible to interpret in this context the term SUR as "border", Sumerian 'ki-sur-ra'. A boundary-dyke of Nanše (e ki-sur-ra <sup>d</sup>Nanše) is well attested in Early Dynastic inscriptions dealing with the boundary dispute between Umma and Ĝirsu/Lagaš. In this regard, see Rey 2016, 61. In the case of this inscription, however, the indication of the Niĝin area may suggest a southern location, towards the border with the Ur territory. With regards to the boundary dispute between Ĝirsu/Lagaš and Ur at the end of the third millennium, see Frayne 1993, 280-284; Wilcke 2011, 31-34. Moreover, two texts dating to the reign of URUKAgina quote a field named 'aša<sub>5</sub> e ki-sur<sub>x</sub>(ERIM)-ra', "field (along) the boundary-dyke", in a marsh area (see below).

<sup>&</sup>lt;sup>11</sup> The element IM.KA is unclear, while 'gug<sub>4</sub>' is to be interpreted as "rush" or "sedge", both being construction materials typical of marsh areas; see Civil 2013, 41.

<sup>&</sup>lt;sup>12</sup> Hypotetically, the Holy Canal mentioned in this inscription may refer to the Nun Canal, which may have been a branch of the Tigris originating north of Ĝirsu and running southwards along the provincial border to reach eventually Ur. See Steinkeller 2001, 55-56.

<sup>&</sup>lt;sup>13</sup> From the composite text in Frayne, 1997, 43.

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9. ambar peš du<sub>3</sub>-a
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tr.: a swamp planted with (palm) seedlings -

10. ambar he<sub>2</sub>-me-am<sub>3</sub>

tr.: (in spite of that) it was indeed a swamp! -

11. a-ša<sub>3</sub>-bi

tr.: its surface

12. šar<sub>2</sub>-gal GANA<sub>2</sub>-am<sub>3</sub>

tr.: (that) is 3600 (bur<sub>3</sub>) in area (= 233.28 km<sup>2</sup>),

13. a-ta

tr.: from the water

14. ha-mu-na-ta-de<sub>6</sub>

tr.: he brought out for him,

15. e-bi 4 da-na 260 nindan<sub>x</sub> (nindan.DU)

tr.: its canal, 4 danna (= 43.2 km) and 260 nindan (= 1560 m)

16. he<sub>2</sub>-na-ak

tr.: he made for him,

17. Uri<sub>5</sub><sup>ki</sup>-e **gil-sa-aš** 

tr.: for Ur, as a (lasting) treasure

18. he<sub>2</sub>-mi-na

tr.: he made it.

19. e-ba a-ba <sup>d</sup>Nanna-gin<sub>7</sub>

tr.: Of that canal: "Who Is Like Nanna?" 14

20. mu-bi

tr.: (is) its name.

At any rate, we are far away from the negative picture of marshes occurring in later literature, where they can be a symbol of devastation in opposition to civilized cities, as for example in the Lament for Ur, a composition dating back to the Early Old Babylonian period. In that composition, in fact, the goddess Ningal, wife of Nanna, is lamenting the loss of her properties in the city, eaten by marshes, suggesting a clear opposition between civilized city and untamed nature:

# Lament for Ur<sup>15</sup>

(Early Old Babylonian Period, c. 2000-1900 BC)

1. 132: niĝ<sub>2</sub>-gur<sub>11</sub> uru<sub>2</sub> ĝal<sub>2</sub>-ĝal<sub>2</sub>-la-ĝu<sub>10</sub> **sug-ge hu-mu-da-ab-gu**<sub>7</sub>

tr.: my properties lying in the city have been 'consumed' by the marshes.

On the contrary, in Ur-Namma's inscription the picture of the marsh is not a completely negative one: it was planted with date palms, which in the context of gardens are a symbol of the richness and prosperity of a land.

In this context, it seems to have been considered rather a wild resource, tamed by the ruler in order to create a lasting treasure for his capital, something that can be controlled and systematically exploited for the wealth and richness of the state. This inscription does not describe an idyllic landscape, delightful for human beings, but offers instead a rational picture of a wealthy state.

Both the idyllic-wild and the rational-tamed aspects of the marshes coexist in the economic documentation. Administrative texts, indeed, provide evidence for marshes as a source of wild commodities, as well as for drained fields interspersed among marsh areas.

<sup>&</sup>lt;sup>14</sup> There is no trace of this canal in the contemporary administrative sources. With regard to the drainage activities of Ur-Namma in the marsh areas located between the Nun Canal and the Nannagugal canal, i.e. between the territory of Ĝirsu/Lagaš and Ur, see Carroué, 1993, 59.

<sup>&</sup>lt;sup>15</sup> As from the composite text in ETCSL 2.02.02.

Several field names present the element 'ambar'; some of them probably preserve the memory of artificial drainage in the area where the fields were located, others may simply shed light on the field's location in the contemporary natural landscape.

Already at the end of the fourth millennium, there is evidence of a field named after a marsh, 'BAD SUG', in the lexical composition Archaic Word List C.<sup>16</sup>

Characterizations of the marsh in field names may vary according to size, as is the case of 'ambar tur', "small marsh", or 'ambar gal', "large marsh", or according to the territory where the marsh was located, as is the case of marsh of Lagaš or Niĝin. It can also vary according to the kind of vegetation growing there, as is the case of the "marsh with *a-gug* grass" or according to the type of water, as is the case of 'ambar a-šeš', "marsh with brackish waters".

The following charts report fields (a-ša<sub>3</sub>/aša<sub>5</sub>) named after a marsh in different cities of the alluvial plain.

### ADAB

Period of Attestation	Name	
Old Akkadian	ambar gal-(mah)	field in the large and great marsh

#### FARA

Period of Attestation	Name	
ED IIIa	<aša<sub>5&gt; ambar</aša<sub>	field in the marsh
Ur III	ambar ĝeš-ur3-ra	field in the 'harrowed' marsh

#### ĜIRSU

GIRSU		
Period of Attestation	Name	
ED IIIb/Ur III	Ambar <sup>(ki)</sup>	field in (the city of) Ambar
Ur III	ambar a-gug <sub>4</sub>	field in the marsh with a-gug grass
Ur III	ambar a-šeš	field in the brackish water marsh
Ur III	ambar Ebih <sup>ki</sup>	field in the marsh of Ebih
Ur III	ambar es <sub>(2-3)</sub> -sa <sub>(2)</sub>	field in the marsh of (Ki)esa
Ur III	ambar es3-sa2 dDumu-zi	field in the marsh of (Ki)esa of Dumuzi
Ur III	ambar es <sub>3</sub> -sa <sub>2</sub> <sup>d</sup> Nin-dara	field in the marsh of (Ki)esa of Nindara
OA/Ur III	ambar Lagaš <sup>kı</sup>	field in the marsh of Lagaš
ED IIIb/OA	ambar Niĝin <sup>ki</sup>	field in the marsh of Niĝin
Ur III	ambar sur-ra	field in the boundary marsh
Ur III	ambar tur	field in the small marsh
Ur III	ambar tur <sup>d</sup> Nanna	field in the small marsh of Nanna
Ur III	ambar tur <sup>d</sup> Nin-dara	field in the small marsh of Nindara
Ur III	dal <sub>x</sub> (HU)-ba-na ambar	field among the marshes
Ur III	Nin-tur <sub>3</sub> -e-si ambar sur-ra	field of Ninturesi in the boundary marsh
Ur III	us <sub>2</sub> -sa ambar-silim	field bordering the 'intact' marsh

### Umma

Period of Attestation	Name	
Ur III	ambar gal	field in the large marsh
Ur III	ambar ni-za-la	field in the marsh of Nizala
ED IIIb	ambar sal <sub>4</sub>	field in the narrow marsh
Ur III	ambar tur	field in the small marsh
Ur III	ĝeš ambar	field with swamp trees

# UR

Period of Attestation	Name	
Ur III	Ambar-mah <sup>(k1)</sup>	field in (the city of) Ambar-mah
Ur III	ambar ĝeš du3-a	field in the swamp (marsh planted with trees)

<sup>&</sup>lt;sup>16</sup> For the interpretation of the entry as a field name, see Veldhuis 2006, 193. The entry occurs in two sources from the Uruk IV period (W 20266,44 and W 20266,45); it also survives in the Early Dynastic counterpart of the composition (ED Word List C, 95 [composite]: bad ambar).

Administrative texts show that these fields were cultivated with the usual crops, i.e. barley and emmer, along with different kinds of onions, pulses, and spices. 17

In addition, the documentation offers evidence for other elements of the domesticated landscape in connection with marshes: meadows (a-gar<sub>3/4</sub>),<sup>18</sup> canals (i<sub>7</sub>), the 'i<sub>7</sub> ambar-ra', which is attested both in Ur and Ĝirsu (but in different periods),<sup>19</sup> and probably a canal in Nippur, the 'i<sub>7</sub> ambar banda<sub>3</sub><sup>da</sup>', of which only the inlet/mouth (Sumerian 'ka') is attested.<sup>20</sup> In Ur III Ĝirsu, a vineyard in the marsh area of Niĝin (<sup>ĝeš</sup>kiri<sub>6</sub> ĝeštin ambar Niĝin<sub>6</sub><sup>ki</sup>) is also attested. Like others of this kind, this vineyard of about 100,000 m<sup>2</sup> was planted with date palms, fruit-trees, and timber trees (Greco 2015, 206).

However, the information about arable surfaces in marsh areas is not limited to field names.

Two texts from Early Dynastic Girsu (NIK 1, 31 and VS 25, 70) concern fields lying in a marsh area. Both texts date back to the reign of URUKAgina and concern "properties of the goddess Bau", 'u2-rum <sup>d</sup>Ba-U<sub>2</sub>', that is, they belonged to the household of the goddess, the e-BaU, led by the king's wife.

The first one, NIK 1, 31, describes six "fields lying in a marsh area", 'aša<sub>5</sub> ambar-ra ĝal<sub>2</sub>-la'. The total section reports the composition of the considered area, subdivided into standing crop surfaces, additionally watered surfaces, surfaces left fallow, and saline surfaces, <sup>21</sup> for a total of about 9.3 km<sup>2</sup>.

# NIK 1, 31 (ED IIIb Ĝirsu)

TRANSLITERATION r. ii, 1-4:

TRANSLATION

šu-niĝin<sub>2</sub> 85.0.1 iku še 50.0.0 la<sub>2</sub> 0.1.0 iku a-ĝar

2.5.0 ½ iku dag 6.1.2 iku <ki>-mun total: 5.5 km<sup>2</sup> standing crop 3.2 km<sup>2</sup> (additionally) watered 0.2 km² left fallow 0.4 km<sup>2</sup> saline plot (sum:) 9.3 km<sup>2</sup>

The second text, VS 25, 70, lists parcels of fields of the household of BaU, which, after being flooded, were allotted as prebends to different professionals and officials. A first subtotal (šu-niĝin<sub>2</sub>) lists the detail of allotted surfaces for each of the seven listed fields, while the final sum (gu<sub>2</sub>-an-še<sub>3</sub>) concerns the whole involved area, designated as "wet ground, (already) flooded (in) a marsh area", 'ki-duru<sub>5</sub> ambar a de<sub>2</sub>-a'.

# VS 25, 70 (ED IIIb Ĝirsu)

TRANSLITERATION r. vi, 1- vii, 1:

TRANSLATION

šu-niĝin<sub>2</sub> 43.1.4 <iku> aša<sub>5</sub> sa<sub>6</sub>-ga tur 7.2.2 <iku> aša<sub>5</sub> dag-hi-a

 $17.1.0 < iku > aša_5 du_6 ^dAb-u_2$ 

total: 2.8 km<sup>2</sup> (in the) small field of Saga 0.5 km<sup>2</sup> (in the) field Daghia 1.1 km<sup>2</sup> (in the) field Mound of Abu

<sup>&</sup>lt;sup>17</sup> See e.g. SNAT 261 from Ur III Ĝirsu.

<sup>&</sup>lt;sup>18</sup> Meadow areas are attested in connection with fields named after a marsh in Old Akkadian texts from Adab and Ur III texts from Umma and Ur.

<sup>&</sup>lt;sup>19</sup> It occurs in ED IIIb texts from Ĝirsu and in one Ur III text from Ur. In ED IIIb Ĝirsu the "small marsh canal" (i<sub>7</sub> ambar-ra tur-ra) is also attested (see RTC 47).

<sup>&</sup>lt;sup>20</sup> The text BE 3/1, 152 attests to 'ka  $\langle i_7 \rangle$  ambar banda<sub>3</sub><sup>da</sup>'.

<sup>&</sup>lt;sup>21</sup> Such a subdivision can be found elsewhere with approximately the same values in connection with fields not necessarily lying in a marsh area.

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7 bur<sub>3</sub> la<sub>2</sub> 3 <iku> aša<sub>5</sub> e ki-sur<sub>x</sub>(ERIM)-ra
7.1.0 <iku> aša<sub>5</sub> du<sub>5</sub>-uh<sub>2</sub>

5 bur<sub>3</sub> la<sub>2</sub> 2 <iku> aša<sub>5</sub> du<sub>6</sub> sir<sub>2</sub>-ra
2 bur<sub>3</sub> la<sub>2</sub> 1 <iku> aša<sub>5</sub> ambar Niĝin<sup>ki</sup>
gu<sub>2</sub>-an-[še<sub>3</sub>] 87.1.0 iku ki-duru<sub>5</sub>

0.4 km² (in the) field (along) the boundary-dyke²²²
0.4 km² (in the) field Bright Mound
0.1 km² (in the) field Bright Mound
0.1 km² (in the) field (in) the marsh of Niĝin
sum: 5.6 km² of wet ground
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The following chart shows that five of the listed fields are included in both texts.<sup>23</sup> Among them, the only field bearing the element ambar in its name is the field in the marshes of Niĝin, while in two cases, 'aša<sub>5</sub> du<sub>6</sub> dAb-u<sub>2</sub>' and 'aša<sub>5</sub> du<sub>6</sub> sir<sub>2</sub>-ra', the field names contain the element 'du<sub>6</sub>', "mound". Somehow, these field names recall the natural scenario of the Early Dynastic Ĝirsu territory, described by Pournelle as a 'turtleback', isolated surfaces protruding above the floodplain (Pournelle 2013, 13 and 27).

# Nik 1, 31 VS 25, 70

### LISTED FIELDS:

aša <sub>5</sub> Sa <sub>6</sub> -ga tur	aša <sub>5</sub> Sa <sub>6</sub> -ga tur
aša <sub>5</sub> dag-hi-a	aša <sub>5</sub> dag-hi-a
$a\check{s}a_5$ $du_6$ $^dAb-u_2$	aša <sub>5</sub> <b>du<sub>6</sub></b> <sup>d</sup> Ab-u <sub>2</sub>
aša <sub>5</sub> e ki-sur <sub>x</sub> (ERIM)-ra	aša <sub>5</sub> e ki-sur <sub>x</sub> (ERIM)-ra
aša <sub>5</sub> du <sub>5</sub> -uh <sub>2</sub>	aša <sub>5</sub> du <sub>5</sub> -uh <sub>2</sub>
	aša <sub>5</sub> <b>du</b> <sub>6</sub> sir <sub>2</sub> -ra
	aša <sub>5</sub> <b>ambar</b> Niĝin <sup>ki</sup>
aša <sub>5</sub> Ha-har-ra-gur <sub>8</sub>	

Another example is provided by an undated text from Ur III Ĝirsu, ASJ 17, 224 114. This text records the reaping plan for the fields lying in a marsh region, with a focus on the manpower provided by different institutions for performing the work. The colophon defines the involved area as 'gu<sub>4</sub> ambar', whereas 'gu<sub>4</sub>' likely stands as an abbreviation for 'ĝiri<sub>3</sub>-se<sub>3</sub>-ga gu<sub>4</sub>', the term used for the base units employed by the Ur III bureaucracy to measure arable lands.<sup>24</sup>

In this text, there is no mention of field names; as shown in the following chart, the subdivision is made according to the area of responsibility of each listed household (mainly situated in the Lagaš territory) or the official (saĝĝa) at the head of it.

# From **ASJ 17, 224 114** (Ur III, Ĝirsu)

Area (bur <sub>3</sub> )	Area (km²)	Relevant institution/official
120	7.76	saĝĝa Urub
93	6.02	E-Ĝatumdu
65	4.21	saĝĝa Bagara
62	4.1	saĝĝa Igalim
28	1.84	saĝĝa Ninsun
54	3.49	saĝĝa Nanše
19	1.23	E-babbar

 $^{22}$  As seen above, the inscription of the Eary Dynastic ruler Enmetena quotes a field on a border area in the marsh territory of Niĝin. Unlike the inscription, the two administrative texts quote the 'aša<sub>5</sub> ambar Niĝin<sup>ki</sup>' as a specific field rather than as a marsh area in the Niĝin territory.

<sup>&</sup>lt;sup>23</sup> More information about these fields is provided by La Placa and Powell 1990, 85-93.

<sup>&</sup>lt;sup>24</sup> The term would literally means "personnel of the bull", referring to the plowing teams (Heimpel 1995, 74 and previous literature). Each agricultural unit corresponded approximately to 20 bur<sub>3</sub> (1.29 km<sup>2</sup>).

21	1.36	saĝĝa Ninhursaĝ
Total area		
462	29.37	

Therefore, the text may suggest that in Ur III times, arable lands in the marsh areas of the Lagaš territory covered at least a surface of almost 30 km<sup>2</sup>. In terms of agricultural units, it would correspond to 23 agricultural units of the about 600 estimated for the whole Ĝirsu Province (Maekawa 1987, 96-99; Maekawa 1999, 65-75), which comprised the territories of Ĝirsu, Lagaš, Niĝin and Gu'aba.

Fields surely represented the tamed aspect of the marshes, but how did they exploit what was untamed? As already stressed, marshlands provided a broad range of economic resources, such as reeds, shrubs, trees, and a wide variety of fishes and waterfowl. Unlike literary compositions, which offer a standardized and limited picture of resources available in marshes, administrative texts can provide more hints on the variety of exploitable goods. Most of the information in this regard comes from Umma and Ĝirsu, which represent the most informative economic and administrative corpora of the whole 3<sup>rd</sup> millennium BC.

Administrative documentation provides examples of workers employed in marsh areas. Unfortunately, in most of the cases, the purpose of the work is not made explicit, so it is hard to establish if the workers were employed in fields lying in marsh areas, or in actual marshes.

For example, in a text from Ur III Umma, MVN 15, 147, attesting the employment of "hirelings", 'lu<sub>2</sub> huĝ-ĝa2', in "the small marsh", 'ambar tur', it is unclear whether the homonymous field was meant, as is the case with of another text from Umma, Princeton 2, 503, where UNga-workers are clearly assigned to "the field (lying in) the small marsh", 'a-ša<sub>3</sub> ambar tur'.

# **MVN 15, 147** (Ur III Umma)

TRANSLITERATION

o. 1-7:

TRANSLATION

20 ĝuruš [u<sub>4</sub> 1-še<sub>3</sub>] ambar tur [gub-ba] 12 ĝuruš [u<sub>4</sub> 1-še<sub>3</sub>] e<sub>2</sub> dŠakkan<sub>2</sub> gub-ba gurum<sub>2</sub> [aka]  $a_2 lu_2 [hu\hat{g}-\hat{g}a_2]$ ki Lugal-[a<sub>2</sub>-zi-da-ta]

20 workers for 1 day assigned to the small marsh. 12 workers for 1 day assigned to the e-Šakkan. *Inspection made,* work of hirelings (provided) by Lugal-azida

# **Princeton 2, 503** (Ur III Umma)

TRANSLITERATION

TRANSLATION

o. 1-2:

64 UN-ĝa<sub>6</sub> 40 sila<sub>3</sub> a-da gub-ba a-ša3 ambar tur

64 UNĝa-workers (earning each) 40 liters (of barley) assigned 'for irrigation works' in the field (in the) small marsh.

Two further texts from Ur III Umma (Nisaba 23, 4 and CUSAS 39, 133) concern the employment of workers in actual marsh areas: in both texts indeed there is mention of "men settled by the marshes", '<lu>> ambar-da tuš-a'.

Nisaba 23, 4 records the account of "arrears of state dependent workers of the duty-rotation in the Apisal district" (col.: la<sub>2</sub>-i<sub>3</sub> erin<sub>2</sub> bala-a-ka / ša<sub>3</sub> A-pi<sub>4</sub>-s[al<sub>4</sub>-la]<sup>ki</sup>). Among the listed workers, there is a group composed of "four boat builders and (men) settled by the marshes" (r. ii, 22: 4 ma<sub>2</sub>-du<sub>3</sub> u<sub>3</sub> < lu<sub>2</sub> > ambarda tuš-a).

The second text, CUSAS 39, 133, concerns a "worker-inspection of spear-fishermen, sesame farmers, boat-builders of the inspector of fishery, and (men) settled by the marshes" (col.: gurum<sub>2</sub> aka / šu-ku<sub>6</sub> ĝeš  $gid_2$ -da / engar ĝeš- $i_3$ -ka /  $ma_2$ -d $u_3$  enku /  $u_3$  < $lu_2$ > ambar-da tuš-a).

In another Ur III text from Umma, UTI 3, 2078, the workers are clearly employed for exploitation purposes in marsh areas; this text, indeed, records the employment of workers for towing a boat for 3 days toward the marshes, loading the boat with reeds and then going back to Umma in 5 days to unload the boat.

# **UTI 3, 2078** (Ur III Umma)

TRANSLITERATION

TRANSLATION

o. 1- r. 1:

5 ĝuruš u<sub>4</sub> 3-še<sub>3</sub>

5 workers during 3 workdays

Ummaki-ta ambar-še<sub>3</sub> ma<sub>2</sub> towed a boat from Umma to the marshes sailing

gid<sub>2</sub>-da ma<sub>2</sub> diri-ga downstream,

u<sub>4</sub> 1-še<sub>3</sub> gi ĝa<sub>6</sub>-ĝa<sub>2</sub>

during 1 workday (they) carried reeds

u<sub>3</sub> ma<sub>2</sub>-a ĝa<sub>2</sub>-ra

and placed them in the boat,

u<sub>4</sub> 5-še<sub>3</sub> ambar-ta Umma<sup>ki</sup>-še<sub>3</sub> during 5 workdays from the marshes to Umma (they)

ma<sub>2</sub> gid<sub>2</sub>-da

towed the boat.

u<sub>4</sub> 1-še<sub>3</sub> ma<sub>2</sub> ba-al-la

during I workday (they) unloaded the boat.

As we can easily expect, the exploitation of fish in marsh areas involved fishermen. Documentation provides evidence for different types of fishermen. Whereas the differentiation according to the catch area mainly consists in "fishermen of the sea", 'šu-ku<sub>6</sub> (a)-ab-ba', and "fishermen of sweet waters", 'šu-ku<sub>6</sub> a du<sub>10</sub>-ga', <sup>25</sup> there is no mention of fishermen of marshes. <sup>26</sup>

Two texts from Early Dynastic Ĝirsu, VS 14, 139 and DP 385, record the deliveries of boxes of fish by a fisherman to a depot of the household of Bau. Both texts are dated to the third year of the reign of URUKAgina and concern the deliveries of the fisherman E'igarasu. In the first text, the quantity of fish is classified as "fish of the marsh field", 'ku<sub>6</sub> aša<sub>5</sub> ambar-kam', likely in the wide sense of marsh area, while in the second one, it is defined as "marsh fish", 'ku<sub>6</sub> ambar-kam'.

# **VS 14, 139** (ED IIIb Ĝirsu)

TRANSLITERATION

TRANSLATION

o. i, 1- o. ii, 5:

mu-de<sub>6</sub>

130 sa-numun<sub>x</sub> eštub<sup>ku6</sup> ku6 aša5 ambar-kam  $E_2$ - $i_3$ - $gara_2$ - $su_3$ šu-ku<sub>6</sub>-e

it is fish of the marsh field, E'igarasu the fisherman brought,

130 container with carps,

<sup>25</sup> For an overview of the different types of fishermen attested in 3<sup>rd</sup> millennium sources, see Englund 1990, 243-246.

<sup>&</sup>lt;sup>26</sup> It is noteworthy to mention however the Ur III text AAS 178 from Ĝirsu, which may distinguish "fishermen of sweet waters" (rev. 5: šu-ku<sub>6</sub> [a] du<sub>10</sub>-[ga]-me) and "fishermen of brackish waters" (rev. 4: [šu-ku<sub>6</sub>] [a-šeš]-[x]-me). Moreover, it is probable that the Sumerian word 'a-ab-ba', "sea", may also involve littoral marshes, especially in texts from Early Dynastic Ĝirsu (Hruška 1998, 68; Englund 1998, 81). This however does not imply that fishermen active in marsh areas were necessarily labeled as "fishermen of the sea"; see below.

En-ig-gal nu-banda<sub>3</sub> e2 ki-sal4-la-ka i<sub>3</sub>-ku<sub>v</sub>

Eniggal the captain/overseer in the e-kisala depot let it enter.

# **DP 325** (ED IIIb Ĝirsu)

TRANSLITERATION o. i, 1-r. i, 3:

TRANSLATION

53 sa-numun<sub>x</sub> eštub<sup>ku6</sup> 70 sa-numun<sub>x</sub> agargara<sup>ku6</sup> ku<sub>6</sub> ambar-kam E<sub>2</sub>-i<sub>3</sub>-gara<sub>2</sub>-su<sub>3</sub> šu-ku<sub>6</sub>-e 2-kam-ma-ka mu-de<sub>6</sub> En-ig-gal nu-banda<sub>3</sub>

53 container with carps, 70 containers of fish-spawn, it is fish of the marsh, E'igarasu the fisherman for the second time brought, Eniggal the captain/overseer

in the e-kisala depot let it enter.

From a text of the following year, DP 308, we know that E'igarasu was considered as a 'fisherman of sweet waters', 'šu-ku<sub>6</sub> a du<sub>10</sub>-ga'. In this text, indeed, E'igarasu delivers an amount of "split carps", 'eštub<sup>ku6</sup> dar-ra', to the overseer of the e-Bau. In this case, the fish amount is partially treated and there is no mention of its original provenance, but rather of the structure where it was likely processed, the e-DU.DU.DU.DU.

# **DP 308** (ED IIIb, Ĝirsu)

TRANSLITERATION o. i, 1-r. i, 2:

e<sub>2</sub> ki-sal<sub>4</sub>-la-ka

i<sub>3</sub>-ku<sub>x</sub>

TRANSLATION

240 split carps,

E'igarasu

240 eštub<sup>ku6</sup> dar-ra ku<sub>6</sub> e<sub>2</sub> DU.DU.DU.DU-ka-kam  $E_2$ - $i_3$ - $gara_2$ - $su_3$ 

šu-ku<sub>6</sub> a du<sub>10</sub>-ga-ke<sub>4</sub> mu-de<sub>6</sub>

En-ig-gal nu-banda<sub>3</sub> e<sub>2</sub> ur<sub>3</sub> ku<sub>6</sub>-ka i<sub>3</sub>-ku<sub>x</sub>

the fisherman of sweet waters brought, Eniggal the captain/overseer

it is fish of the e-DU.DU.DU.DU,

in the fish roof-depot

let it enter.

Summing up, considering the relevance of marsh areas in the third millennium landscape, on the one side, and the occurrence of marsh natural products in the extant documents on the other, attestations of marshes as a place of provenance for incoming commodities are quite scarce.

First of all, we have to consider the nature of the documentation; documents from the 3<sup>rd</sup> millennium pertain in a large extent to the perspective of the state or provincial domain.

As far as the texts from Early Dynastic Ĝirsu are concerned, they belong to the archive of the e-Bau of Ĝirsu, known before URUKAgina's reign as the E-mi, the household lead by the queen in charge.

On the other side, there is the huge source of information represented by the Ur III texts, thousands of documents, in particular of administrative nature, dealing with different aspects of the state economy, which, nevertheless, leave the non-institutional sector essentially underrepresented.

We can surely imagine that the exploitation of those particular areas mainly concerned the noninstitutional domain, and, in this light, the creation of arable lands can be read as a long-lasting treasure, as claimed by Ur-Namma.

But we also have to consider that, according to the perspective of the texts, the information about the provenance of incoming commodities can simply be replaced by the mention of intermediate structures, as was the case with the last text we have seen, or by the name of workers or agents who had to supply specific commodities, including also those which were abudant in marsh areas.

In this context, a further obstacle is given by the fact that fish, birds and reeds, all goods abundantly attested in the economic documentation, are not the exclusive resources of marsh areas.

Especially in Ur III times, the management and exploitation of goods that were interspersed throughout the territory, hence not necessarely related to physically circumscribed economic units (as can be the case of barley and fields), may have relied on the intervention of intermediary agents, a sort of interface between workers, the actual exploiters, and receiving institutions.<sup>27</sup>

At least for the fish sector, the role of intermediary agents between marsh resources and state or provincial institutions may have been played by the 'enku(d/r)', a profession attested from the beginning of the cuneiform tradition, in the Archaic list Lu A (l. 82. GAL.ZAG), traditionally translated as "inspector of the fishery" or "tax collector" 28

And indeed, according to Englund, the 'enku' were professionals who took over fish from fishermen (or other people) and then conveyed it to the relevant structures (Englund 1990, 201).

This intermediary role is also underlined in the passage of the Cylinder B of Gudea (Il. 268-273) in connection with the marsh resources, which reports that Gudea introduced an 'enku' to the god Ninĝirsu, in order to enable a messenger to inform him about the amount of fish in marshes and reeds in canebrakes

### Gudea, Cylinder B

TRANSLITERATION II. 268-273:

268. ambar-bi ku6HI+SUHUR ku6suhur u3-de6

269. ĝeš-gi sig<sub>7</sub>-ga-bi <sup>gi</sup>ha-bu<sub>3</sub>-ur<sub>2</sub> u<sub>3</sub>-de<sub>6</sub>

270. Imin-šatam ra-gaba Gu<sub>2</sub>-eden-na-ke<sub>4</sub>

271. <sup>d</sup>Nin-ĝir<sub>2</sub>-su-ra e<sub>2</sub>-ninnu-a inim-bi ku<sub>4</sub>-ku<sub>4</sub>-da,

272. <sup>d</sup>Lamma **enku-e** Gu<sub>2</sub>-eden-na

273. en <sup>d</sup>Nin-ĝir<sub>2</sub>-su-ra me-ni-da mu-na-da-dib-e

## TRANSLATION 11. 268-273:29

With his divine duties, namely to make sure that Imin-satam, the messenger of Gu'edena, might inform Ningirsu in the E-ninnu about the amount of carp and perch(?) yielded by the marshes, and about the quantity of new shoots of reed yielded by the green reedbeds, he (Gudea) introduced Lama, the inspector of fishery of Gu'edena, to Lord Ninĝirsu.

A connection between marsh products and 'enku' can also be found in one administrative document from Ur, UET 3, 1310, dating to the reign of the last king of the Ur III dynasty, Ibbi-Sin. Here, an amount of "beheaded fish", "cooked fish", and unclear types of fish are defined as "fish of the 'enku's duty' (from) the swamp planted with palm seedlings" and is conveyed by an enku.

# **UET 3, 1310** (Ur III, Ur)

<sup>&</sup>lt;sup>27</sup> A similar situation is analyzed for the garden management in Greco 2015.

<sup>&</sup>lt;sup>28</sup> On the role of the Sumerian enku see Greco forthcoming.

<sup>&</sup>lt;sup>29</sup> After adapted translation by G. Zolyomi in ETCSL t.2.1.7 (ll. 1082-1087).

TRANSLITERATION

TRANSLATION

o. 1-r. 2:

120 ku<sub>6</sub> saĝ-kur<sub>2</sub>

6.1.0 ku<sub>6</sub> šeg<sub>6</sub> gur 3 saĝ-keš<sub>2</sub> ku<sub>6</sub> [...]

 $mu-ku_x$  (=DU)

ku<sub>6</sub> nam-enku-ra ambar peš du<sub>3</sub>-a

120 beheaded fish,

1860 liters of cooked fish, 3 (or 180) saĝkeš-fish [...],

fish of the 'enku's duty' (from) the swamp planted

with palm seedlings,

(it is a) delivery,

ĝiri<sub>3</sub> Ku<sub>3</sub>-<sup>d</sup>Nanna enku the conveyor was Ku-Nanna the enku.

Curiously enough, the swamp quoted by the text, the swamp planted with palm seedlings, might have been the same one which Ur-Namma, one century earlier, claimed to have drained. Anyway, this text confirms that, even if not completely tamed, marshes could have been an attractive economic resource also according to the state perspective.

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