

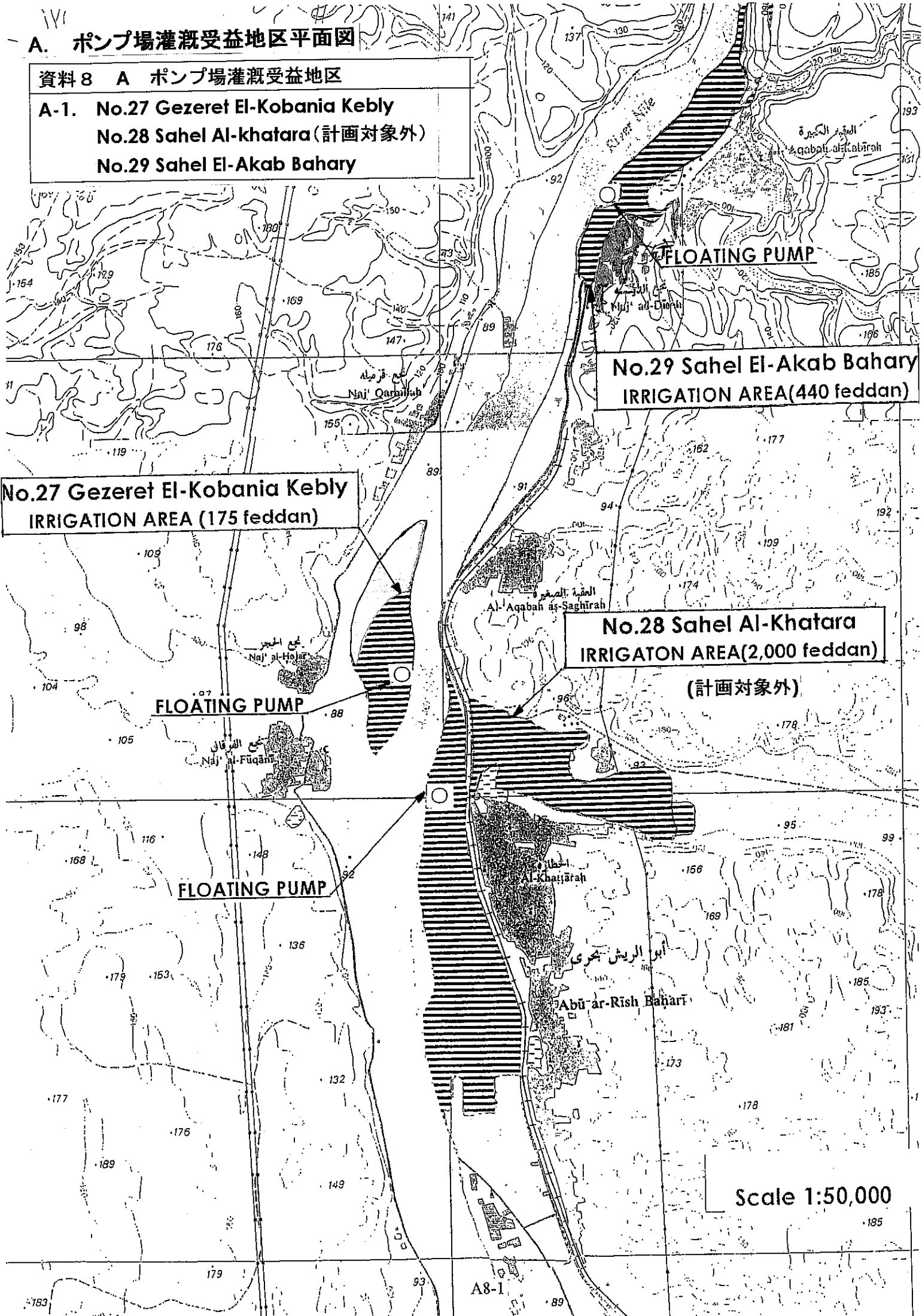
資料8. その他の資料・情報

| | | |
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A. ポンプ場灌漑受益地区平面図

資料 8 A ポンプ場灌漑受益地区

- A-1. No.27 Gezeret El-Kobania Kebly
- No.28 Sahel Al-khatara (計画対象外)
- No.29 Sahel El-Akab Bahary



No.27 Gezeret El-Kobania Kebly
IRRIGATION AREA (175 feddan)

No.29 Sahel El-Akab Bahary
IRRIGATION AREA(440 feddan)

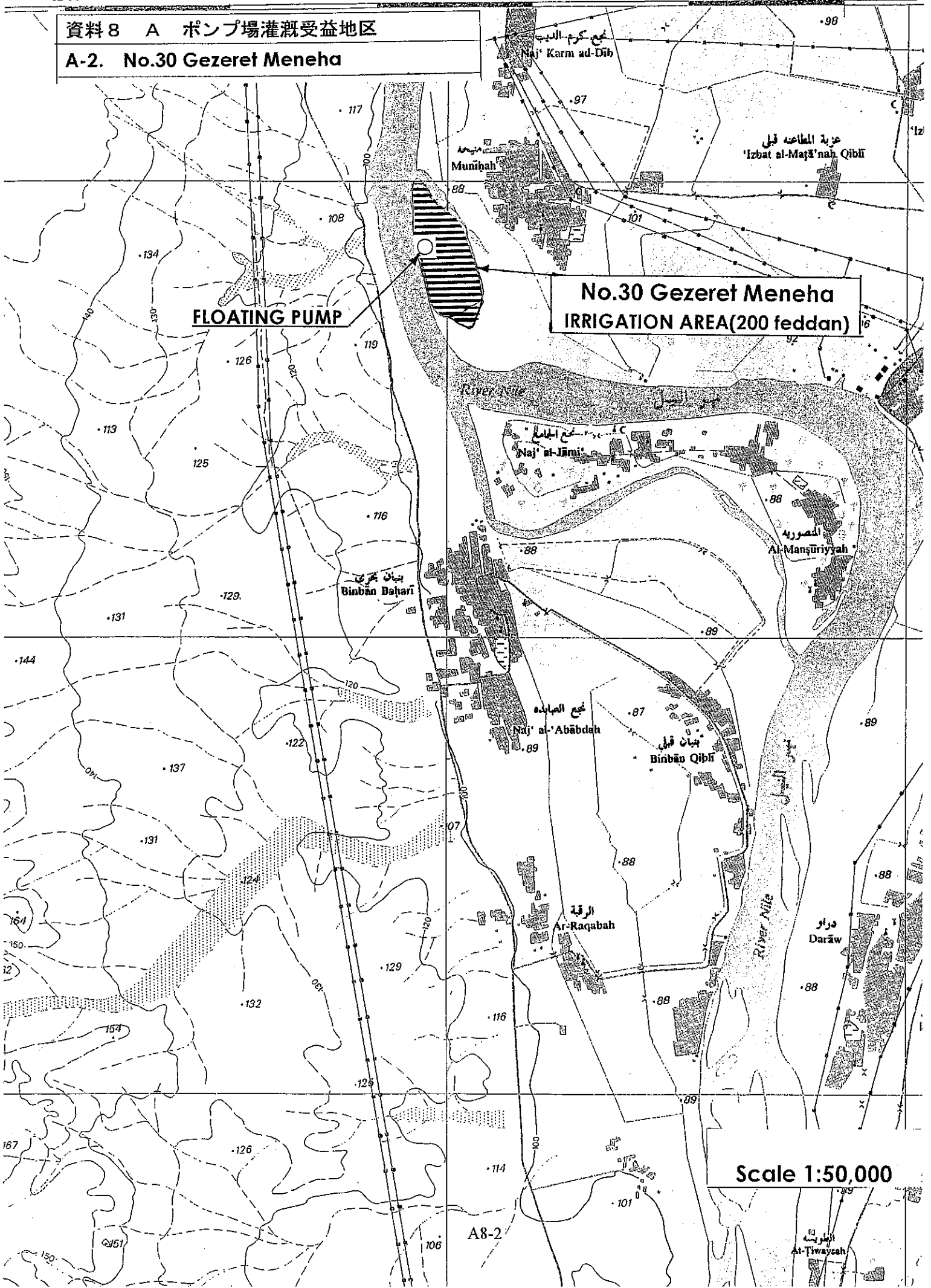
No.28 Sahel Al-Khatara
IRRIGATION AREA(2,000 feddan)
(計画対象外)

Scale 1:50,000

A8-1

資料 8 A ポンプ場灌漑受益地区

A-2. No.30 Gezeret Meneha



FLOATING PUMP

No.30 Gezeret Meneha
IRRIGATION AREA(200 feddan)

Scale 1:50,000

A8-2

الطيوسه
At-Tiwayzah

الحاج زيدان
Naj' al-Zaydan

الطراب
A-Tunab

الحيطان الغربية
Naj' al-Haṣayā al-Gharbiyyah

FLOATING PUMP

السراج
As-Sirāj

الحقة
Naj' an-Naqbah

**No.31 El-Sarag
IRRIGATION AREA(200 feddan)**

الحسانين
Naj' Hasānayn

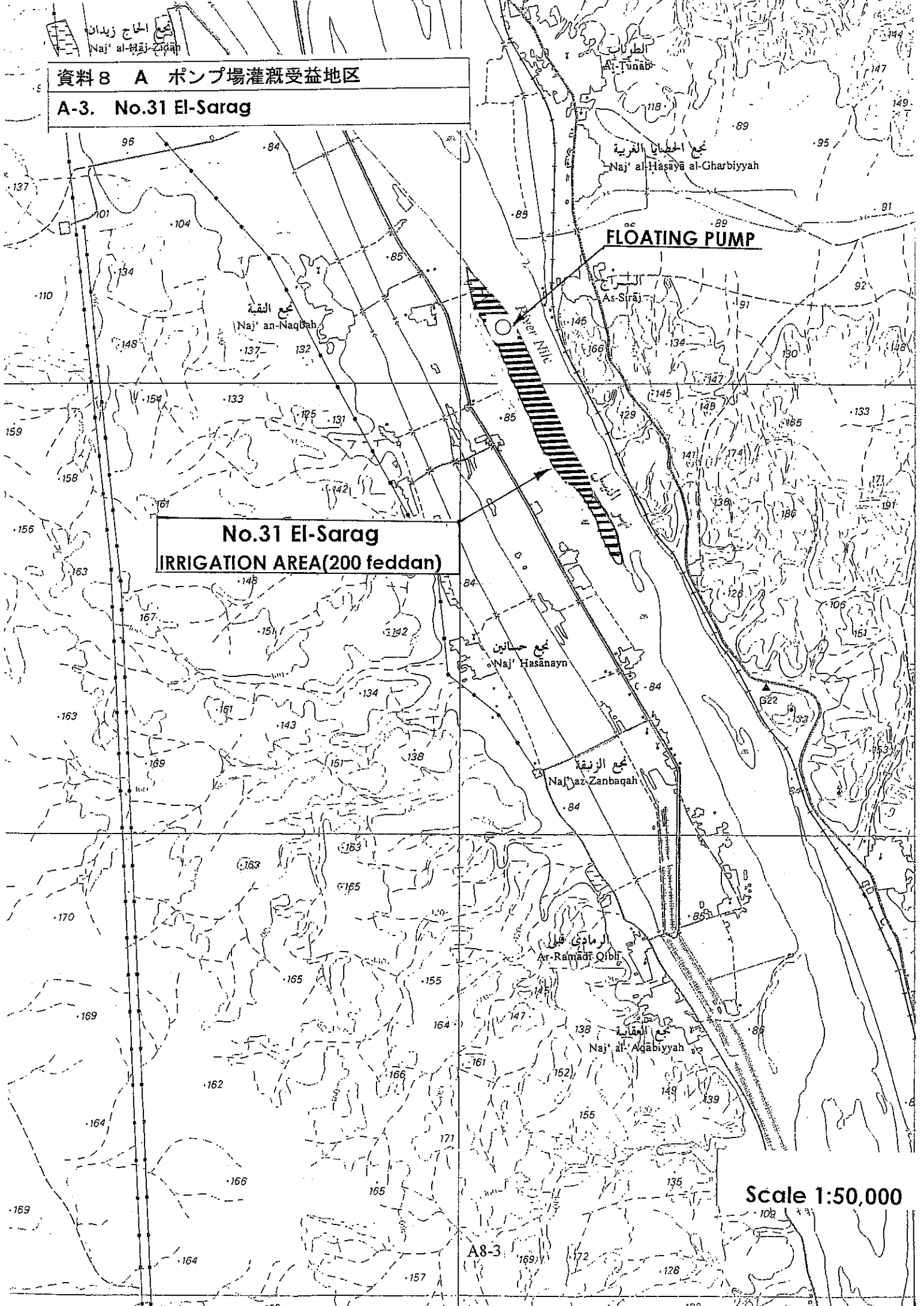
الحزنية
Naj' az-Zanbaqah

الرمادي قبل
Ar-Ramādī Qibli

الحقانية
Naj' al-Aqābiyyah

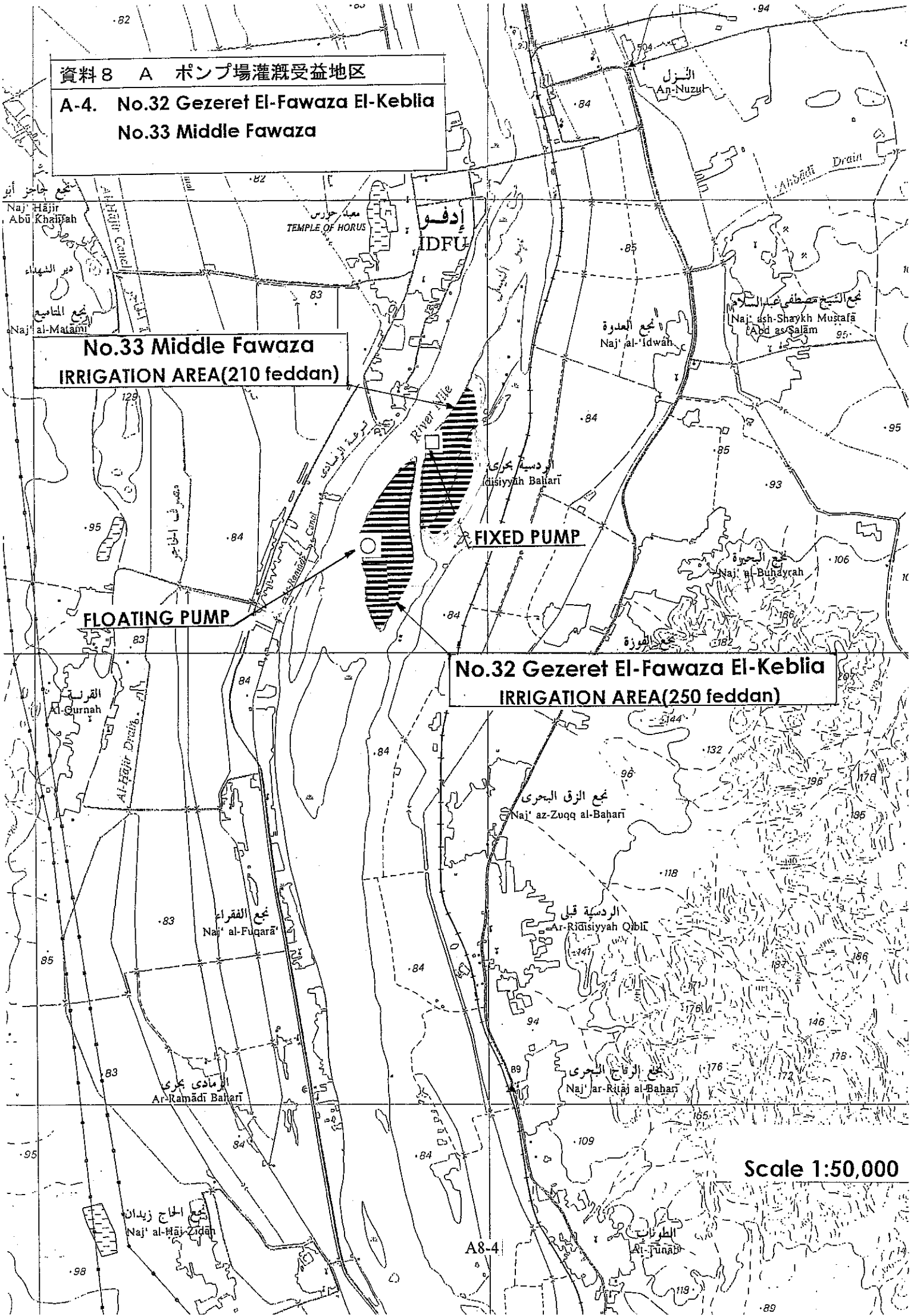
Scale 1:50,000

A8-3



資料 8 A ポンプ場灌漑受益地区

A-4. No.32 Gezeret El-Fawaza El-Keblia
No.33 Middle Fawaza



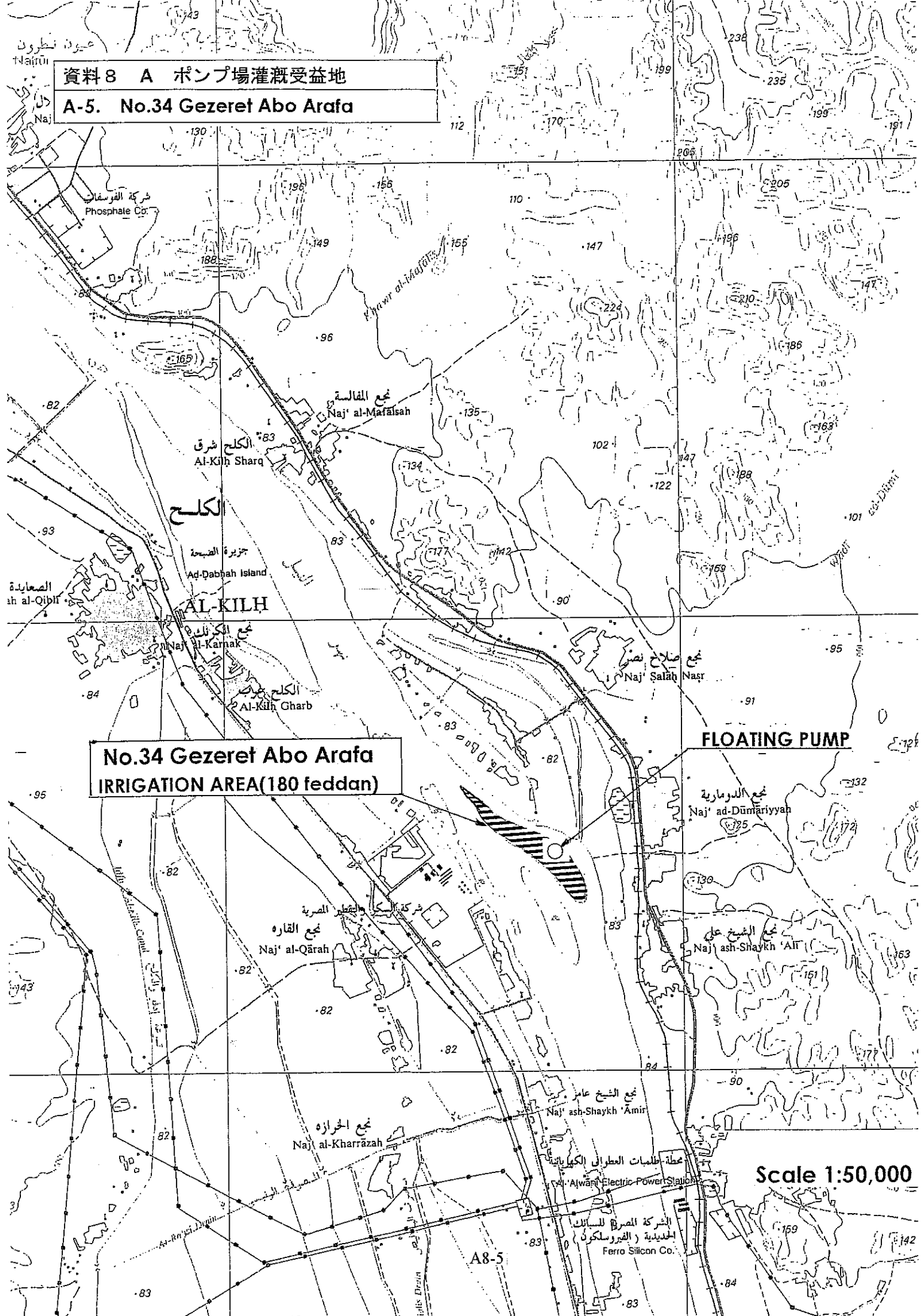
No.32 Gezeret El-Fawaza El-Keblia
IRRIGATION AREA(250 feddan)

Scale 1:50,000

A8-4

資料 8 A ポンプ場灌漑受益地

A-5. No.34 Gezeret Abo Arafa



**No.34 Gezeret Abo Arafa
IRRIGATION AREA(180 feddan)**

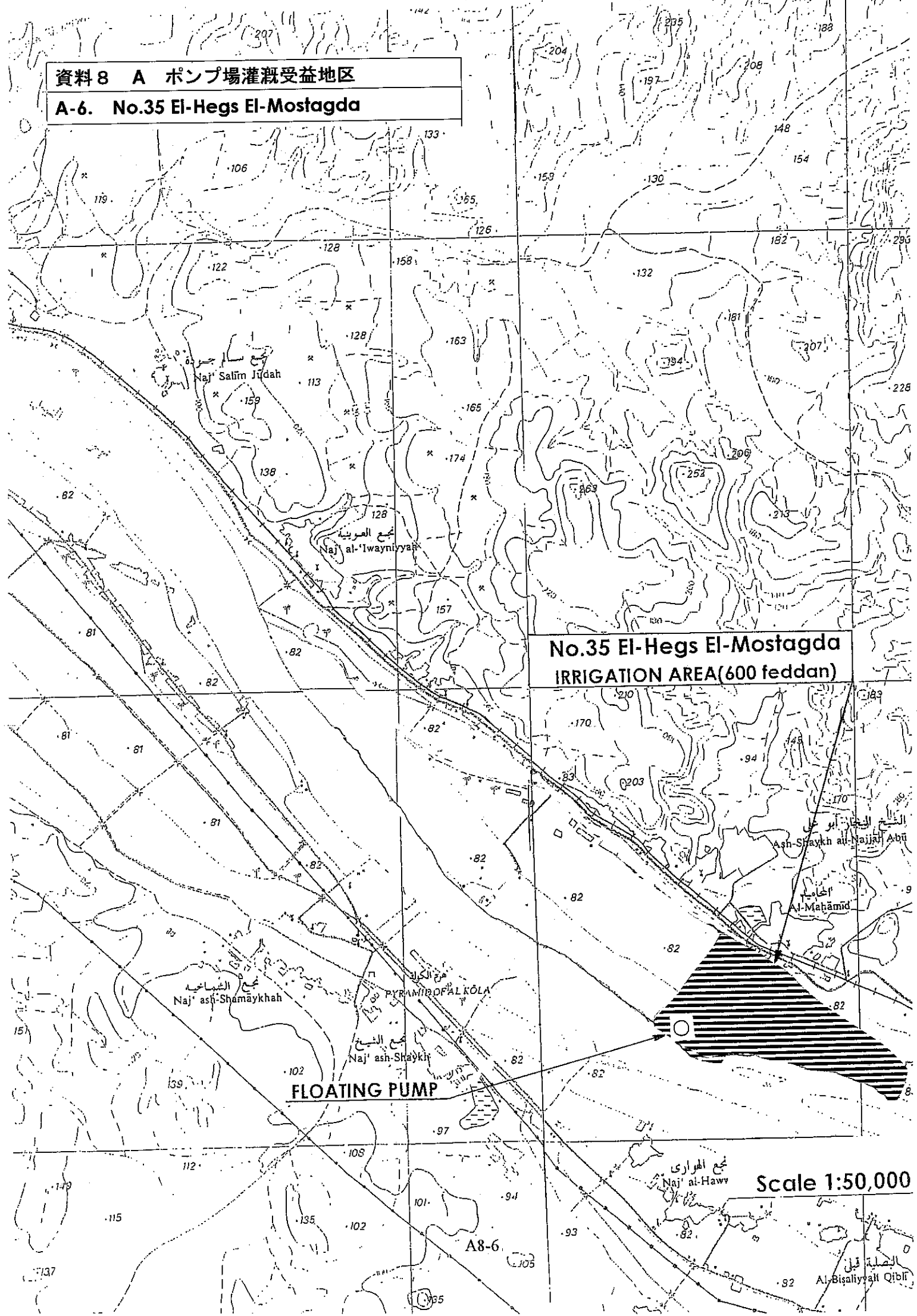
FLOATING PUMP

Scale 1:50,000

A8-5

資料 8 A ポンプ場灌漑受益地区

A-6. No.35 El-Hegs El-Mostagda



No.35 El-Hegs El-Mostagda
IRRIGATION AREA(600 feddan)

FLOATING PUMP

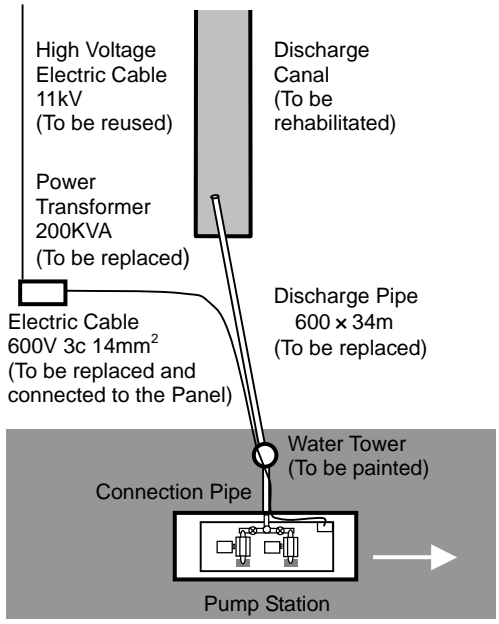
Scale 1:50,000

A8-6

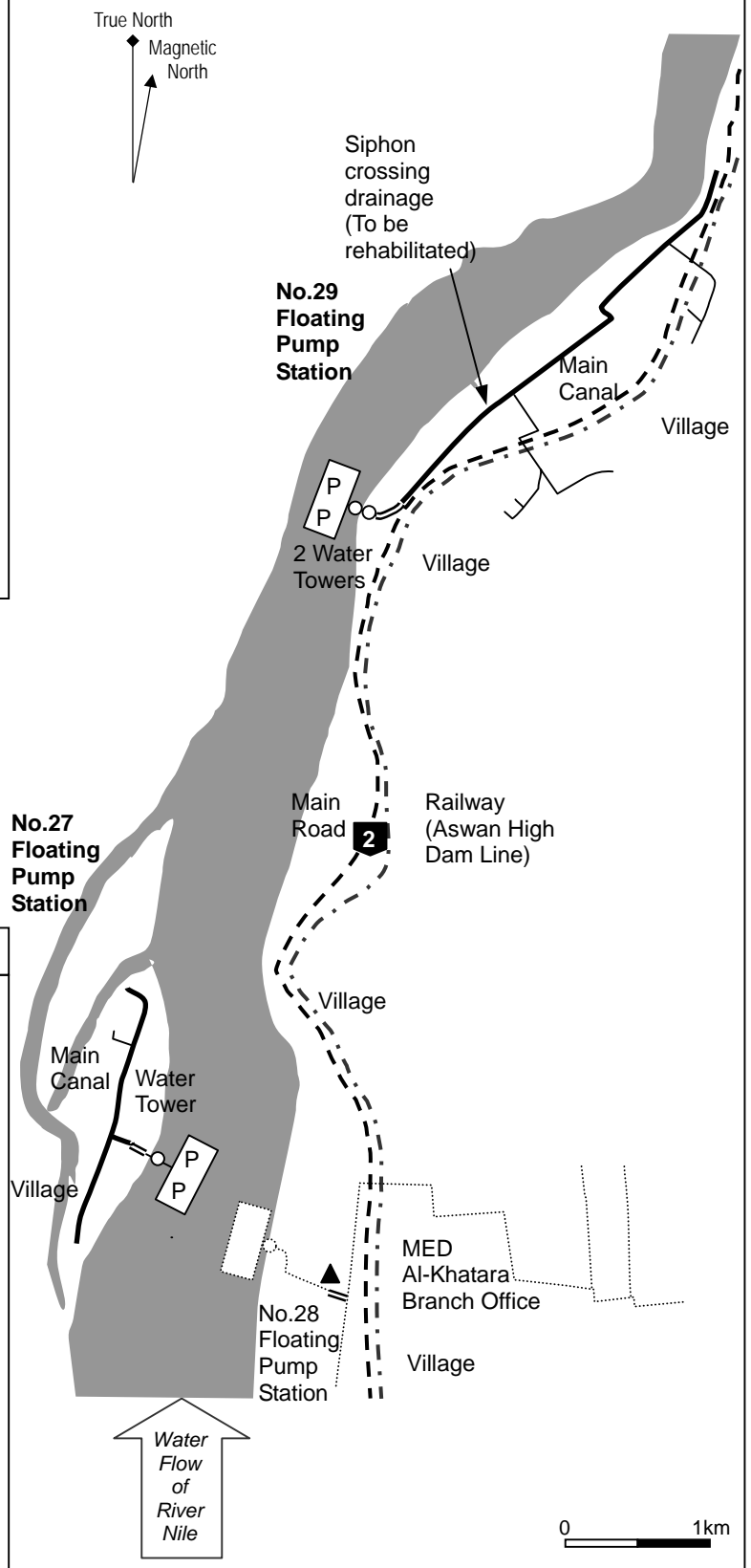
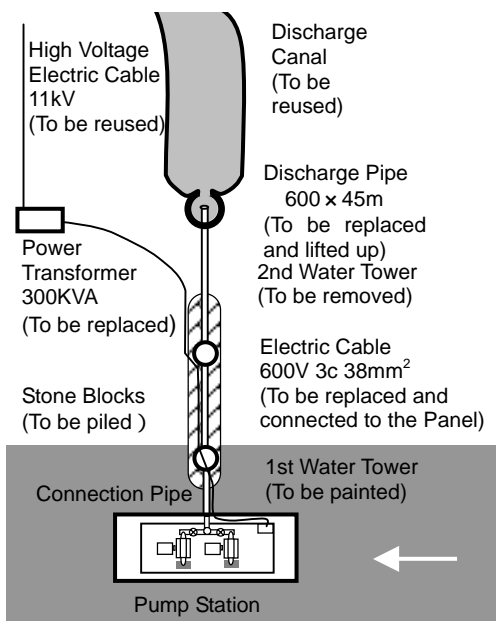
B . 灌溉施設計画図

No.27 Gezerat El-Kobania Kebly Pump Station and
 No.29 Sahel El-Akab Bahary Pump Station
 (Floating Pump Type for No.27 and No.29)

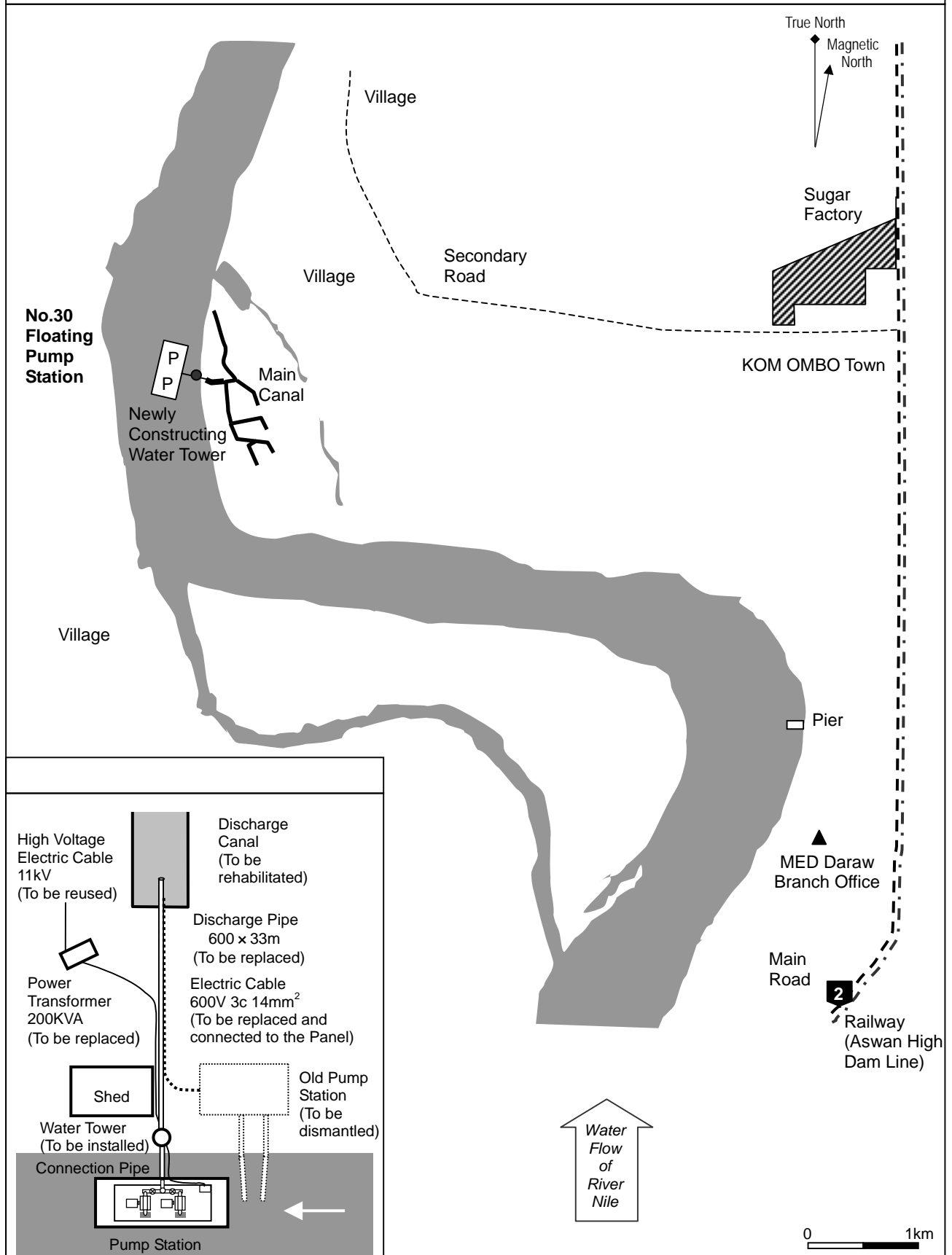
Work Plan for No.27 Pump Station



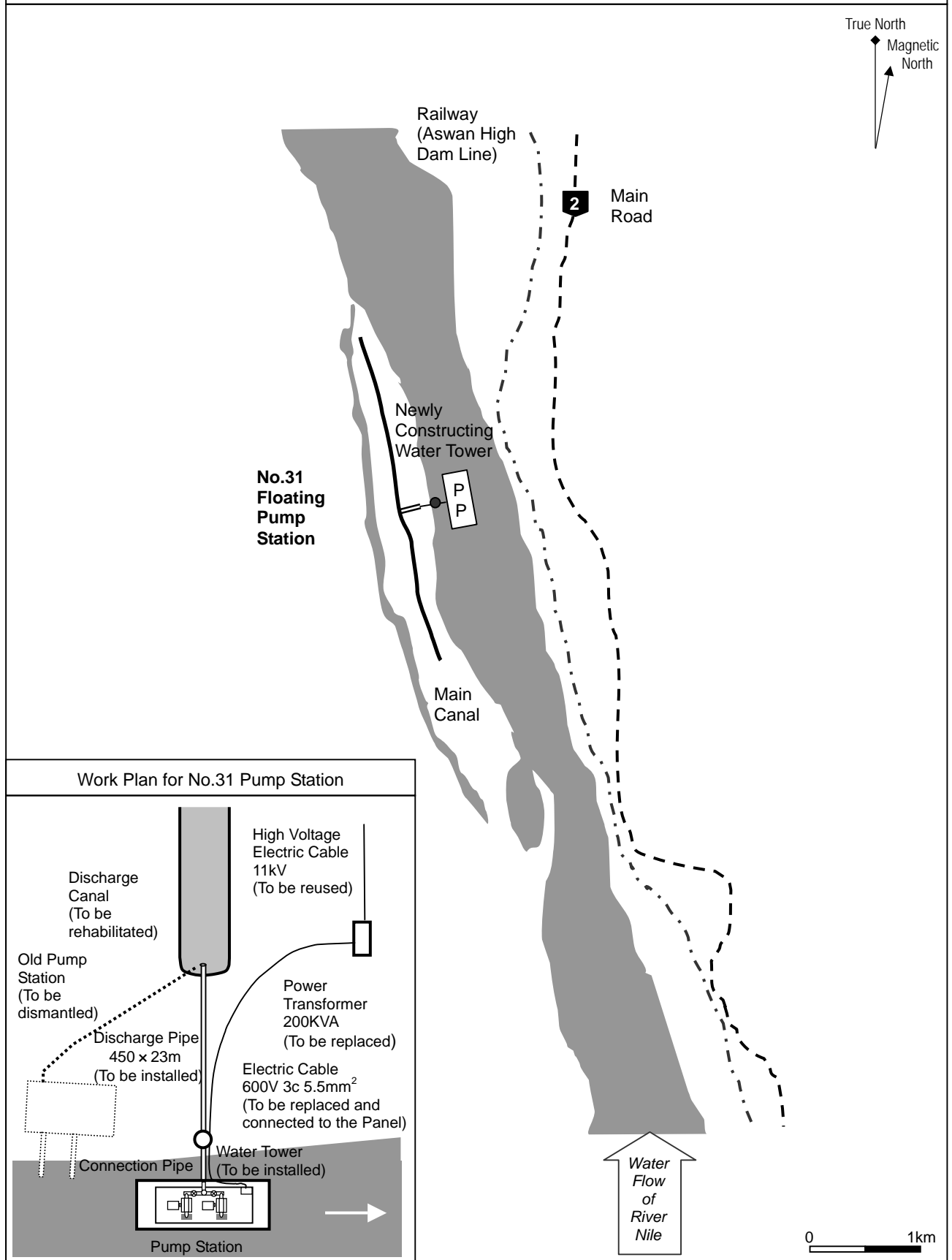
Work Plan for No.29 Pump Station



No.30 Gezeret Maneha Pump Station (Floating Pump Type)



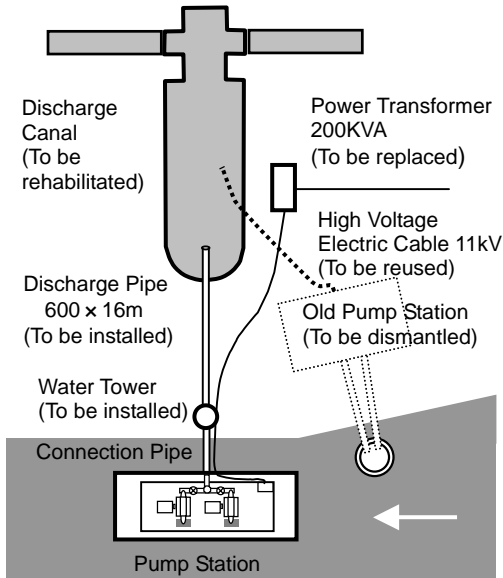
No.31 El-Sarag Pump Station (Floating Pump Type)



No.32 Gezeret El-Fawaza El-Keblia Pump Station and No.33 Middle Fawaza Pump Station

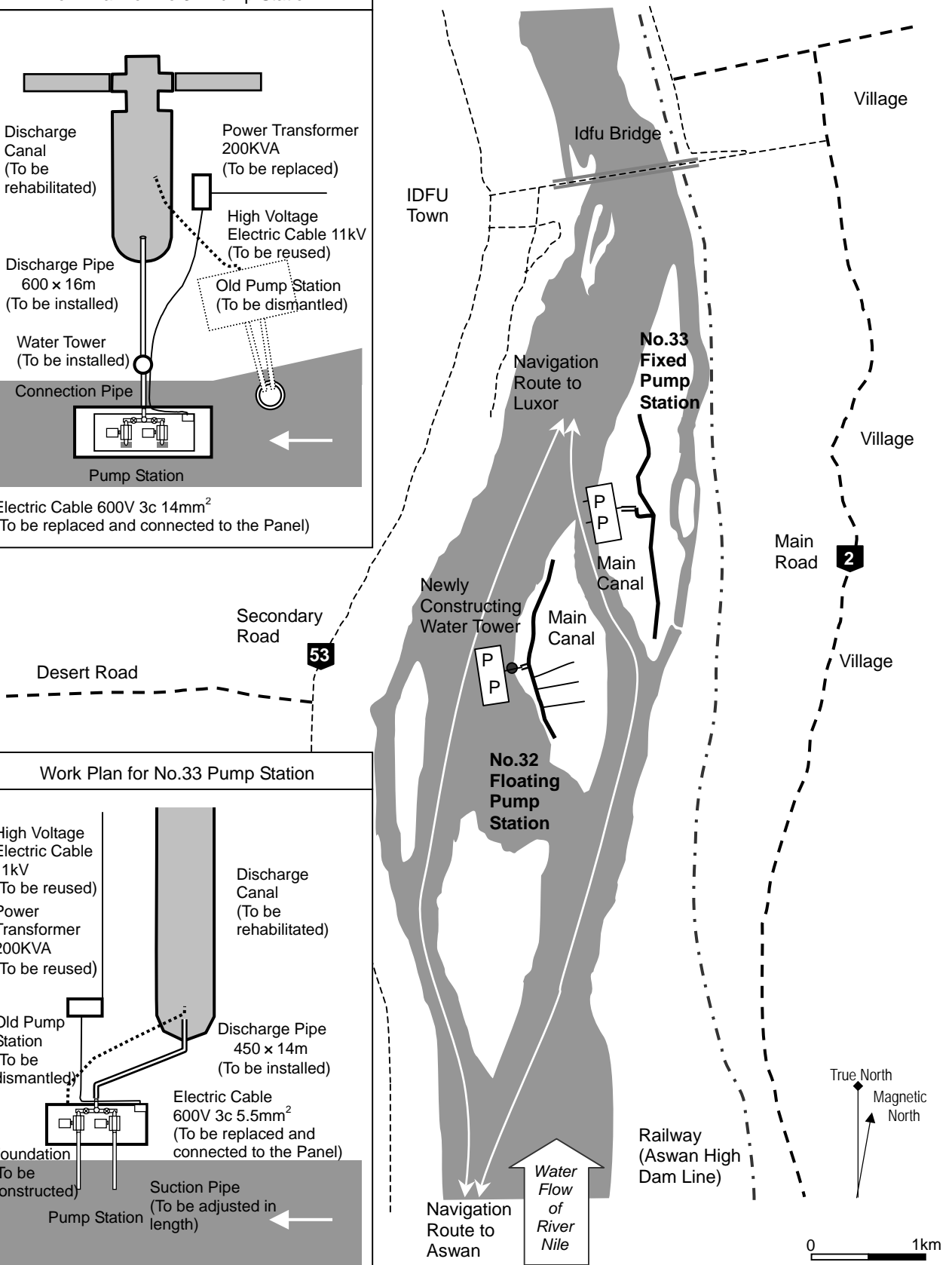
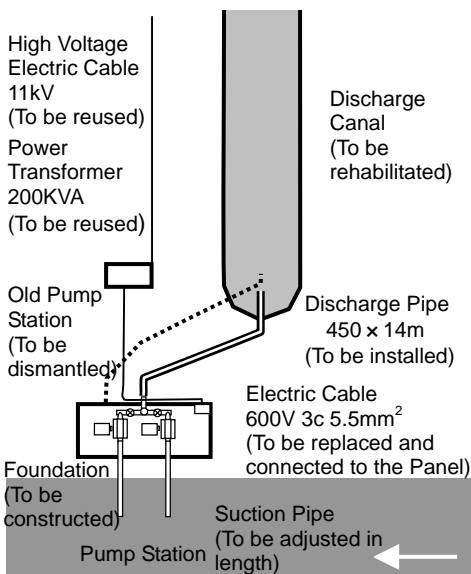
(Floating Pump Type for No.32 and Fixed Pump Type for No.33)

Work Plan for No.32 Pump Station

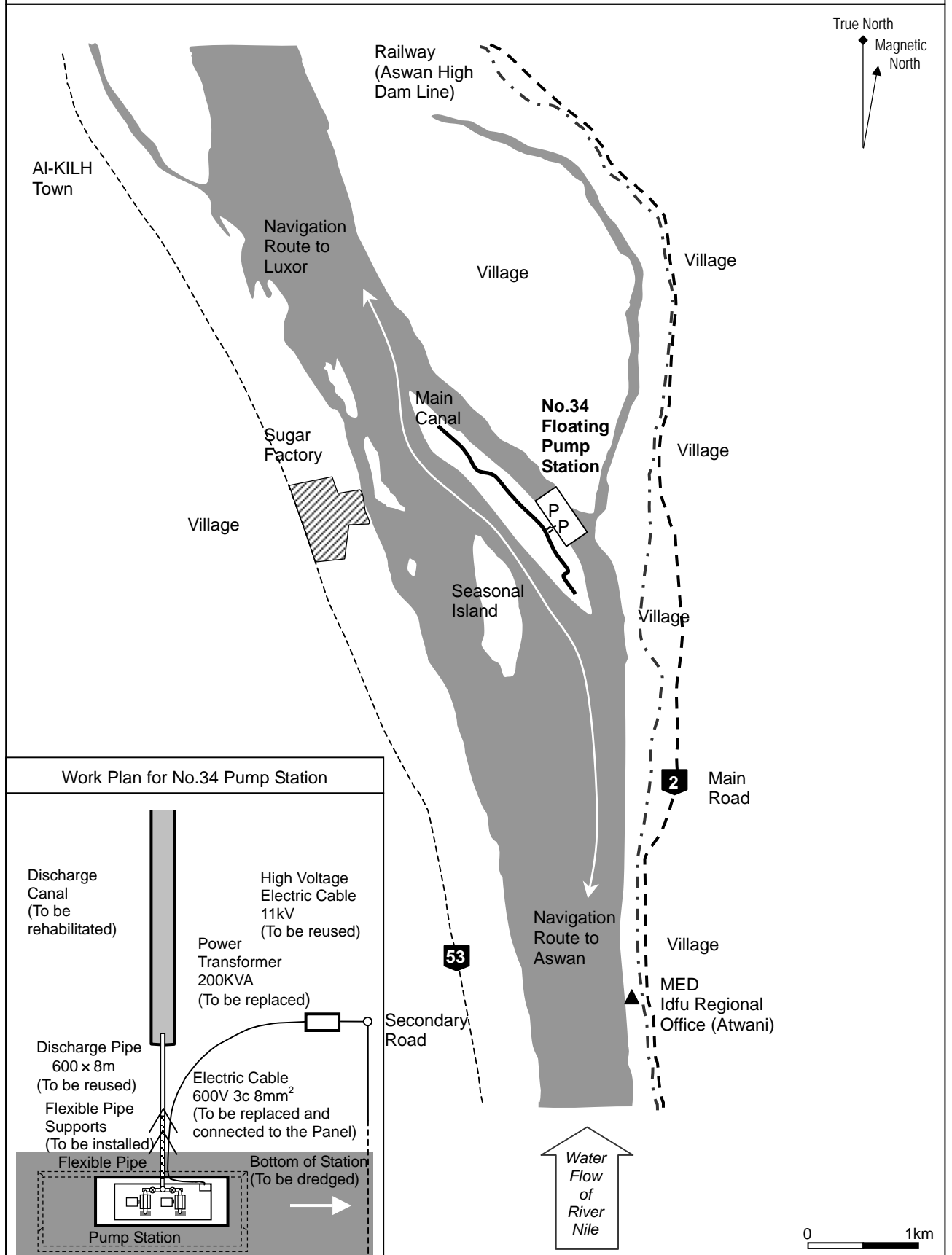


Electric Cable 600V 3c 14mm²
(To be replaced and connected to the Panel)

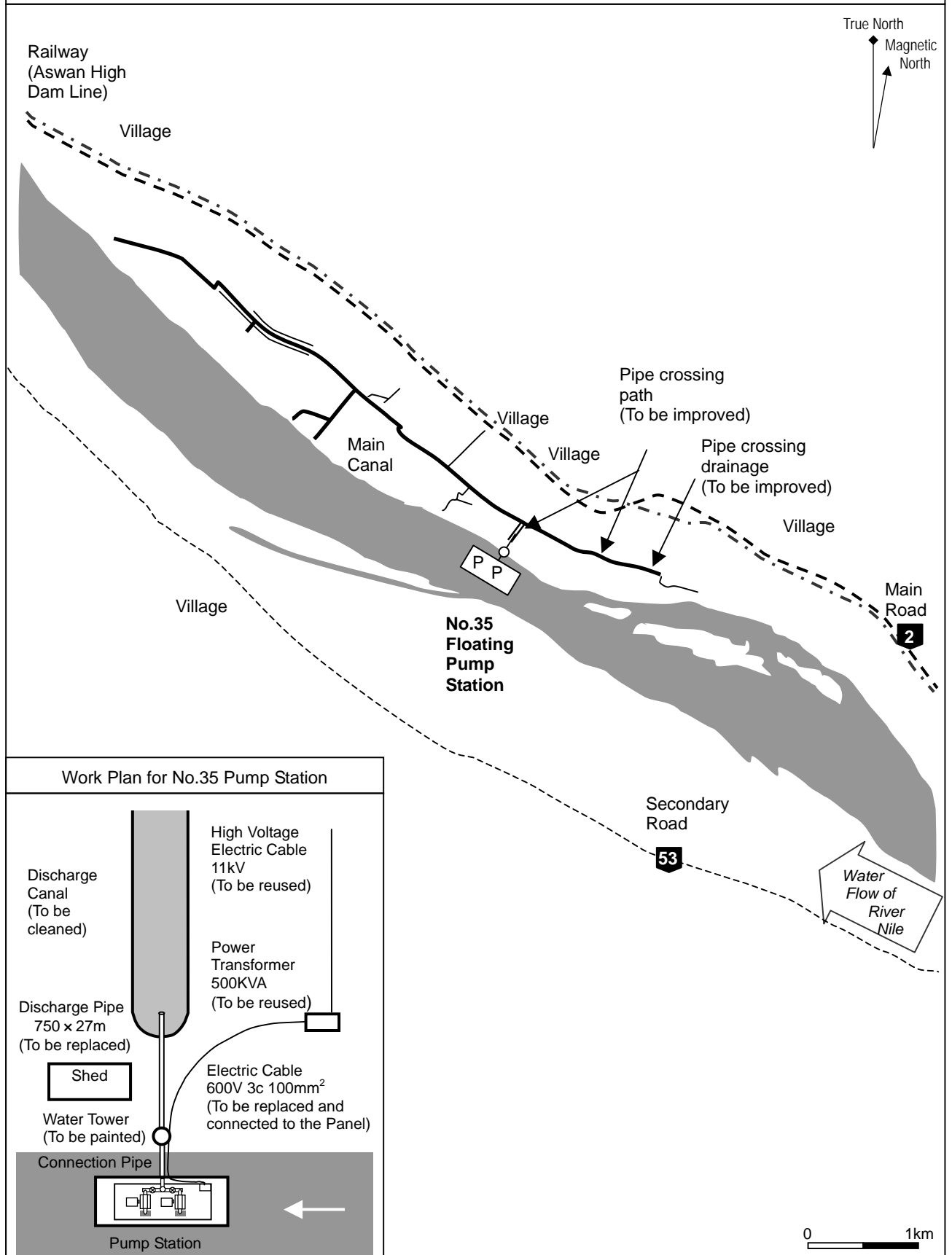
Work Plan for No.33 Pump Station



No.34 Gezerat Abo Arafa Pump Station (Floating Pump Type)



No.35 El-Hegs El-Mostagda Pump Station (Floating Pump Type)



C. 計画月別用水量

Table **Cropping Area (%) for Each Crop (Present)** No.27 Gezeret El-Kobania Kebly
 Location: **No.27 Gezeret El-Kobania Kebly** (Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 31.3 | 31.3 | 31.3 | 31.3 | | | | | | | | 31.3 | 31.3 |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | | | | | | | | | | | | | |
| Berseem(Fodder) | 18.8 | 18.8 | | | | | | | | | | 18.8 | 18.8 |
| Flax | | | | | | | | | | | | | |
| Onion | 12.5 | 12.5 | 12.5 | 12.5 | | | | | | | | 12.5 | 12.5 |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 6.3 | 6.3 | 6.3 | | | | | | | | | 6.3 | 6.3 |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 68.9 | 68.9 | 68.9 | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 |
| Berseem(Fodder) | | | | | | | | | | 68.9 | 68.9 | 68.9 | |
| Total | 100.0 | 100.0 | 81.2 | 74.9 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

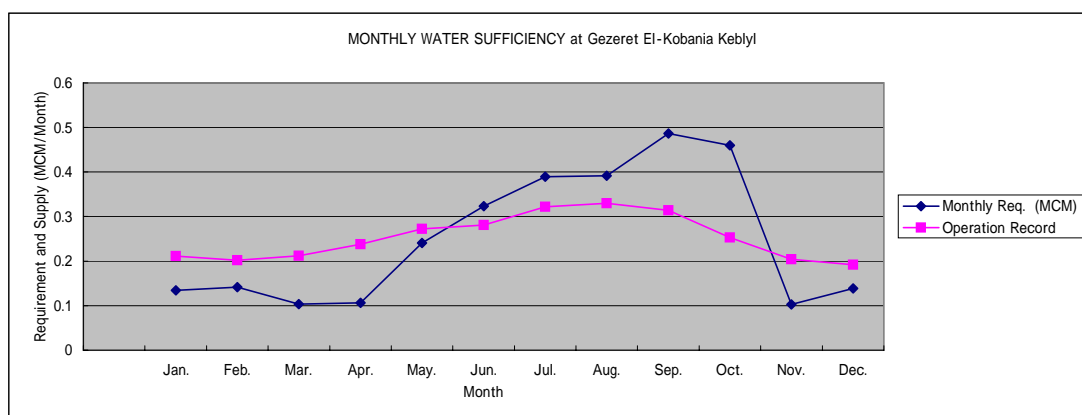
Table
Location: **Consumptive Use of Each Crop (Present)**
No.27 Gezeret El-Kobania Kebly

(Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 0.252 | 0.284 | 0.258 | 0.262 | | | | | | | 0.144 | 0.292 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | | | | | | | | | | | | | |
| Berseem(Fodder) | 0.093 | 0.150 | | | | | | | | | 0.085 | 0.093 | |
| Flax | | | | | | | | | | | | | |
| Onion | 0.123 | 0.137 | 0.127 | 0.119 | | | | | | | 0.086 | 0.095 | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 0.073 | 0.091 | 0.012 | | | | | | | | 0.046 | 0.056 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 1.019 | 1.418 | 1.720 | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.139 | 0.136 | 0.125 | 0.177 | 0.210 | 0.286 | 0.270 | 0.261 | 0.253 | 0.237 | 0.177 | 0.169 | |
| Berseem(Fodder) | | | | | | | | 1.740 | 2.313 | 2.113 | | | |
| Total | 0.681 | 0.797 | 0.522 | 0.558 | 1.228 | 1.704 | 1.990 | 2.001 | 2.567 | 2.350 | 0.539 | 0.704 | |

Table
Location: **Monthly Water Requirement (Present)**
No.27 Gezeret El-Kobania Kebly

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| (l/s/feddan) | 0.681 | 0.797 | 0.522 | 0.558 | 1.228 | 1.704 | 1.990 | 2.001 | 2.567 | 2.350 | 0.539 | 0.704 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (175 feddan) | | | | | | | | | | | | | |
| Existing 175 | 0.12 | 0.14 | 0.09 | 0.10 | 0.21 | 0.30 | 0.35 | 0.35 | 0.45 | 0.41 | 0.09 | 0.12 | |
| Extension 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Total Requirement | 0.12 | 0.14 | 0.09 | 0.10 | 0.21 | 0.30 | 0.35 | 0.35 | 0.45 | 0.41 | 0.09 | 0.12 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement | 0.12 | 0.14 | 0.09 | 0.10 | 0.22 | 0.30 | 0.35 | 0.35 | 0.45 | 0.41 | 0.10 | 0.12 | Annual Ttl. |
| Monthly Req. (MCM) | 0.134 | 0.142 | 0.103 | 0.107 | 0.241 | 0.323 | 0.390 | 0.392 | 0.486 | 0.460 | 0.103 | 0.139 | 3.019 |
| Operation Record | 0.211 | 0.202 | 0.212 | 0.238 | 0.272 | 0.281 | 0.322 | 0.330 | 0.314 | 0.253 | 0.204 | 0.192 | 3.031 |



Table

Cropping Area (%) for Each Crop (Plan)

No.27 Gezeret El-Kobania Kebly

Location:

No.27 Gezeret El-Kobania Kebly

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 31.3 | 31.3 | 31.3 | 31.3 | | | | | | | 31.3 | 31.3 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.6 |
| Berseem(Fodder) | 18.8 | 18.8 | | | | | | | | | 18.8 | 18.8 | |
| Flax | | | | | | | | | | | | | |
| Onion | 12.5 | 12.5 | 12.5 | 12.5 | | | | | | | 12.5 | 12.5 | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 6.3 | 6.3 | 6.3 | | | | | | | | 6.3 | 6.3 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 68.9 | 68.9 | 68.9 | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 |
| Berseem(Fodder) | | | | | | | | 68.9 | 68.9 | 68.9 | | | |
| Total | 115.6 | 115.6 | 96.8 | 90.5 | 115.6 | 115.6 | 115.6 | 115.6 | 115.6 | 115.6 | 115.6 | 115.6 | 115.6 |

Table **Consumptive Use of Each Crop (Plan)** 0.5 10 1
 Location: **No.27 Gezeret El-Kobania Kebly** (Unit : liter/sec/ feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 0.252 | 0.284 | 0.258 | 0.262 | | | | | | | 0.144 | 0.292 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.226 | 0.285 | 0.240 | 0.237 | 0.252 | 0.274 | 0.260 | 0.140 | 0.263 | 0.224 | 0.173 | 0.165 | |
| Berseem(Fodder) | 0.093 | 0.150 | | | | | | | | | 0.085 | 0.093 | |
| Flax | | | | | | | | | | | | | |
| Onion | 0.123 | 0.137 | 0.127 | 0.119 | | | | | | | 0.086 | 0.095 | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 0.073 | 0.091 | 0.012 | | | | | | | | 0.046 | 0.056 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 1.019 | 1.418 | 1.720 | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.139 | 0.136 | 0.125 | 0.177 | 0.210 | 0.286 | 0.270 | 0.261 | 0.253 | 0.237 | 0.177 | 0.169 | |
| Berseem(Fodder) | | | | | | | | 1.740 | 2.313 | 2.113 | | | |
| Total | 0.907 | 1.082 | 0.763 | 0.795 | 1.480 | 1.978 | 2.250 | 2.141 | 2.830 | 2.573 | 0.712 | 0.869 | |

Table **Monthly Water Requirement (Plan)**
 Location: **No.27 Gezeret El-Kobania Kebly**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| (l/s/feddan) | 0.907 | 1.082 | 0.763 | 0.795 | 1.480 | 1.978 | 2.250 | 2.141 | 2.830 | 2.573 | 0.712 | 0.869 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (175 feddan) | | | | | | | | | | | | | |
| Existing 175 | 0.16 | 0.19 | 0.13 | 0.14 | 0.26 | 0.35 | 0.39 | 0.37 | 0.50 | 0.45 | 0.12 | 0.15 | |
| Extension 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Total Requirement | 0.16 | 0.19 | 0.13 | 0.14 | 0.26 | 0.35 | 0.39 | 0.37 | 0.50 | 0.45 | 0.12 | 0.15 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement | 0.16 | 0.19 | 0.13 | 0.14 | 0.26 | 0.35 | 0.39 | 0.38 | 0.50 | 0.45 | 0.13 | 0.15 | Annual Ttl. |
| Monthly Req. (MCM) | 0.178 | 0.192 | 0.150 | 0.151 | 0.290 | 0.375 | 0.440 | 0.419 | 0.536 | 0.504 | 0.136 | 0.171 | 3.542 |

Operation Record

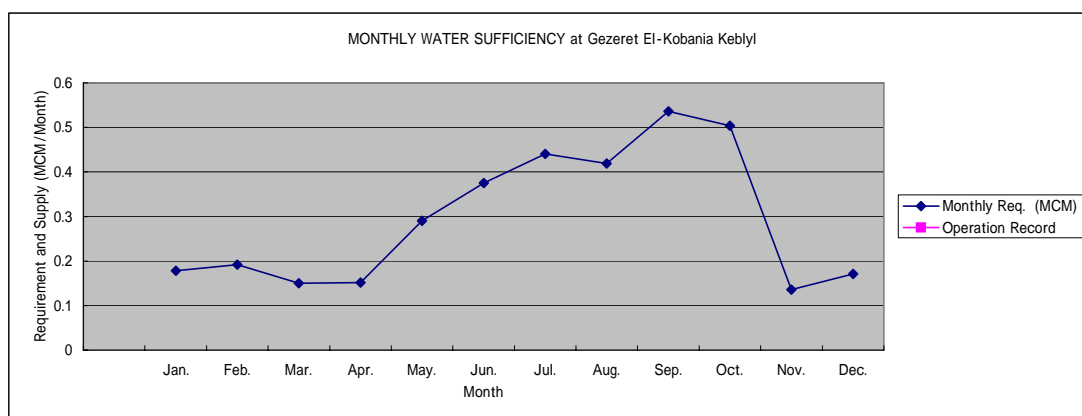


Table Cropping Area (%) for Each Crop (Present)

No.29 Sahal El-Akab Bahary

Location: No.29 Sahal El-Akab Bahary

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 13.7 | 13.7 | 13.7 | 13.7 | | | | | | | 13.7 | 13.7 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| Berseem(Fodder) | 33.7 | 33.7 | | | | | | | | | 33.7 | 33.7 | |
| Flax | | | | | | | | | | | | | |
| Onion | 5.1 | 5.1 | 5.1 | 5.1 | | | | | | | 5.1 | 5.1 | |
| Garlic | 0.6 | 0.6 | 0.6 | 0.6 | | | | | | 0.6 | 0.6 | 0.6 | |
| Vegetables | 4.6 | 4.6 | 4.6 | | | | | | | 4.6 | 4.6 | 4.6 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | | | |
| Sorghum | | | | | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 6.9 | 6.9 | 6.9 | 6.9 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 117.7 | 117.7 | 84.0 | 79.4 | 81.8 | 117.8 | 117.8 | 117.8 | 110.9 | 101.2 | 117.7 | 117.7 | |

Table **Consumptive Use of Each Crop (Present)** 0.5 12 1.0
 Location: **No.29 Sahal El-Akab Bahary** (Unit : liter/sec/ feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 0.092 | 0.104 | 0.094 | 0.096 | | | | | | | 0.053 | 0.106 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.242 | 0.304 | 0.257 | 0.253 | 0.269 | 0.293 | 0.278 | 0.149 | 0.281 | 0.239 | 0.185 | 0.176 | |
| Berseem(Fodder) | 0.138 | 0.224 | | | | | | | | | 0.127 | 0.138 | |
| Flax | | | | | | | | | | | | | |
| Onion | 0.042 | 0.046 | 0.043 | 0.041 | | | | | | | 0.029 | 0.032 | |
| Garlic | 0.003 | 0.004 | 0.004 | 0.003 | | | | | | 0.006 | 0.008 | 0.009 | |
| Vegetables | 0.045 | 0.055 | 0.007 | | | | | | | 0.025 | 0.028 | 0.034 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.235 | 0.433 | 0.403 | 0.477 | 0.247 | | | |
| Sorghum | | | | | 0.055 | 0.159 | 0.223 | 0.165 | 0.032 | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 0.085 | 0.118 | 0.144 | 0.072 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.149 | 0.146 | 0.134 | 0.190 | 0.225 | 0.307 | 0.289 | 0.280 | 0.272 | 0.254 | 0.190 | 0.181 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.711 | 0.883 | 0.540 | 0.583 | 0.633 | 1.112 | 1.366 | 1.069 | 1.062 | 0.770 | 0.621 | 0.677 | |

Table **Monthly Water Requirement (Present)**
 Location: **No.29 Sahal El-Akab Bahary**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.711 | 0.883 | 0.540 | 0.583 | 0.633 | 1.112 | 1.366 | 1.069 | 1.062 | 0.770 | 0.621 | 0.677 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (440 feddan) | | | | | | | | | | | | | |
| Existing 440 | 0.31 | 0.39 | 0.24 | 0.26 | 0.28 | 0.49 | 0.60 | 0.47 | 0.47 | 0.34 | 0.27 | 0.30 | |
| Extension 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Total Requirement | 0.31 | 0.39 | 0.24 | 0.26 | 0.28 | 0.49 | 0.60 | 0.47 | 0.47 | 0.34 | 0.27 | 0.30 | |
| Village Water | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | |
| Total Requirement | 0.32 | 0.40 | 0.25 | 0.27 | 0.29 | 0.50 | 0.61 | 0.48 | 0.48 | 0.35 | 0.28 | 0.31 | Annual Ttl. |
| Monthly Req. (MCM) | 0.433 | 0.482 | 0.331 | 0.345 | 0.386 | 0.647 | 0.818 | 0.643 | 0.618 | 0.467 | 0.367 | 0.412 | 5.951 |
| Operation Record | 0.442 | 0.432 | 0.505 | 0.503 | 0.590 | 0.623 | 0.702 | 0.657 | 0.586 | 0.520 | 0.428 | 0.426 | 6.414 |

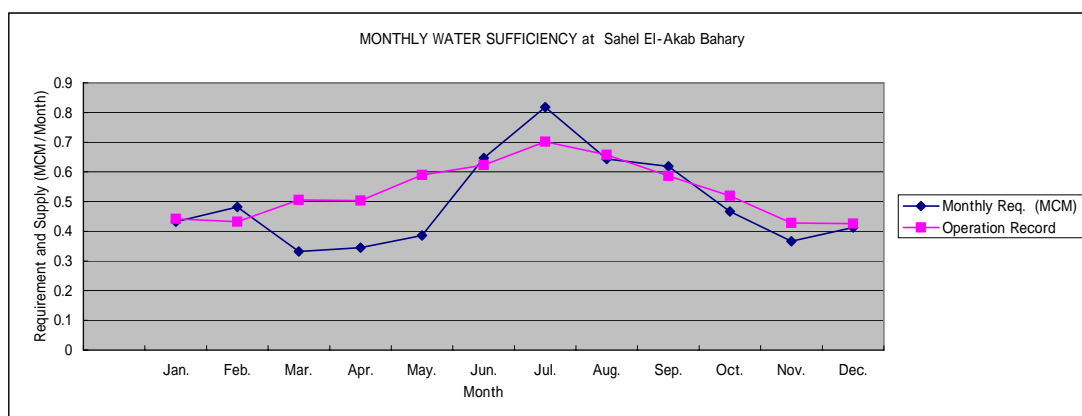


Table Cropping Area (%) for Each Crop (Plan)

No.29 Sahal El-Akab Bahary

Location:

No.29 Sahal El-Akab Bahary

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|-------|-------|-------|------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 13.7 | 13.7 | 13.7 | 13.7 | | | | | | | 13.7 | 13.7 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | |
| Berseem(Fodder) | 33.7 | 33.7 | | | | | | | | | 33.7 | 33.7 | |
| Flax | | | | | | | | | | | | | |
| Onion | 7.4 | 7.4 | 7.4 | 7.4 | | | | | | | 7.4 | 7.4 | |
| Garlic | 0.6 | 0.6 | 0.6 | 0.6 | | | | | | 0.6 | 0.6 | 0.6 | |
| Vegetables | 4.6 | 4.6 | 4.6 | | | | | | | 4.6 | 4.6 | 4.6 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 14.4 | 14.4 | 14.4 | 14.4 | 14.4 | | | |
| Sorghum | | | | | 14.9 | 14.9 | 14.9 | 14.9 | 14.9 | | | | |
| Soia Beans | | | | | 7.2 | 7.2 | 7.2 | 7.2 | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 21.3 | 21.3 | 21.3 | 21.3 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | 2.2 | 2.2 | 2.2 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 2.2 | 2.2 | 2.2 | | | |
| Fruits | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 120.0 | 120.0 | 86.3 | 81.7 | 105.6 | 120.0 | 120.0 | 120.0 | 91.5 | 81.8 | 120.0 | 120.0 | |

Table

Consumptive Use of Each Crop (Plan)

0.5 12

1.0

Location:

No.29 Sahal El-Akab Bahary

(Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 0.092 | 0.104 | 0.094 | 0.096 | | | | | | | 0.053 | 0.106 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.242 | 0.304 | 0.257 | 0.253 | 0.269 | 0.293 | 0.278 | 0.149 | 0.281 | 0.239 | 0.185 | 0.176 | |
| Berseem(Fodder) | 0.138 | 0.224 | | | | | | | | | 0.127 | 0.138 | |
| Flax | | | | | | | | | | | | | |
| Onion | 0.061 | 0.067 | 0.063 | 0.059 | | | | | | | 0.043 | 0.047 | |
| Garlic | 0.003 | 0.004 | 0.004 | 0.003 | | | | | | 0.006 | 0.008 | 0.009 | |
| Vegetables | 0.045 | 0.055 | 0.007 | | | | | | | 0.025 | 0.028 | 0.034 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.094 | 0.173 | 0.161 | 0.191 | 0.099 | | | |
| Sorghum | | | | | 0.055 | 0.159 | 0.223 | 0.165 | 0.032 | | | | |
| Soia Beans | | | | | 0.071 | 0.113 | 0.152 | 0.022 | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 0.262 | 0.365 | 0.443 | 0.221 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | 0.044 | 0.038 | 0.007 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 0.047 | 0.062 | 0.057 | | | |
| Fruits | 0.149 | 0.146 | 0.134 | 0.190 | 0.225 | 0.307 | 0.289 | 0.280 | 0.272 | 0.254 | 0.190 | 0.181 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.730 | 0.904 | 0.559 | 0.601 | 0.926 | 1.369 | 1.564 | 1.045 | 0.838 | 0.679 | 0.634 | 0.692 | |

Table

Monthly Water Requirement (Plan)

Location:

No.29 Sahal El-Akab Bahary

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|-------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.730 | 0.904 | 0.559 | 0.601 | 0.926 | 1.369 | 1.564 | 1.045 | 0.838 | 0.679 | 0.634 | 0.692 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (440 feddan) | | | | | | | | | | | | | |
| Existing 440 | 0.32 | 0.40 | 0.25 | 0.26 | 0.41 | 0.60 | 0.69 | 0.46 | 0.37 | 0.30 | 0.28 | 0.30 | |
| Extension 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Total Requirement | 0.32 | 0.40 | 0.25 | 0.26 | 0.41 | 0.60 | 0.69 | 0.46 | 0.37 | 0.30 | 0.28 | 0.30 | |
| Village Water | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | |
| Total Requirement (MCM) | 0.33 | 0.41 | 0.26 | 0.27 | 0.42 | 0.61 | 0.70 | 0.47 | 0.38 | 0.31 | 0.29 | 0.31 | Annual Ttl. |
| Monthly Req. (MCM) | 0.444 | 0.493 | 0.343 | 0.356 | 0.559 | 0.793 | 0.935 | 0.629 | 0.491 | 0.413 | 0.374 | 0.421 | 6.252 |

Operation Record

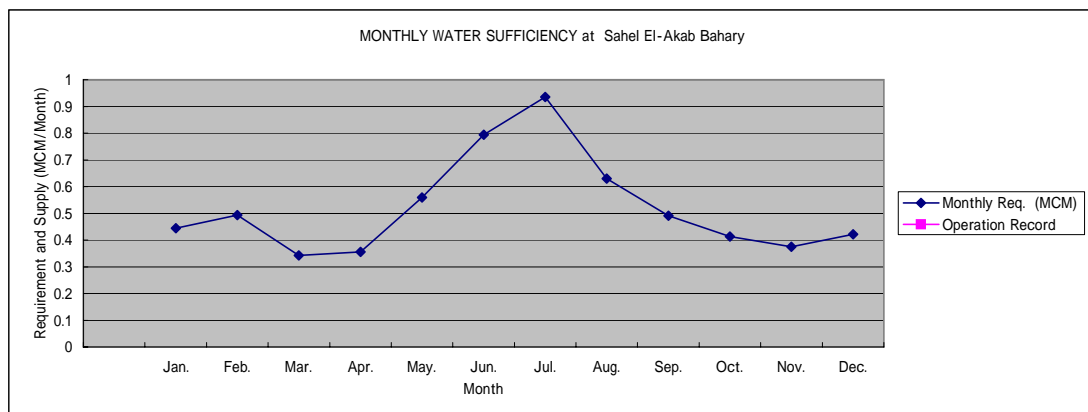


Table
Location: **Cropping Area (%) for Each Crop (Present)**
No.30 Gezeret Meneha (fixed)

No.30 Gezeret Meneha (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|-------|-------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 |
| Berseem(Fodder) | 15.4 | 15.4 | | | | | | | | | | 15.4 | 15.4 |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | 7.7 | 7.7 | 7.7 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 7.7 | 7.7 | 7.7 | | | |
| Fruits | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 116.9 | 116.9 | 101.5 | 101.5 | 109.2 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 | 116.9 |

Table **Consumptive Use of Each Crop (Present)** 0.5 9 1.0
 Location: **No.30 Gezeret Meneha (fixed)** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.272 | 0.343 | 0.289 | 0.285 | 0.303 | 0.330 | 0.313 | 0.168 | 0.316 | 0.269 | 0.209 | 0.199 | |
| Berseem(Fodder) | 0.084 | 0.136 | | | | | | | | | 0.078 | 0.084 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.067 | 0.123 | 0.115 | 0.136 | 0.070 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | 0.206 | 0.178 | 0.031 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 0.219 | 0.291 | 0.264 | | | |
| Fruits | 0.421 | 0.410 | 0.379 | 0.536 | 0.633 | 0.865 | 0.815 | 0.790 | 0.766 | 0.716 | 0.536 | 0.510 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.778 | 0.890 | 0.668 | 0.821 | 1.142 | 1.440 | 1.283 | 1.292 | 1.509 | 1.319 | 0.822 | 0.793 | |

Table **Monthly Water Requirement (Present)**
 Location: **No.30 Gezeret Meneha (fixed)**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.778 | 0.890 | 0.668 | 0.821 | 1.142 | 1.440 | 1.283 | 1.292 | 1.509 | 1.319 | 0.822 | 0.793 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (200 feddan) | | | | | | | | | | | | | |
| Existing 150 | 0.12 | 0.13 | 0.10 | 0.12 | 0.17 | 0.22 | 0.19 | 0.19 | 0.23 | 0.20 | 0.12 | 0.12 | |
| Extension 50 | 0.04 | 0.04 | 0.03 | 0.04 | 0.06 | 0.07 | 0.06 | 0.06 | 0.08 | 0.07 | 0.04 | 0.04 | |
| Total Requirement | 0.16 | 0.18 | 0.13 | 0.16 | 0.23 | 0.29 | 0.26 | 0.26 | 0.30 | 0.26 | 0.16 | 0.16 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement (MCM) | 0.16 | 0.18 | 0.13 | 0.17 | 0.23 | 0.29 | 0.26 | 0.26 | 0.30 | 0.26 | 0.17 | 0.16 | Annual Ttl. 2.528 |
| Monthly Req. (MCM) | 0.157 | 0.162 | 0.135 | 0.161 | 0.231 | 0.281 | 0.259 | 0.261 | 0.294 | 0.266 | 0.161 | 0.160 | 2.415 |
| Operation Record | 0.168 | 0.166 | 0.186 | 0.199 | 0.216 | 0.231 | 0.258 | 0.243 | 0.224 | 0.201 | 0.179 | 0.144 | 2.415 |

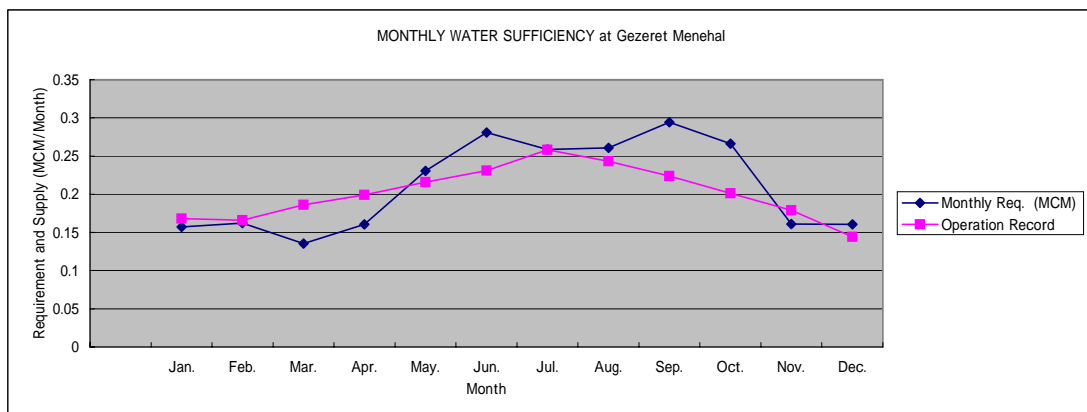


Table **Cropping Area (%) for Each Crop (Plan)**
 Location: **No.30 Gezeret Meneha (fixed)**

No.30 Gezeret Meneha (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|-------|-------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 |
| Berseem(Fodder) | 15.4 | 15.4 | | | | | | | | | | | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | 7.7 | 7.7 | 7.7 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 16.2 | 16.2 | 16.2 | | | |
| Fruits | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 | 84.6 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 116.9 | 116.9 | 101.5 | 101.5 | 109.2 | 116.9 | 116.9 | 125.4 | 125.4 | 125.4 | 116.9 | 116.9 | |

Table **Consumptive Use of Each Crop (Plan)** 0.5 7 1.0
 Location: **No.30 Gezeret Meneha (fixed)** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.350 | 0.441 | 0.372 | 0.367 | 0.389 | 0.425 | 0.402 | 0.216 | 0.407 | 0.346 | 0.268 | 0.255 | |
| Berseem(Fodder) | 0.108 | 0.175 | | | | | | | | | 0.100 | 0.108 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.086 | 0.159 | 0.148 | 0.175 | 0.090 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | 0.265 | 0.229 | 0.040 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 0.593 | 0.787 | 0.713 | | | |
| Fruits | 0.541 | 0.528 | 0.487 | 0.689 | 0.814 | 1.112 | 1.048 | 1.016 | 0.985 | 0.921 | 0.689 | 0.656 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 1.000 | 1.144 | 0.859 | 1.056 | 1.469 | 1.852 | 1.649 | 1.972 | 2.353 | 2.070 | 1.057 | 1.020 | |

Table **Monthly Water Requirement (Plan)**
 Location: **No.30 Gezeret Meneha (fixed)**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 1.000 | 1.144 | 0.859 | 1.056 | 1.469 | 1.852 | 1.649 | 1.972 | 2.353 | 2.070 | 1.057 | 1.020 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (200 feddan) | | | | | | | | | | | | | |
| Existing | 150 | 0.15 | 0.17 | 0.13 | 0.16 | 0.22 | 0.28 | 0.25 | 0.30 | 0.35 | 0.31 | 0.16 | 0.15 |
| Extension | 50 | 0.05 | 0.06 | 0.04 | 0.05 | 0.07 | 0.09 | 0.08 | 0.10 | 0.12 | 0.10 | 0.05 | 0.05 |
| Total Requirement | 0.20 | 0.23 | 0.17 | 0.21 | 0.29 | 0.37 | 0.33 | 0.39 | 0.47 | 0.41 | 0.21 | 0.20 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Total Requirement (MCM) | 0.20 | 0.23 | 0.17 | 0.21 | 0.29 | 0.37 | 0.33 | 0.40 | 0.47 | 0.42 | 0.21 | 0.20 | Annual Ttl. |
| Monthly Req. (MCM) | 0.157 | 0.162 | 0.135 | 0.160 | 0.230 | 0.281 | 0.258 | 0.309 | 0.357 | 0.324 | 0.161 | 0.160 | 2.695 |

Operation Record

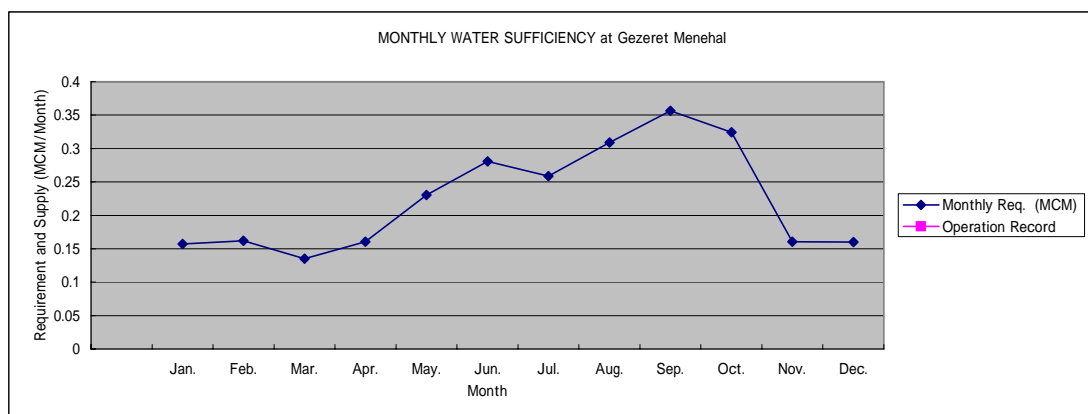


Table Cropping Area (%) for Each Crop (Present)

No.31 El-Sarag (fixed)

Location:

No.31 El-Sarag (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Berseem(Fodder) | 23.9 | 23.9 | | | | | | | | | | 23.9 | 23.9 |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 17.4 | 17.4 | 17.4 | 17.4 | 17.4 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 4.4 | 4.4 | 4.4 | 4.4 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 110.2 | 110.2 | 86.3 | 86.3 | 90.7 | 108.1 | 108.1 | 108.1 | 103.7 | 103.7 | 110.2 | 110.2 | |

Table **Consumptive Use of Each Crop (Present)**

0.5 12 1.0

Location: **No.31 El-Sarag (fixed)** (Unit : liter/sec/ feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.228 | 0.288 | 0.243 | 0.239 | 0.254 | 0.277 | 0.263 | 0.141 | 0.265 | 0.226 | 0.175 | 0.167 | |
| Berseem(Fodder) | 0.098 | 0.159 | | | | | | | | | 0.090 | 0.098 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.114 | 0.209 | 0.195 | 0.231 | 0.119 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | 0.010 | 0.017 | 0.017 | 0.024 | 0.052 | 0.061 | 0.081 | 0.088 | 0.078 | 0.061 | 0.047 | 0.024 | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 0.054 | 0.075 | 0.092 | 0.046 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.235 | 0.229 | 0.212 | 0.299 | 0.354 | 0.483 | 0.455 | 0.441 | 0.428 | 0.400 | 0.299 | 0.285 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.572 | 0.693 | 0.471 | 0.562 | 0.714 | 1.010 | 1.100 | 0.911 | 1.002 | 0.806 | 0.612 | 0.574 | |

Table **Monthly Water Requirement (Present)**

Location: **No.31 El-Sarag (fixed)**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.572 | 0.693 | 0.471 | 0.562 | 0.714 | 1.010 | 1.100 | 0.911 | 1.002 | 0.806 | 0.612 | 0.574 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (200 feddan) | | | | | | | | | | | | | |
| Existing 150 | 0.09 | 0.10 | 0.07 | 0.08 | 0.11 | 0.15 | 0.17 | 0.14 | 0.15 | 0.12 | 0.09 | 0.09 | |
| Extension 50 | 0.03 | 0.03 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.05 | 0.05 | 0.04 | 0.03 | 0.03 | |
| Total Requirement | 0.11 | 0.14 | 0.09 | 0.11 | 0.14 | 0.20 | 0.22 | 0.18 | 0.20 | 0.16 | 0.12 | 0.11 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement | 0.12 | 0.14 | 0.10 | 0.11 | 0.14 | 0.20 | 0.22 | 0.18 | 0.20 | 0.16 | 0.12 | 0.12 | Annual Ttl. |
| Monthly Req. (MCM) | 0.154 | 0.169 | 0.128 | 0.147 | 0.193 | 0.263 | 0.296 | 0.245 | 0.261 | 0.217 | 0.160 | 0.155 | 2.388 |
| Operation Record | 0.135 | 0.150 | 0.192 | 0.214 | 0.278 | 0.276 | 0.301 | 0.282 | 0.244 | 0.232 | 0.164 | 0.124 | 2.592 |

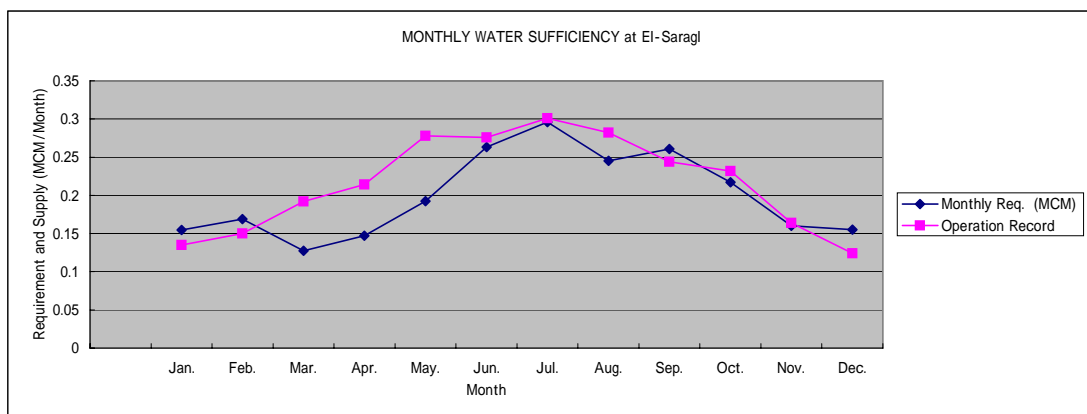


Table Cropping Area (%) for Each Crop (Plan)

No.31 El-Sarag (fixed)

Location:

No.31 El-Sarag (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Berseem(Fodder) | 23.9 | 23.9 | | | | | | | | | | 23.9 | 23.9 |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 17.4 | 17.4 | 17.4 | 17.4 | 17.4 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 4.4 | 4.4 | 4.4 | 4.4 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 12.6 | 12.6 | 12.6 | | | |
| Fruits | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 122.8 | 122.8 | 98.9 | 98.9 | 103.3 | 120.7 | 120.7 | 120.7 | 116.3 | 116.3 | 110.2 | 110.2 | |

Table **Consumptive Use of Each Crop (Plan)** 0.5 12 1.0
 Location: **No.31 EI-Sarag (fixed)** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.228 | 0.288 | 0.243 | 0.239 | 0.254 | 0.277 | 0.263 | 0.141 | 0.265 | 0.226 | 0.175 | 0.167 | |
| Berseem(Fodder) | 0.098 | 0.159 | | | | | | | | | 0.090 | 0.098 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.114 | 0.209 | 0.195 | 0.231 | 0.119 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | 0.010 | 0.017 | 0.017 | 0.024 | 0.052 | 0.061 | 0.081 | 0.088 | 0.078 | 0.061 | 0.047 | 0.024 | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | 0.054 | 0.075 | 0.092 | 0.046 | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | 0.103 | 0.116 | 0.205 | 0.231 | 0.253 | 0.218 | 0.038 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | 0.269 | 0.357 | 0.324 | | | |
| Fruits | 0.235 | 0.229 | 0.212 | 0.299 | 0.354 | 0.483 | 0.455 | 0.441 | 0.428 | 0.400 | 0.299 | 0.285 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.675 | 0.809 | 0.676 | 0.793 | 0.967 | 1.228 | 1.138 | 1.180 | 1.359 | 1.130 | 0.612 | 0.574 | |

Table **Monthly Water Requirement (Plan)**
 Location: **No.31 EI-Sarag (fixed)**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|-------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.675 | 0.809 | 0.676 | 0.793 | 0.967 | 1.228 | 1.138 | 1.180 | 1.359 | 1.130 | 0.612 | 0.574 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (200 feddan) | | | | | | | | | | | | | |
| Existing | 150 | 0.10 | 0.12 | 0.10 | 0.12 | 0.15 | 0.18 | 0.17 | 0.18 | 0.20 | 0.17 | 0.09 | 0.09 |
| Extension | 50 | 0.03 | 0.04 | 0.03 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.03 | 0.03 |
| Total Requirement | 0.14 | 0.16 | 0.14 | 0.16 | 0.19 | 0.25 | 0.23 | 0.24 | 0.27 | 0.23 | 0.12 | 0.11 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement | 0.14 | 0.16 | 0.14 | 0.16 | 0.19 | 0.25 | 0.23 | 0.24 | 0.27 | 0.23 | 0.12 | 0.12 | Annual Ttl. |
| Monthly Req. (MCM) | 0.182 | 0.197 | 0.182 | 0.207 | 0.260 | 0.320 | 0.306 | 0.317 | 0.353 | 0.304 | 0.160 | 0.155 | 2.944 |

Operation Record

0.000

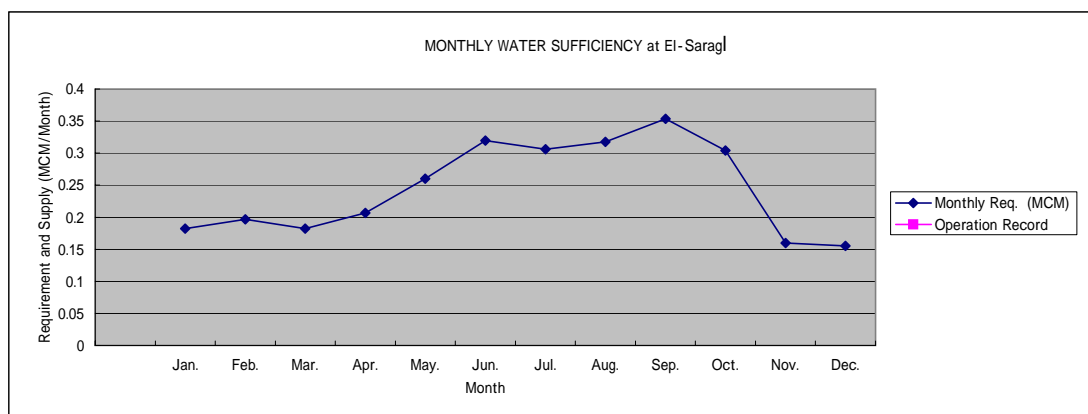


Table
Location: **Cropping Area (%) for Each Crop (Present)**
No.32 Gezeret El-Fawaza El-Keblia (fixed)

No.32 Gezeret El-Fawaza El-Keblia (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | | Summer Season | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|------|---------------|------|------|------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 |
| Berseem(Fodder) | 6.5 | 6.5 | | | | | | | | | | 6.5 | 6.5 |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 | 31.6 |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 | 42.3 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 100.0 | 100.0 | 93.5 | 93.5 | 93.5 | 93.5 | 93.5 | 93.5 | 93.5 | 93.5 | 100.0 | 100.0 | |

Table
 Location: **Consumptive Use of Each Crop (Present)**
No.32 Gezeret El-Fawaza El-Kebliia (fixed) (Unit : liter/sec/feddan) 0.5 10 1.0

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.284 | 0.358 | 0.302 | 0.298 | 0.316 | 0.345 | 0.327 | 0.176 | 0.330 | 0.281 | 0.218 | 0.207 | |
| Berseem(Fodder) | 0.032 | 0.052 | | | | | | | | | 0.029 | 0.032 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 0.091 | 0.154 | 0.147 | 0.211 | 0.453 | 0.527 | 0.702 | 0.765 | 0.673 | 0.566 | 0.410 | 0.215 | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.190 | 0.185 | 0.171 | 0.241 | 0.285 | 0.389 | 0.367 | 0.356 | 0.345 | 0.322 | 0.241 | 0.230 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.596 | 0.748 | 0.620 | 0.750 | 1.054 | 1.261 | 1.396 | 1.296 | 1.348 | 1.169 | 0.898 | 0.684 | |

Table
 Location: **Monthly Water Requirement (Present)**
No.32 Gezeret El-Fawaza El-Kebliia (fixed)

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.596 | 0.748 | 0.620 | 0.750 | 1.054 | 1.261 | 1.396 | 1.296 | 1.348 | 1.169 | 0.898 | 0.684 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (250 feddan) | | | | | | | | | | | | | |
| Existing 200 | 0.12 | 0.15 | 0.12 | 0.15 | 0.21 | 0.25 | 0.28 | 0.26 | 0.27 | 0.23 | 0.18 | 0.14 | |
| Extension 50 | 0.03 | 0.04 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.06 | 0.07 | 0.06 | 0.04 | 0.03 | |
| Total Requirement | 0.15 | 0.19 | 0.15 | 0.19 | 0.26 | 0.32 | 0.35 | 0.32 | 0.34 | 0.29 | 0.22 | 0.17 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement | 0.15 | 0.19 | 0.16 | 0.19 | 0.26 | 0.32 | 0.35 | 0.32 | 0.34 | 0.29 | 0.23 | 0.17 | Annual Ttl. |
| Monthly Req. (MCM) | 0.167 | 0.189 | 0.174 | 0.203 | 0.295 | 0.341 | 0.391 | 0.363 | 0.365 | 0.327 | 0.244 | 0.192 | 3.252 |
| Operation Record | 0.176 | 0.186 | 0.212 | 0.258 | 0.310 | 0.328 | 0.374 | 0.337 | 0.314 | 0.275 | 0.218 | 0.171 | 3.159 |

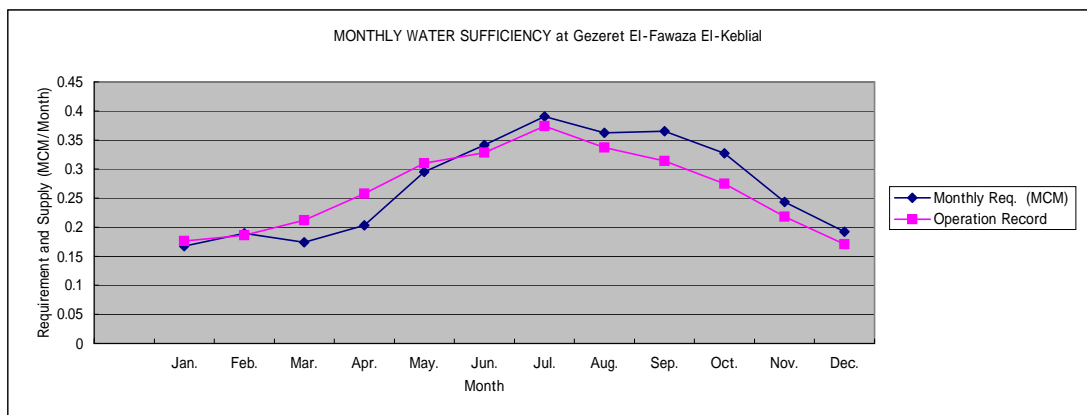


Table
Location: **Cropping Area (%) for Each Crop (Plan)**
No.32 Gezeret El-Fawaza El-Keblia (fixed)

No.32 Gezeret El-Fawaza El-Keblia (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 |
| Berseem(Fodder) | 6.5 | 6.5 | | | | | | | | | | 6.5 | 6.5 |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| Sesame | | | | | 26.1 | 26.1 | 26.1 | 26.1 | 26.1 | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 | 42.4 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 107.4 | 107.4 | 100.9 | 100.9 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 100.9 | 107.4 | 107.4 |

Table
 Location: **Consumptive Use of Each Crop (Plan)**
No.32 Gezeret El-Fawaza El-Kebliia (fixed) (Unit : liter/sec/feddan) 0.5 10 1.0

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.391 | 0.493 | 0.416 | 0.410 | 0.435 | 0.475 | 0.450 | 0.242 | 0.455 | 0.387 | 0.300 | 0.285 | |
| Berseem(Fodder) | 0.032 | 0.052 | | | | | | | | | 0.029 | 0.032 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 0.090 | 0.153 | 0.147 | 0.210 | 0.452 | 0.525 | 0.700 | 0.762 | 0.671 | 0.565 | 0.408 | 0.215 | |
| Sesame | | | | | 0.164 | 0.291 | 0.298 | 0.282 | 0.205 | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.190 | 0.185 | 0.171 | 0.242 | 0.286 | 0.390 | 0.368 | 0.356 | 0.345 | 0.323 | 0.242 | 0.230 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.704 | 0.883 | 0.734 | 0.862 | 1.337 | 1.682 | 1.815 | 1.642 | 1.677 | 1.275 | 0.980 | 0.762 | |

Table
 Location: **Monthly Water Requirement (Plan)**
No.32 Gezeret El-Fawaza El-Kebliia (fixed)

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|-------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.704 | 0.883 | 0.734 | 0.862 | 1.337 | 1.682 | 1.815 | 1.642 | 1.677 | 1.275 | 0.980 | 0.762 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (250 feddan) | | | | | | | | | | | | | |
| Existing 200 | 0.14 | 0.18 | 0.15 | 0.17 | 0.27 | 0.34 | 0.36 | 0.33 | 0.34 | 0.25 | 0.20 | 0.15 | |
| Extension 50 | 0.04 | 0.04 | 0.04 | 0.04 | 0.07 | 0.08 | 0.09 | 0.08 | 0.08 | 0.06 | 0.05 | 0.04 | |
| Total Requirement | 0.18 | 0.22 | 0.18 | 0.22 | 0.33 | 0.42 | 0.45 | 0.41 | 0.42 | 0.32 | 0.24 | 0.19 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement (MCM) | 0.18 | 0.22 | 0.18 | 0.22 | 0.34 | 0.42 | 0.45 | 0.41 | 0.42 | 0.32 | 0.25 | 0.19 | Annual Ttl. |
| Monthly Req. (MCM) | 0.197 | 0.224 | 0.206 | 0.234 | 0.374 | 0.455 | 0.508 | 0.459 | 0.454 | 0.357 | 0.266 | 0.214 | 3.946 |

Operation Record

0.000

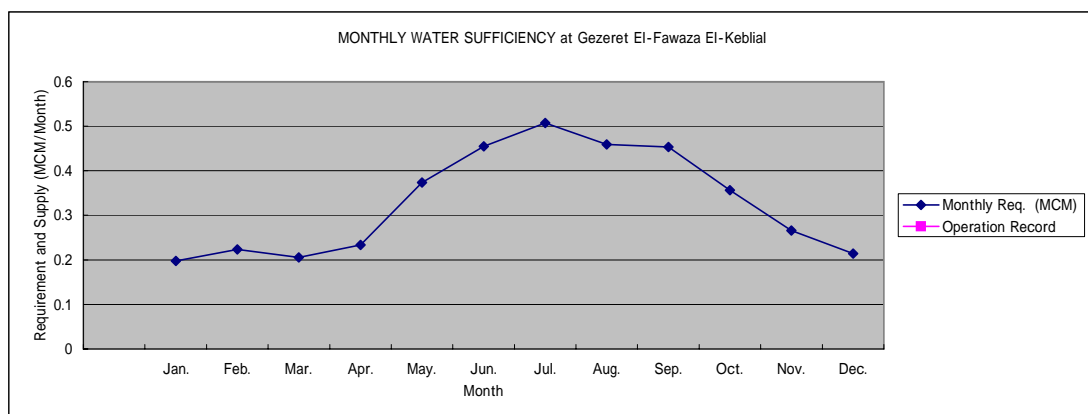


Table Cropping Area (%) for Each Crop (Present)

No.33 Middle Fawaza (fixed)

Location:

No.33 Middle Fawaza (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|------|------|------|---------------|------|------|------|------|---------------|------|------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | | | | | | | | | | | | | |
| Berseem(Fodder) | 4.6 | 4.6 | | | | | | | | | 4.6 | 4.6 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 97.8 | 97.8 | 93.2 | 93.2 | 93.2 | 95.5 | 95.5 | 93.2 | 93.2 | 93.2 | 95.5 | 95.5 | |

Table **Consumptive Use of Each Crop (Present)** 0.5 12 1.0
 Location: **No.33 Middle Fawaza (fixed)** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks | |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|--|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | | |
| Winter Season | | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | | |
| Clover | | | | | | | | | | | | | | |
| Berseem(Fodder) | 0.019 | 0.031 | | | | | | | | | | 0.017 | 0.019 | |
| Flax | | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | | |
| Maize | | | | | | 0.015 | 0.028 | 0.026 | 0.030 | 0.016 | | | | |
| Sorghum | | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | | |
| Banana | 0.141 | 0.239 | 0.229 | 0.328 | 0.706 | 0.821 | 1.094 | 1.192 | 1.049 | 0.883 | 0.638 | 0.335 | | |
| Sesame | | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | | |
| Vegetables | 0.019 | 0.021 | 0.037 | 0.042 | 0.046 | 0.040 | 0.007 | | | | | | | |
| Corn | | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | | |
| Fruits | 0.119 | 0.116 | 0.107 | 0.151 | 0.179 | 0.244 | 0.230 | 0.223 | 0.216 | 0.202 | 0.151 | 0.144 | | |
| Berseem(Fodder) | | | | | | | | | | | | | | |
| Total | 0.298 | 0.407 | 0.374 | 0.522 | 0.931 | 1.120 | 1.359 | 1.440 | 1.295 | 1.100 | 0.807 | 0.498 | | |

Table **Monthly Water Requirement (Present)**
 Location: **No.33 Middle Fawaza (fixed)**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.298 | 0.407 | 0.374 | 0.522 | 0.931 | 1.120 | 1.359 | 1.440 | 1.295 | 1.100 | 0.807 | 0.498 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (210 feddan) | | | | | | | | | | | | | |
| Existing 150 | 0.04 | 0.06 | 0.06 | 0.08 | 0.14 | 0.17 | 0.20 | 0.22 | 0.19 | 0.17 | 0.12 | 0.07 | |
| Extension 60 | 0.02 | 0.02 | 0.02 | 0.03 | 0.06 | 0.07 | 0.08 | 0.09 | 0.08 | 0.07 | 0.05 | 0.03 | |
| Total Requirement | 0.06 | 0.09 | 0.08 | 0.11 | 0.20 | 0.24 | 0.29 | 0.30 | 0.27 | 0.23 | 0.17 | 0.10 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement (MCM) | 0.06 | 0.09 | 0.08 | 0.11 | 0.20 | 0.24 | 0.29 | 0.30 | 0.27 | 0.23 | 0.17 | 0.11 | Annual Ttl. |
| Monthly Req. (MCM) | 0.085 | 0.105 | 0.106 | 0.143 | 0.263 | 0.306 | 0.384 | 0.406 | 0.354 | 0.311 | 0.221 | 0.141 | 2.825 |
| Operarion Record | 0.123 | 0.125 | 0.181 | 0.225 | 0.247 | 0.255 | 0.306 | 0.259 | 0.219 | 0.219 | 0.155 | 0.135 | 2.449 |

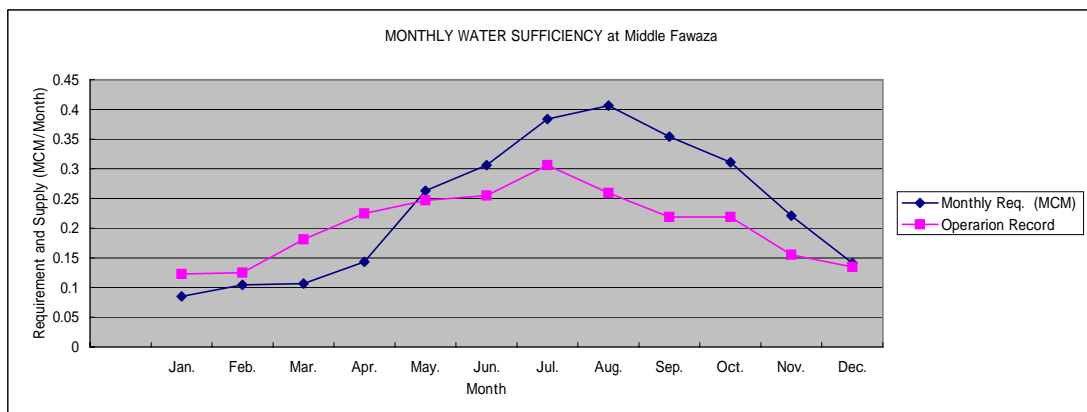


Table Cropping Area (%) for Each Crop (Plan)

No.33 Middle Fawaza (fixed)

Location:

No.33 Middle Fawaza (fixed)

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|------|------|------|---------------|------|------|------|------|---------------|------|------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | | | | | | | | | | | | | |
| Berseem(Fodder) | 4.6 | 4.6 | | | | | | | | | 4.6 | 4.6 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | 59.1 | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 97.8 | 97.8 | 93.2 | 93.2 | 93.2 | 95.5 | 95.5 | 93.2 | 93.2 | 93.2 | 95.5 | 95.5 | |

Table **Consumptive Use of Each Crop (Plan)** 0.5 12 1.0
 Location: **No.33 Middle Fawaza (fixed)** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | | | | | | | | | | | | | |
| Berseem(Fodder) | 0.019 | 0.031 | | | | | | | | | 0.017 | 0.019 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.015 | 0.028 | 0.026 | 0.030 | 0.016 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 0.141 | 0.239 | 0.229 | 0.328 | 0.706 | 0.821 | 1.094 | 1.192 | 1.049 | 0.883 | 0.638 | 0.335 | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | 0.019 | 0.021 | 0.037 | 0.042 | 0.046 | 0.040 | 0.007 | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.119 | 0.116 | 0.107 | 0.151 | 0.179 | 0.244 | 0.230 | 0.223 | 0.216 | 0.202 | 0.151 | 0.144 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.298 | 0.407 | 0.374 | 0.522 | 0.931 | 1.120 | 1.359 | 1.440 | 1.295 | 1.100 | 0.807 | 0.498 | |

Table **Monthly Water Requirement (Plan)**
 Location: **No.33 Middle Fawaza (fixed)**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.298 | 0.407 | 0.374 | 0.522 | 0.931 | 1.120 | 1.359 | 1.440 | 1.295 | 1.100 | 0.807 | 0.498 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (210 feddan) | | | | | | | | | | | | | |
| Existing 150 | 0.04 | 0.06 | 0.06 | 0.08 | 0.14 | 0.17 | 0.20 | 0.22 | 0.19 | 0.17 | 0.12 | 0.07 | |
| Extension 60 | 0.02 | 0.02 | 0.02 | 0.03 | 0.06 | 0.07 | 0.08 | 0.09 | 0.08 | 0.07 | 0.05 | 0.03 | |
| Total Requirement | 0.06 | 0.09 | 0.08 | 0.11 | 0.20 | 0.24 | 0.29 | 0.30 | 0.27 | 0.23 | 0.17 | 0.10 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement | 0.06 | 0.09 | 0.08 | 0.11 | 0.20 | 0.24 | 0.29 | 0.30 | 0.27 | 0.23 | 0.17 | 0.11 | Annual Ttl. |
| Monthly Req. (MCM) | 0.085 | 0.105 | 0.106 | 0.143 | 0.263 | 0.306 | 0.384 | 0.406 | 0.354 | 0.311 | 0.221 | 0.141 | 2.825 |

Operation Record

0.000

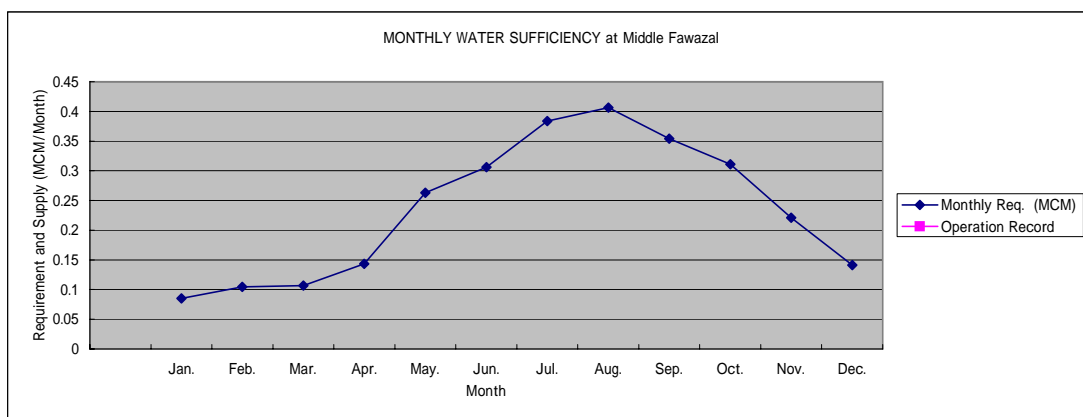


Table Cropping Area (%) for Each Crop (Present)

No.34 Gezeret Abo Arafa

Location: No.34 Gezeret Abo Arafa

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|-------|------|---------------|------|------|------|------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Flax | | | | | | | | | | | | | |
| Onion | 5.4 | 5.4 | 5.4 | 5.4 | | | | | | | 5.4 | 5.4 | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 0.5 | 0.5 | 0.5 | | | | | | | 0.5 | 0.5 | 0.5 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 100.0 | 100.0 | 100.0 | 99.5 | 94.1 | 94.1 | 94.1 | 94.1 | 94.1 | 94.6 | 100.0 | 100.0 | |

Table **Consumptive Use of Each Crop (Present)** 0.5 11 1.0
 Location: **No.34 Gezeret Abo Arafa** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.014 | 0.018 | 0.015 | 0.015 | 0.016 | 0.018 | 0.017 | 0.009 | 0.017 | 0.014 | 0.011 | 0.011 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Flax | | | | | | | | | | | | | |
| Onion | 0.048 | 0.054 | 0.050 | 0.047 | | | | | | | 0.034 | 0.037 | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 0.005 | 0.007 | 0.001 | | | | | | | 0.003 | 0.003 | 0.004 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 0.235 | 0.399 | 0.383 | 0.547 | 1.177 | 1.368 | 1.824 | 1.986 | 1.748 | 1.471 | 1.064 | 0.559 | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.011 | 0.011 | 0.010 | 0.014 | 0.017 | 0.023 | 0.021 | 0.021 | 0.020 | 0.019 | 0.014 | 0.013 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.315 | 0.488 | 0.459 | 0.623 | 1.210 | 1.408 | 1.862 | 2.016 | 1.785 | 1.507 | 1.126 | 0.624 | |

Table **Monthly Water Requirement (Present)**
 Location: **No.34 Gezeret Abo Arafa**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.315 | 0.488 | 0.459 | 0.623 | 1.210 | 1.408 | 1.862 | 2.016 | 1.785 | 1.507 | 1.126 | 0.624 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (180 feddan) | | | | | | | | | | | | | |
| Existing | 150 | 0.05 | 0.07 | 0.07 | 0.09 | 0.18 | 0.21 | 0.28 | 0.30 | 0.27 | 0.23 | 0.17 | 0.09 |
| Extension | 30 | 0.01 | 0.01 | 0.01 | 0.02 | 0.04 | 0.04 | 0.06 | 0.06 | 0.05 | 0.05 | 0.03 | 0.02 |
| Total Requirement | 0.06 | 0.09 | 0.08 | 0.11 | 0.22 | 0.25 | 0.34 | 0.36 | 0.32 | 0.27 | 0.20 | 0.11 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Total Requirement (MCM) | 0.06 | 0.09 | 0.08 | 0.11 | 0.22 | 0.25 | 0.34 | 0.36 | 0.32 | 0.27 | 0.20 | 0.11 | Annual Ttl. |
| Monthly Req. (MCM) | 0.071 | 0.099 | 0.103 | 0.134 | 0.269 | 0.302 | 0.413 | 0.447 | 0.383 | 0.334 | 0.242 | 0.139 | 2.935 |
| Operation Record | 0.092 | 0.101 | 0.117 | 0.129 | 0.175 | 0.187 | 0.219 | 0.248 | 0.199 | 0.192 | 0.156 | 0.084 | 1.899 |

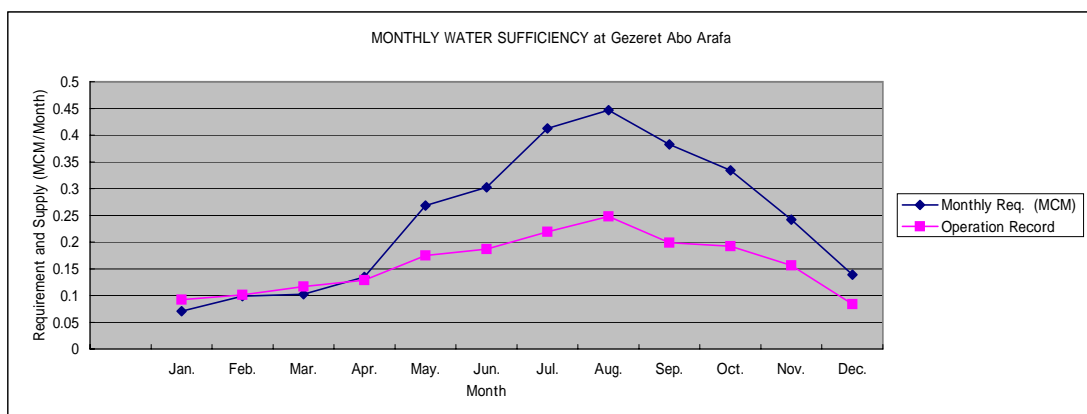


Table **Cropping Area (%) for Each Crop (Plan)**
 Location: **No.34 Gezeret Abo Arafa**

No.34 Gezeret Abo Arafa

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|-------|-------|---------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Flax | | | | | | | | | | | | | |
| Onion | 5.4 | 5.4 | 5.4 | 5.4 | | | | | | | | 5.4 | 5.4 |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 0.5 | 0.5 | 0.5 | | | | | | | | 0.5 | 0.5 | 0.5 |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | 23.3 | 23.3 | 23.3 | 23.3 | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 | 90.3 |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 109.3 | 109.3 | 109.3 | 108.8 | 126.7 | 126.7 | 126.7 | 126.7 | 103.4 | 103.9 | 109.3 | 109.3 | |

Table **Consumptive Use of Each Crop (Plan)**

0.5 11 1.0
(Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.137 | 0.173 | 0.146 | 0.144 | 0.152 | 0.166 | 0.158 | 0.085 | 0.159 | 0.136 | 0.105 | 0.100 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Flax | | | | | | | | | | | | | |
| Onion | 0.048 | 0.054 | 0.050 | 0.047 | | | | | | | 0.034 | 0.037 | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | 0.005 | 0.007 | 0.001 | | | | | | | 0.003 | 0.003 | 0.004 | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | 0.251 | 0.398 | 0.537 | 0.077 | | | | | |
| Sugarcane | | | | | | | | | | | | | |
| Banana | 0.235 | 0.399 | 0.383 | 0.547 | 1.177 | 1.368 | 1.824 | 1.986 | 1.748 | 1.471 | 1.064 | 0.559 | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.011 | 0.011 | 0.010 | 0.014 | 0.017 | 0.023 | 0.021 | 0.021 | 0.020 | 0.019 | 0.014 | 0.013 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.437 | 0.643 | 0.589 | 0.752 | 1.597 | 1.955 | 2.540 | 2.168 | 1.928 | 1.628 | 1.220 | 0.714 | |

Table **Monthly Water Requirement (Plan)**
Location: **No.34 Gezeret Abo Arafa**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.437 | 0.643 | 0.589 | 0.752 | 1.597 | 1.955 | 2.540 | 2.168 | 1.928 | 1.628 | 1.220 | 0.714 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (180 feddan) | | | | | | | | | | | | | |
| Existing 150 | 0.07 | 0.10 | 0.09 | 0.11 | 0.24 | 0.29 | 0.38 | 0.33 | 0.29 | 0.24 | 0.18 | 0.11 | |
| Extension 30 | 0.01 | 0.02 | 0.02 | 0.02 | 0.05 | 0.06 | 0.08 | 0.07 | 0.06 | 0.05 | 0.04 | 0.02 | |
| Total Requirement | 0.08 | 0.12 | 0.11 | 0.14 | 0.29 | 0.35 | 0.46 | 0.39 | 0.35 | 0.29 | 0.22 | 0.13 | |
| Village Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | |
| Total Requirement (MCM) | 0.08 | 0.12 | 0.11 | 0.14 | 0.29 | 0.35 | 0.46 | 0.39 | 0.35 | 0.29 | 0.22 | 0.13 | Annual Ttl. |
| Monthly Req. (MCM) | 0.098 | 0.129 | 0.131 | 0.162 | 0.354 | 0.419 | 0.563 | 0.480 | 0.413 | 0.361 | 0.262 | 0.159 | 3.532 |

Operation Record

0.000

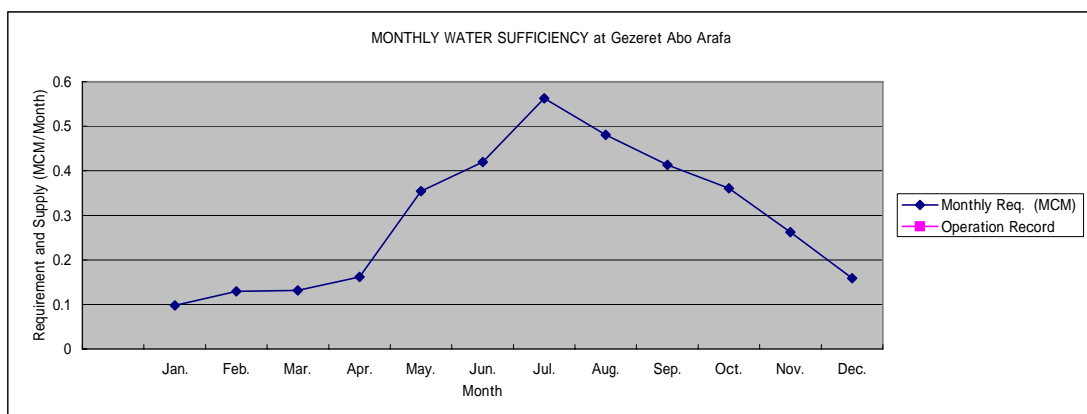


Table **Cropping Area (%) for Each Crop (Present,Plan)**

No.35 El-Hegs El-Mostagda

Location: **No.35 El-Hegs El-Mostagda**

(Unit: %)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Total |
|----------------------|---------------|-------|------|------|---------------|------|------|------|------|---------------|-------|-------|-------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 2.4 | 2.4 | 2.4 | 2.4 | | | | | | | 2.4 | 2.4 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | |
| Berseem(Fodder) | 6.1 | 6.1 | | | | | | | | | 6.1 | 6.1 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | 81.1 | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 100.0 | 100.0 | 93.9 | 93.9 | 91.5 | 95.2 | 95.2 | 95.2 | 95.2 | 95.2 | 100.0 | 100.0 | |

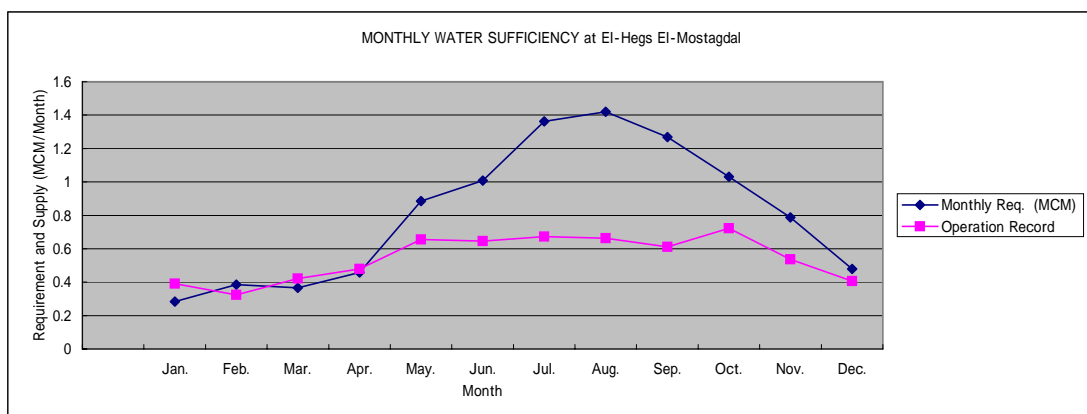
Table **Consumptive Use of Each Crop (Present,Plan)** 0.5 12 1.0
 Location: **No.35 EI-Hegs EI-Mostagda** (Unit : liter/sec/feddan)

| Season/Crops | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|----------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|---------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Winter Season | | | | | | | | | | | | | |
| Wheat | 0.016 | 0.018 | 0.016 | 0.017 | | | | | | | 0.009 | 0.019 | |
| Broad Beans | | | | | | | | | | | | | |
| Barley | | | | | | | | | | | | | |
| Fenugreek | | | | | | | | | | | | | |
| Lupine | | | | | | | | | | | | | |
| Chick-peas | | | | | | | | | | | | | |
| Lentils | | | | | | | | | | | | | |
| Clover | 0.095 | 0.120 | 0.101 | 0.100 | 0.106 | 0.116 | 0.110 | 0.059 | 0.111 | 0.094 | 0.073 | 0.070 | |
| Berseem(Fodder) | 0.025 | 0.041 | | | | | | | | | 0.023 | 0.025 | |
| Flax | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Garlic | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Beet | | | | | | | | | | | | | |
| Summer Season | | | | | | | | | | | | | |
| Cotton | | | | | | | | | | | | | |
| Rice | | | | | | | | | | | | | |
| Maize | | | | | | 0.024 | 0.044 | 0.041 | 0.049 | 0.025 | | | |
| Sorghum | | | | | | | | | | | | | |
| Soia Beans | | | | | | | | | | | | | |
| Sugarcane | 0.186 | 0.322 | 0.308 | 0.438 | 0.959 | 1.116 | 1.501 | 1.628 | 1.432 | 1.126 | 0.874 | 0.449 | |
| Banana | | | | | | | | | | | | | |
| Sesame | | | | | | | | | | | | | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Groundnuts | | | | | | | | | | | | | |
| Onion | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Corn | | | | | | | | | | | | | |
| Other Plants | | | | | | | | | | | | | |
| Nile Seasons | | | | | | | | | | | | | |
| Maize | | | | | | | | | | | | | |
| Sorghum | | | | | | | | | | | | | |
| Vegetables | | | | | | | | | | | | | |
| Fruits | 0.009 | 0.009 | 0.008 | 0.012 | 0.014 | 0.019 | 0.018 | 0.018 | 0.017 | 0.016 | 0.012 | 0.011 | |
| Berseem(Fodder) | | | | | | | | | | | | | |
| Total | 0.332 | 0.510 | 0.434 | 0.566 | 1.080 | 1.276 | 1.673 | 1.746 | 1.609 | 1.261 | 0.992 | 0.574 | |

n b

Table **Monthly Water Requirement (Present,Plan)**
 Location: **No.35 EI-Hegs EI-Mostagda**

| Description | Winter Season | | | | Summer Season | | | | | Winter Season | | | Remarks |
|--|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | |
| Unit Consumption (l/s/feddan) | 0.332 | 0.510 | 0.434 | 0.566 | 1.080 | 1.276 | 1.673 | 1.746 | 1.609 | 1.261 | 0.992 | 0.574 | |
| Water Requirement (m³/s) | | | | | | | | | | | | | |
| Whole Area (600 feddan) | | | | | | | | | | | | | |
| Existing 600 | 0.20 | 0.31 | 0.26 | 0.34 | 0.65 | 0.77 | 1.00 | 1.05 | 0.97 | 0.76 | 0.59 | 0.34 | |
| Extension 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Total Requirement | 0.20 | 0.31 | 0.26 | 0.34 | 0.65 | 0.77 | 1.00 | 1.05 | 0.97 | 0.76 | 0.59 | 0.34 | |
| Village Water | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | |
| Total Requirement (MCM) | 0.21 | 0.32 | 0.27 | 0.35 | 0.66 | 0.78 | 1.02 | 1.06 | 0.98 | 0.77 | 0.61 | 0.36 | Annual Ttl. |
| Monthly Req. (MCM) | 0.284 | 0.386 | 0.366 | 0.457 | 0.885 | 1.009 | 1.362 | 1.421 | 1.268 | 1.031 | 0.788 | 0.479 | 9.734 |
| Operation Record | 0.390 | 0.323 | 0.422 | 0.480 | 0.655 | 0.646 | 0.672 | 0.663 | 0.611 | 0.722 | 0.537 | 0.406 | 6.527 |



D. 作物収量

(1) 現況作物収量

| Pump Station Area (Fed.) | | | No.27 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 | Total(Exl.No.28) |
|--------------------------|-------------|-------------|-------|-------|-------|--------|-------|-------|-------|---------|------------------|
| | | | 175 | 440 | 200 | 200 | 250 | 210 | 180 | 600 | 2,255 |
| Winter Season | Wheat | % Fed. | 31.3 | 13.7 | | | | | | 2.4 | 47.4 |
| | | ton/Fed ton | 54.8 | 60.3 | | | | | | 14.4 | 129.5 |
| | Broad Beans | % Fed. | 1.8 | 0.9 | | | | | | 0.6 | |
| | | ton/Fed ton | 98.6 | 54.3 | | | | | | 8.64 | 161.5 |
| | Barley | % Fed. | | | | | | | | | |
| | | ton/Fed ton | | | | | | | | | |
| | Clover | % Fed. | | 20.0 | 16.9 | 18.9 | 19.6 | | 1.1 | 7.9 | 84.4 |
| | | ton/Fed ton | | 88.0 | 33.8 | 37.8 | 49 | | 2.0 | 47.4 | 258.0 |
| | Berseem | % Fed. | | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 | |
| | | ton/Fed ton | | 264.0 | 101.4 | 113.4 | 147 | | 5.9 | 142.2 | 773.9 |
| | Onion | % Fed. | 18.8 | 33.7 | 15.4 | 23.9 | 6.5 | 4.6 | | 6.1 | 109.0 |
| | | ton/Fed ton | 32.9 | 148.3 | 30.8 | 47.8 | 16.3 | 9.7 | | 36.6 | 322.3 |
| | Garlic | % Fed. | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | |
| | | ton/Fed ton | 32.9 | 148.3 | 30.8 | 47.8 | 16.3 | 9.7 | | 36.6 | 322.3 |
| | Vegetables | % Fed. | 12.5 | 5.1 | | | | | 5.4 | | 23.0 |
| ton/Fed ton | | 21.9 | 22.4 | | | | | 9.7 | | 54.0 | |
| Vegetables | % Fed. | 1.2 | 0.4 | | | | | 1.2 | | | |
| | ton/Fed ton | 26.3 | 9.0 | | | | | 11.7 | | 46.9 | |
| Vegetables | % Fed. | | 0.6 | | | | | | | 0.6 | |
| | ton/Fed ton | | 2.6 | | | | | | | 2.6 | |
| Vegetables | % Fed. | | 0.3 | | | | | | | 0.8 | |
| | ton/Fed ton | | 0.8 | | | | | | | 0.8 | |
| Vegetables | % Fed. | 6.3 | 4.6 | | | | | 0.5 | | 11.4 | |
| | ton/Fed ton | 11.0 | 20.24 | | | | | 0.9 | | 32.2 | |
| Vegetables | % Fed. | 1.6 | 1.0 | | | | | 1.0 | | | |
| | ton/Fed ton | 17.6 | 20.2 | | | | | 0.9 | | 38.8 | |
| Summer Season | Maize | % Fed. | | 36 | 7.7 | 17.4 | | 2.3 | | 3.7 | 67.1 |
| | | ton/Fed ton | | 158.4 | 15.4 | 34.8 | | 4.8 | | 22.2 | 67.1 |
| | Sorghum | % Fed. | | 1.2 | 1.2 | 1.2 | | 1.2 | | 1.2 | 14.9 |
| | | ton/Fed ton | | 190.1 | 18.5 | 41.76 | | 5.8 | | 26.6 | 65.6 |
| | Soybean | % Fed. | | 14.9 | | | | | | | 14.9 |
| | | ton/Fed ton | | 65.6 | | | | | | | 65.6 |
| | Sugarcane | % Fed. | | | | 4.4 | | | | 81.1 | 85.5 |
| | | ton/Fed ton | | | | 8.8 | | | | 486.6 | 495.4 |
| | Banana | % Fed. | | | | 40.0 | | | | 31.0 | 181.0 |
| | | ton/Fed ton | | | | 352 | | | | 15084.6 | 15436.6 |
| | Seasame | % Fed. | | | | | 31.6 | 59.1 | 90.3 | | |
| | | ton/Fed ton | | | | | 79.0 | 124.1 | 162.5 | | 11.4 |
| | Berseem | % Fed. | | | | | 3.0 | 3.0 | 4.0 | | |
| | | ton/Fed ton | | | | | 237.0 | 372.3 | 650.2 | | 1259.5 |
| | Berseem | % Fed. | 68.9 | 6.9 | | 4.4 | | | | | 80.2 |
| ton/Fed ton | | 120.6 | 30.4 | | 8.8 | | | | | 159.7 | |
| Groundnuts | % Fed. | 1.0 | 1.0 | | 1.0 | | | | | | |
| | ton/Fed ton | 120.6 | 30.4 | | 8.8 | | | | | 159.7 | |
| Onion | % Fed. | | | | | | | | | | |
| | ton/Fed ton | | | | | | | | | | |
| Other Plants | % Fed. | | | | | | | | | | |
| | ton/Fed ton | | | | | | | | | | |
| Vegetables | % Fed. | | | 7.7 | | | 2.3 | | | 10.0 | |
| | ton/Fed ton | | | 15.4 | | | 4.8 | | | 20.2 | |
| Vegetables | % Fed. | | | 4.4 | | | 2.0 | | | 7.4 | |
| | ton/Fed ton | | | 67.8 | | | 9.7 | | | 77.4 | |
| Vegetables | % Fed. | | | 7.7 | | | | | | 7.7 | |
| | ton/Fed ton | | | 30.8 | | | | | | 30.8 | |
| Fruits | % Fed. | 31.1 | 40.0 | 84.6 | 63.0 | 42.3 | 31.8 | 2.7 | 2.5 | 298.0 | |
| | ton/Fed ton | 54.4 | 176.0 | 169.2 | 126.0 | 105.75 | 66.8 | 4.9 | 15.0 | 718.0 | |
| Berseem | % Fed. | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| | ton/Fed ton | 54.4 | 176.0 | 169.2 | 126.0 | 105.75 | 66.8 | 4.9 | 15.0 | 718.0 | |
| Berseem | % Fed. | 68.9 | | | | | | | | 68.9 | |
| | ton/Fed ton | 120.6 | | | | | | | | 120.6 | |
| Total (ton) | % Fed. | 1.0 | | | | | | | | | |
| | ton/Fed ton | 120.6 | | | | | | | | 120.6 | |
| Total (ton) | | | 471.0 | 958.5 | 418.4 | 689.8 | 506.0 | 464.2 | 673.5 | 15313.7 | 19495.1 |

注: 各作物の単位収量 (ton/Fed) は、基本設計調査団が実施した農家調査における農民からの聞き取りによる。

(2) 計画作物収量

| Pump Station | | No.27 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 | Total |
|--------------|--------------|-------------|-------|--------|-------|-------|-------|-------|-------|---------|
| Area (Fed.) | | 175 | 440 | 200 | 200 | 250 | 210 | 180 | 600 | 2,255 |
| Winter | Wheat | % Fed. | 31.3 | 13.7 | | | | | 2.4 | 47.4 |
| | | ton/Fed ton | 54.8 | 60.3 | | | | | 14.4 | 129.5 |
| Season | Broad Beans | % Fed. | 1.8 | 1.8 | | | | | 1.8 | |
| | | ton/Fed ton | 98.6 | 108.5 | | | | | 25.92 | 233.0 |
| | Barley | % Fed. | | | | | | | | |
| | | ton/Fed ton | | | | | | | | |
| | Clover | % Fed. | 15.6 | 20.0 | 16.9 | 18.9 | 27.0 | | 10.4 | 7.9 |
| | | ton/fed ton | 27.3 | 88.0 | 33.8 | 37.8 | 67.5 | | 18.7 | 47.4 |
| | Berseem | % Fed. | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| | | ton/fed ton | 81.9 | 264.0 | 101.4 | 113.4 | 202.5 | | 56.2 | 142.2 |
| | Onion | % Fed. | 18.8 | 33.7 | 15.4 | 23.9 | 6.5 | 4.6 | | 6.1 |
| | | ton/Fed ton | 32.9 | 148.3 | 30.8 | 47.8 | 16.3 | 9.7 | | 36.6 |
| | Garlic | % Fed. | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 |
| | | ton/Fed ton | 32.9 | 148.3 | 30.8 | 47.8 | 16.3 | 9.7 | | 36.6 |
| | Vegetables | % Fed. | 12.5 | 7.4 | | | | | 5.4 | |
| | | ton/Fed ton | 21.9 | 32.6 | | | | | 9.7 | |
| | Vegetables | % Fed. | 1.2 | 1.2 | | | | | 1.2 | |
| ton/Fed ton | | 26.3 | 39.1 | | | | | 11.7 | | |
| Vegetables | % Fed. | | 0.6 | | | | | | | |
| | ton/Fed ton | | 2.6 | | | | | | | |
| Vegetables | % Fed. | | 0.3 | | | | | | | |
| | ton/Fed ton | | 0.8 | | | | | | | |
| Vegetables | % Fed. | 6.3 | 4.6 | | | | | 0.5 | | |
| | ton/Fed ton | 11.0 | 20.2 | | | | | 0.9 | | |
| Summer | Maize | % Fed. | 17.6 | 40.5 | | | | | | |
| | | ton/Fed ton | 17.6 | 40.5 | | | | | | |
| Season | Sorghum | % Fed. | | 14.4 | 7.7 | 17.4 | | 2.3 | | 3.7 |
| | | ton/Fed ton | | 63.4 | 15.4 | 34.8 | | 4.8 | | 22.2 |
| | Soybean | % Fed. | | 1.7 | 1.7 | 1.7 | | 1.7 | | 1.7 |
| | | ton/Fed ton | | 107.7 | 26.18 | 59.16 | | 8.2 | | 37.7 |
| | Sugarcane | % Fed. | | 14.9 | | | | | | |
| | | ton/Fed ton | | 65.6 | | | | | | |
| | Banana | % Fed. | | 7.2 | | | | | 23.3 | |
| | | ton/Fed ton | | 31.7 | | | | | 41.9 | |
| | Seasame | % Fed. | | 1.2 | | | | | 1.2 | |
| | | ton/Fed ton | | 38.0 | | | | | 50.3 | |
| | Other Plants | % Fed. | | | 4.4 | | | | | 81.1 |
| | | ton/Fed ton | | | 8.8 | | | | | 486.6 |
| | Vegetables | % Fed. | | | 40.0 | | | | | 40.0 |
| | | ton/Fed ton | | | 352.0 | | | | | 1946.0 |
| | Vegetables | % Fed. | | | | | 31.5 | 59.1 | 90.3 | |
| ton/Fed ton | | | | | | 78.8 | 124.1 | 162.5 | | |
| Vegetables | % Fed. | | | | | 4.0 | 4.0 | 4.0 | | |
| | ton/Fed ton | | | | | 315.0 | 496.4 | 650.2 | | |
| Vegetables | % Fed. | | | | | 26.1 | | | | |
| | ton/Fed ton | | | | | 65.3 | | | | |
| Vegetables | % Fed. | | | | | 0.5 | | | | |
| | ton/Fed ton | | | | | 32.6 | | | | |
| Vegetables | % Fed. | 68.9 | 21.3 | | 4.4 | | | | | |
| | ton/Fed ton | 120.6 | 93.7 | | 8.8 | | | | | |
| Vegetables | % Fed. | 1.0 | 1.0 | | 1.0 | | | | | |
| | ton/Fed ton | 120.6 | 93.7 | | 8.8 | | | | | |
| Vegetables | % Fed. | | | | | | | | | |
| | ton/Fed ton | | | | | | | | | |
| Vegetables | % Fed. | | | | | | | | | |
| | ton/Fed ton | | | | | | | | | |
| Vegetables | % Fed. | | 2.2 | 7.7 | 12.6 | | 2.3 | | | |
| | ton/Fed ton | | 9.7 | 15.4 | 25.2 | | 4.8 | | | |
| Nile | Vegetables | % Fed. | 2.0 | 4.4 | 2.0 | | | | | |
| | | ton/Fed ton | 19.4 | 67.8 | 50.4 | | | | | |
| Season | Fruits | % Fed. | 2.2 | 16.2 | 12.6 | | | | | |
| | | ton/Fed ton | 19.4 | 64.8 | 50.4 | | | | | |
| | Berseem | % Fed. | 31.1 | 40.0 | 84.6 | 63.0 | 42.4 | 31.8 | 2.7 | 2.5 |
| | | ton/Fed ton | 54.4 | 176.0 | 169.2 | 126.0 | 106.0 | 66.8 | 4.9 | 15.0 |
| | Vegetables | % Fed. | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| | | ton/Fed ton | 54.4 | 176.0 | 169.2 | 126.0 | 106.0 | 66.8 | 4.9 | 15.0 |
| Vegetables | % Fed. | 68.9 | | | | | | | | |
| | ton/Fed ton | 120.6 | | | | | | | | |
| Total (ton) | | | 552.9 | 1120.9 | 460.1 | 808.0 | 672.4 | 590.8 | 775.0 | 19721.5 |
| | | | | | | | | | | 24701.4 |

注: 各作物の単位収量 (ton/Fed) は、基本設計調査団が実施した農家調査における農民からの聞き取りによる。

E. 農業生産所得

農業生産所得

| 栽培作物 | | 現況生産量 (A) Ton | 計画生産量 (B) Ton | 単価 (LE/Ton) | 現況生産額 (1,000LE) | 計画生産額 (1,000LE) |
|------------------|--------------|------------------|------------------|----------------|--------------------|--------------------|
| Winter Season | Wheat | 162 | 233 | 1,200 | 194 | 280 |
| | Broad Bean | 0 | 0 | 1,000 | 0 | 0 |
| | Barley | 0 | 0 | 1,000 | 0 | 0 |
| | Clover | 774 | 962 | 800 | 619 | 770 |
| | Berseem | 322 | 322 | 800 | 258 | 258 |
| | Onion | 47 | 77 | 500 | 24 | 39 |
| | Garlic | 1 | 1 | 0 | 0 | 0 |
| | Vegetable | 39 | 60 | 1,000 | 39 | 60 |
| Summer Season | Maize | 283 | 239 | 1,000 | 283 | 239 |
| | Sorghum | 66 | 66 | 1,000 | 66 | 66 |
| | Soybean | 0 | 88 | 1,400 | 0 | 123 |
| | Sugarcane | 15437 | 19,816 | 130 | 2007 | 2576 |
| | Banana | 1260 | 1462 | 2,000 | 2520 | 2924 |
| | Sesame | 0 | 33 | 3,000 | 0 | 99 |
| | Berseem | 160 | 223 | 800 | 128 | 178 |
| | Groundnut | 0 | 0 | | 0 | 0 |
| | Onion | 0 | 0 | | 0 | 0 |
| | Other Plants | 0 | 0 | | 0 | 0 |
| | Vegetable | 77 | 147 | 1,000 | 77 | 147 |
| Nile Season | Vegetable | 31 | 135 | 1,000 | 31 | 135 |
| | Fruits | 718 | 718 | 2,000 | 1436 | 1436 |
| | Berseem | 121 | 121 | 800 | 97 | 97 |
| Total | | 19498 | 24703 | | 7778 | 9426 |
| (B)/(A)=1.27 | | | | | 生産増額 = 1,647 | |

注： 作物単価は、基本設計調査団が実施した農家・市場調査による農家庭先価格を示す。

既存ポンプ場の老朽度調査結果 (1)

| ポンプ場 Pump station | No. 27 | No. 28 | No. 29 | No. 30 | No. 31 |
|-------------------------------|--------------------------------------|--------------------------|--------------------------|----------------------------|-----------------------------|
| | Gezeret EI-Kobania Kelby | Sahel Al-Khatara | Sahel EI-Akab Bahay | Gezeret Maneha | EI-Sarag |
| 位置 Location | left bank, 22.0km | right bank, 21.5km | right bank, 28.0km | right bank, island, 56.5km | left bank, island, 101.0km |
| 供用年 Commencement of operation | 1948 | 1951 | 1948 | 1986 | 1973 |
| 主要な修理実績 Major maintenance | | 1999 by Swiss Gov. | | assembled by secondhand | electrified in 1981 |
| 設置位置 Position | down stream upper stream | down stream upper stream | down stream upper stream | down stream upper stream | down stream upper stream |
| 機番 Unit no. | no. 2 no. 1 | no. 1 no. 2 | no. 1 no. 2 | no. 1 no. 2 | no. 1 no. 2 |
| 1. ポンプ本体 Main Pump | | | | | |
| 1-1. Type | single end suction | 2-stage end suction | single end suction | single end suction | single end suction |
| 1-2. Manufacturer | Kleinschanzlin Bestenbosotel GMBH | Sulzer Pumps Ltd. | Sulzer Pumps Ltd. | Sigma Hranice | Sigma Olomouc |
| 1-3. Year of manufacturing | 1951 1951 | 1951 1951 | 1948 1948 | 1969 1950 | 1969 1969 |
| 1-4. Country of origin | West Germany | Switzerland | Switzerland | Czech | Czech |
| 1-5. Discharge capacity | 0.25m3/s 0.25m3/s | 1.35m3/s 1.35m3/s | 0.35m3/s 0.35m3/s | 2083GPM 3066GPM | 2083GPM 2083GPM |
| 1-6. Total head | 13m 13m | 23m 23m | 13m 13m | not discribed 39.4ft | not discribed not discribed |
| 1-7. Rated revolution | 675rpm 675rpm | 500rpm 500rpm | 1000rpm 1000rpm | 1500rpm 960rpm | 960rpm 960rpm |
| 1-8. Workability | | | | x x | x x |
| 1-9. Casing | | | | | |
| 1-9-1. Finish coat | | | | x x | x x |
| 1-9-2. Rust | | | | x x | x x |
| 1-10. Unit assembling | | | | | |
| 1-10-1. Bolt tightness | | | | x x | x x |
| 1-10-2. Vibration | | | | x x | x x |
| 1-10-3. Noise | | | x x | x x | x x |
| 1-11. Bearing | | | | | |
| 1-11-1. Noise | | | | | x x |
| 1-11-2. Vibration | | | | | x x |
| 1-11-3. Temperature | | | | | x x |
| 1-11-4. Oil leak | | | | x x | x x |
| 1-12. Coupling | | | | | |
| 1-12-1. Bolt tightness | x x | | | x x | |
| 1-12-2. Eccentricity | | | | x x | |
| 1-12-3. Wear | | | | | x x |
| 1-13. Stuff box | | | | | |
| 1-13-1. Water leak | x x | | | x x | x x |
| 1-13-2. Temperature | | | | | |
| 1-14. Others | | | | | |
| 1-14-1. Rust | | | | x x | x x |
| 1-14-2. Oil leak | x x | | | x x | x x |
| 1-14-3. Water leak | | | | x x | x x |
| 1-14-4. Wear | | | | x x | x x |

既存ポンプ場の老朽度調査結果 (2)

| 2. モータ本体 Prime mover | | squirrel cage induction | | wound induction | | squirrel cage induction | | squirrel cage induction | | squirrel cage induction | |
|----------------------|-----------------------|-------------------------|---------|---------------------------|--------|-------------------------|----------|-------------------------|----------|-------------------------|----------|
| 2-1. | Type | squirrel cage induction | | wound induction | | squirrel cage induction | | squirrel cage induction | | squirrel cage induction | |
| 2-2. | Manufacturer | russian | Abntate | Yaskawa Electric Mfg. Co. | | Reliance | Reliance | Reliance | Reliance | AC | HXPOHH I |
| 2-3. | Year of manufacturing | 1978 | 1978 | 1978 | 1978 | 1948 | 1948 | 1950 | 1950 | 1969 | 1969 |
| 2-4. | Rated output | 40kW | 40kW | 600HP | 600HP | 135HP | 135HP | 60HP | 60HP | 40kW | 40kW |
| 2-5. | Voltage | 380V | 380V | 6000V | 6000V | 380V | 380V | 380V | 380V | 380V | 380V |
| 2-6. | Ampere | 88.8A | 88.8A | 50.5A | 50.5A | 110A | 110A | 84.7A | 84.7A | 73A | 73A |
| 2-7. | Frequency | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz |
| 2-8. | No of revolution | 735rpm | 735rpm | 490rpm | 490rpm | 985rpm | 985rpm | 975rpm | 975rpm | 1470rpm | 1470rpm |
| 2-9. | Present Workability | | × | | | | | × | × | | × |
| 2-10. | Outer appearance | | | | | | | | | | |
| 2-10-1. | Finish coat | × | × | | | | | | | × | × |
| 2-10-2. | Rust | × | × | | | | | | | × | × |
| 2-11. | Bearing | | | | | | | | | | |
| 2-11-1. | Noise | × | × | | | × | | × | × | | |
| 2-11-2. | Vibration | × | × | | | × | | × | × | | |
| 2-11-3. | Temperature | | | | | | | × | × | | × |
| 2-11-4. | Oil leak | × | × | × | × | | | × | × | × | × |
| 2-12. | Rotor & Fun | | | | | (mis-assembled) | | | | | |
| 2-12-1. | Noise | | | | | × | | × | × | | × |
| 2-12-2. | Vibration | | | | | × | × | × | × | | × |
| 2-12-3. | Wind pressure | | | | | × | × | × | × | | |
| 2-13. | Others | | | | | | | | | | |
| 2-13-1. | Rust | × | × | | | | | | | × | × |
| 2-13-2. | Oil leak | × | × | | | | | × | × | × | × |
| 2-13-3. | Wear | × | × | | | × | × | × | × | × | × |
| 3. 真空ポンプ Vacuum pump | | one unit | | two units | | one unit | | one unit | | one unit | |
| 3-1. | Type | totally enclosed | | totally enclosed | | totally enclosed | | totally enclosed | | totally enclosed | |
| 3-2. | Manufacturer | Sigma Pumpy Hranice | | Sigma Pumpy Hranice | | Sigma Pumpy Hranice | | VN-Pompen | | VN-Pompen | |
| 3-3. | Year of manufacturing | not described | | not described | | not described | | 1984 | | 1984 | |
| 3-4. | Country of origin | Czech Republic | | Czech Republic | | Czech Republic | | West Germany | | West Germany | |
| 3-5. | Capacity | 7.5lit/sec | | 50lit/min | | 7.5lit/sec | | 30m3/h | | 30m3/h | |
| 3-6. | No of revolution | 1430rpm | | 1430rpm | | 1430rpm | | 2900rpm | | 2900rpm | |
| 3-7. | Present Workability | | | | | | | | | | |
| 3-8. | Appearance of casing | | | | | | | | | | |
| 3-8-1. | Finish coat | | | | | × | | × | | × | |
| 3-8-2. | Rust | | × | | | × | | × | | × | |
| 3-9. | Unit assembling | | | | | | | | | | |
| 3-9-1. | Bolt tightness | | | | | × | | × | | × | |
| 3-9-2. | Vibration | | | | | | | × | | × | |
| 3-9-3. | Noise | | | | | | | × | | × | |
| 3-10. | Bearing | | | | | | | | | | |
| 3-10-1. | Noise | × | | | | × | | × | | × | |
| 3-10-2. | Vibration | × | | | | × | | × | | × | |
| 3-10-3. | Temperature | × | | | | × | | × | | × | |
| 3-10-4. | Oil leak | | | | | | | × | | × | |

既存ポンプ場の老朽度調査結果 (3)

| | | | | | | |
|-----------|--|---------------|-------------------|-------------------|---------------|---------------|
| 3-11. | Coupling | | | | | |
| 3-11-1. | Bolt tightness | | | | × | |
| 3-11-2. | Eccentricity | | | | × | |
| 3-11-3. | Wear | × | | | × | |
| 3-12. | Stuff box | | | | | |
| 3-12-1. | Water leak | | | | | |
| 3-12-2. | Temperature | | | | | |
| 3-13. | Others | | | | | |
| 3-13-1. | Rust | × | | | | |
| 3-13-2. | Oil leak | | | | × | × |
| 3-13-3. | Water leak | | | | | |
| 3-13-4. | Wear | × | | | × | × |
| 4. | 真空ポンプ用モータ Motor for vacuum pump | | | | | |
| 4-1. | Type | squirrel cage | squirrel cage | squirrel cage | squirrel cage | squirrel cage |
| 4-2. | Manufacturer | Siemens | Siemens | not described | ATB Austria | ATB Austria |
| 4-3. | Year of manufacturing | not described | not described | not described | not described | not described |
| 4-4. | Rated output | 3kW | 3kW | not described | not described | not described |
| 4-5. | Voltage | 380V | 230/400V | 380V | 380V | 380V |
| 4-6. | Ampere | not described | 11.3/6.5A | not described | not described | not described |
| 4-7. | Frequency | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz |
| 4-8. | No of revolution | not described | 1420rpm | not described | not described | not described |
| 4-9. | Present workability | × | | × | | |
| 4-10. | Appearance | | | | | |
| 4-10-1. | Finish coat | × | | | × | |
| 4-10-2. | Rust | × | | × | × | |
| 4-11. | Bearing | | | | | |
| 4-11-1. | Noise | × | | × | × | × |
| 4-11-2. | Vibration | × | | × | × | × |
| 4-11-3. | Temperature | × | | × | | |
| 4-11-4. | Oil leak | × | | × | × | × |
| 4-12. | Others | | | | | |
| 4-12-1. | Rust | × | | × | × | × |
| 4-12-2. | Oil leak | × | | × | × | × |
| 4-12-3. | Wear | × | | × | × | × |
| 5. | 仕切弁 Sluice valve | two units | four units | two units | two units | two units |
| 5-1. | Type | plate | plate | plate | plate | plate |
| 5-2. | Manufacturer | KSB | Sulzer Pumps Ltd. | Sulzer Pumps Ltd. | local made | MR (local) |

既存ポンプ場の老朽度調査結果 (4)

| | | | | | | |
|---------|----------------------------|-------------------|--------------------|--------------------|-------------------------|-------------------------|
| 5-3. | Year of manufacturing | 1951 | 1951 | 1948 | not described | 1978 |
| 5-4. | Bore | 400 | 650 | 300 | 425 | 250 |
| 5-5. | Appearance | | | | | |
| 5-5-1. | Finish coat | | | | × | × |
| 5-5-2. | Rust | | | | × | × |
| 5-5-3. | Water leak | | | × | × | × |
| 5-5-4. | Wear | × | | × | × | × |
| 6. | 逆止弁 Check valve | two units | two units | not equipped | not equipped | one unit |
| 6-1. | Type | non-return plate | swing | - | - | non-return plate |
| 6-2. | Manufacturer | KSB | Sulzer Pumps Ltd. | - | - | MR (local) |
| 6-3. | Year of manufacturing | 1951 | 1951 | - | - | 1978 |
| 6-4. | Bore | 400 | 650 | - | - | 450 |
| 6-5. | Appearance | | | | | |
| 6-5-1. | Finish coat | | | - | - | - |
| 6-5-2. | Rust | | | - | - | - |
| 6-5-3. | Water leak | | | - | - | - |
| 6-5-4. | Wear | | | - | - | - |
| 7. | 接続管 Connection pipe | | | | 吸込管 Suction pipe | 吸込管 Suction pipe |
| 7-1. | Type | ball joint | ball joint | ball joint | bell bottom valve | foot valve |
| 7-2. | Manufacturer | not described | not described | India made | local made | local made |
| 7-3. | Year of manufacturing | not described | not described | not described | not described | not described |
| 7-4. | Bore | 350 | 600 | 450 | 300 | 300 |
| 7-5. | Appearance | | | | | |
| 7-5-1. | Finish coat | × | | × | × | |
| 7-5-2. | Rust | × | | × | × | |
| 7-5-3. | Water leak | × | | × | × | |
| 7-5-4. | Wear | × | | × | × | |
| 8. | 操作盤 Switch board | | | | | |
| 8-1. | Type | self-stand | self-stand | self-stand | self-stand | self-stand |
| 8-2. | Manufacturer | local made | EGEMEC | local made | local made | local made |
| 8-3. | Year of manufacturing | not described | not described | not described | not described | not described |
| 8-4. | Dimensions (H × W × Dmm) | 1910 × 1400 × 500 | 2200 × 2340 × 1240 | 2200 × 2340 × 1240 | 2050 × 1400 × 1150 | 2050 × 1350 × 550 |
| 8-5. | Rated voltage | 220/380V | 220/380V | 220/380V | 220/380V | 220/380V |
| 8-6. | Rated frequency | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz |
| 8-7. | Appearance | | | | | |
| 8-7-1. | Rust | × | | | | |
| 8-7-2. | Wear | × | | | | |
| 8-7-3. | Noise | × | | | | |
| 8-7-4. | Tightness | × | | × | | |
| 8-7-5. | Insulation | × | × | × | × | × |
| 8-8. | Meters | | | | | |
| 8-8-1. | Zero setting | | | | × | |
| 8-8-2. | Workability | × | | | × | |
| 8-9. | Door opening | | | | | × |
| 8-10. | Inner appearance | | | | | × |
| 8-10-1. | Lighting | × | × | × | × | × |
| 8-10-2. | Rust | | | | | |

既存ポンプ場の老朽度調査結果 (5)

| | | | | | | | |
|------------|------------------------------|-------------|--|----------------------|-----|------------------|--------------|
| 8-10-3. | Tightness | | | | | | × |
| 9. | 台船 Barge | | | | | not equipped | not equipped |
| 9-1. | Outer appearance of barge | | | | | | |
| 9-1-1. | Finish coat | × | | × | | × | - |
| 9-1-2. | Damage | | | | | | - |
| 9-1-3. | Rust | | | | | | - |
| 9-1-4. | Wear | × | | | | × | - |
| 9-2. | Outer appearance of shed | | | | | | |
| 9-2-1. | Finish coat | | | | | | - |
| 9-2-2. | Damage | | | | | | - |
| 9-2-3. | Rust | wooden made | | wooden made | | wooden made | - |
| 9-2-4. | Wear | | | | | | - |
| 9-3. | Anchoring | | | | | | |
| 9-3-1. | Type | chain | | chain | | chain-wire | - |
| 9-3-2. | No of anchor | 4 | | 4 | | 4 | - |
| 9-3-3. | Damage | | | | | | - |
| 9-3-4. | Rust | | | | | | - |
| 9-4. | Inner appearance | | | | | | |
| 9-4-1. | Finish coat | | | | | | - |
| 9-4-2. | Damage | × | | | | | - |
| 9-4-3. | Rust | | | | | | - |
| 9-4-4. | Wear | | | | | | - |
| 9-5. | Appearance of intake hole | | | | | | |
| 9-5-1. | Finish coat | | | × | | | - |
| 9-5-2. | Damage | | | | | | - |
| 9-5-3. | Rust | | | × | | | - |
| 9-5-4. | Wear | | | × | | | - |
| 9-6. | Appearance of pipe support | | | | | | |
| 9-6-1. | Finish coat | | | | | | - |
| 9-6-2. | Damage | | | | | | - |
| 9-6-3. | Rust | × | | | | × | - |
| 9-6-4. | Wear | × | | | | × | - |
| 10. | 送水タワー Discharge tower | | | | | not equipped | not equipped |
| 10-1. | Material | 1 tower | | 2 towers in parallel | | 2 towers in line | |
| 10-2. | Present workability | steel | | steel | | steel | - |
| 10-3. | Bore | 1000 | | 1050 | 975 | 1050 | - |
| 10-4. | Outer appearance | | | | | | |
| 10-4-1. | Finish coat | × | | × | × | × | - |

既存ポンプ場の老朽度調査結果 (6)

| | | | | | |
|-----------------------------------|---|---|---|--|--|
| 10-4-2. Damage | | | | - | - |
| 10-4-3. Rust | | | | - | - |
| 10-4-4. Wear | | | | - | - |
| 10-4-5. Water leak | | | × | - | - |
| 11. 送水管 Discharge pipeline | | | | | |
| 11-1. Nominal bore | 600 | 700-600, reduced at joint | 600-620 | 550 | 300 |
| 11-2. Material | steel | steel | steel | steel | steel |
| 11-3. Installation | on ground | buried | on ground | on ground | on ground |
| 11-4. Present workability | | × | (leaking) | × | |
| 11-5. Outer appearance | | | | | |
| 11-5-1. Damage | | | | | |
| 11-5-2. Rust | × | | × | × | × |
| 11-5-3. Wear | | | × | × | × |
| 11-5-4. Water leak | | | × | × | |
| 12. 電力線 Power cable | | | | | |
| 12-1. Outer appearance | | | | | |
| 12-1-1. Damage | | | | | |
| 12-1-2. Wear | | | | | |
| 12-1-3. Covering | | | | | |
| 12-1-4. Connection | | | | | |
| 12-1-5. Insulation | | | | | |
| 13. 変圧器 Transformer | | | | | |
| 13-1. Type | oil cooling | oil cooling | oil cooling | oil cooling | oil cooling |
| 13-2. Capacity | 100KVA | 1000KVA | 300KVA | 300KVA | 200KVA |
| 13-3. Primary voltage | 11000V | 11000V | 11000V | 11000V | 11000V |
| 13-4. Secondary voltage | 380V | 6000V | 380V | 380V | 400V |
| 13-5. Present workability | × | | × | | |
| 13-6. Outer appearance | | concrete block housing | | | |
| 13-6-1. Rust | | | | × | |
| 13-6-2. Wear | × | | × | | |
| 13-6-3. Tightness | × | | × | | |
| 13-6-4. Insulation | × | | × | × | × |
| 13-7. Door opening | × | | | | |
| 13-8. Inner appearance | | | | | |
| 13-6-1. Rust | × | | | | |
| 13-6-2. Wear | × | | | | |
| 総合評価: | ポンプ、モータ、操作盤の老朽化が進んでおり、ポンプ効率が著しく低下しており、機材の更新が必要。 | ポンプ、モータは稼働可能な状態であるが、高圧による入力のため操作は危険である。1台運転しかできない配管設備を早急に改善する必要がある。 | ポンプの製造年は非常に古く老朽化が進んでいるが、操作員が丁寧に機材の維持管理を行っていた形跡がある。モータは老朽化が進んでおり、機材の更新が必要。 | キャピテーションによりポンプ、モータの老朽化が顕著であり、機材の更新が必要。 | 2号機は老朽化のため稼働できない状況であり、また、1号機も老朽化が進んでおり、機材の更新が必要。 |

備考:
 : 稼働可能な状態
 : 動作しているが、老朽化が進んでおり、修理あるいは更新が必要の状態
 × : 早急に更新が必要か、あるいは改善を要する状態
 - : 該当しない

既存ポンプ場の老朽度調査結果 (7)

| ポンプ場 Pump station | No. 32 Gezeret El-Fawaza El-Keblia | No. 33 Middle Fawaza | No. 34 Gezeret Abo Arafa | No. 35 El-Hegs El-Mostageda |
|-------------------------------|--|-----------------------------|---------------------------------------|--------------------------------|
| 位置 Location | right bank, island, 112.0km | right bank, island, 113.0km | right bank, island, 124.0km | right bank, 138.0km |
| 供用年 Commencement of operation | 1973 | 1972 | 1973 | 1952 |
| 主要な修理実績 Major maintenance | electrified in 1980 | electrified in 1981 | replaced in 1997 | electrified in 1983 |
| 設置位置 Position | down stream upper stream | down stream upper stream | down stream upper stream | down stream upper stream |
| 機番 Unit no. | no. 2 no. 1 | no. 1 no. 2 | no. 2 no. 1 | no. 1 no. 2 |
| 1. ポンプ本体 Main Pump | | | | |
| 1-1. Type | single end suction | single end suction | single end suction | single end suction |
| 1-2. Manufacturer | Sigma Hranice | Sigma Hranice | Kleinschanzilin Bestenbosotel GMBH | Sulzer Pumps Ltd. |
| 1-3. Year of manufacturing | 1950 1950 | 1969 1969 | 1951 1951 | 1948 1948 |
| 1-4. Country of origin | Czech | Czech | West Germany | Switzerland |
| 1-5. Discharge capacity | 3066GPM 3066GPM | 2083GPM 2083GPM | 0.25m3/s 0.25m3/s | 0.35m3/s 0.35m3/s |
| 1-6. Total head | 39.4ft 39.4ft | not discribed not discribed | 13m 13m | 13m 13m |
| 1-7. Rated revolution | 960rpm 960rpm | 1500rpm 1500rpm | 800rpm 800rpm | 1000rpm 1000rpm |
| 1-8. Workability | x x | x x | x x | x x |
| 1-9. Casing | | | | |
| 1-9-1. Finish coat | x x | x x | x x | |
| 1-9-2. Rust | | x x | | |
| 1-10. Unit assembling | | | | |
| 1-10-1. Bolt tightness | | x x | | |
| 1-10-2. Vibration | x | x x | | x x |
| 1-10-3. Noise | x | x x | x x | x |
| 1-11. Bearing | | | | |
| 1-11-1. Noise | x x | | x x | x x |
| 1-11-2. Vibration | x | x x | x x | x x |
| 1-11-3. Temperature | | | | |
| 1-11-4. Oil leak | x x | x x | | x x |
| 1-12. Coupling | | | | |
| 1-12-1. Bolt tightness | x x (no cover) | | x x | x x |
| 1-12-2. Eccentricity | | | x x | x x |
| 1-12-3. Wear | x x | | x x | x x |
| 1-13. Stuff box | | | | |
| 1-13-1. Water leak | | x | x x | x |
| 1-13-2. Temperature | | | | x x |
| 1-14. Others | | | | |
| 1-14-1. Rust | | x x | | |
| 1-14-2. Oil leak | x x | x x | x x | x x |
| 1-14-3. Water leak | x x | x x | x x | x x |
| 1-14-4. Wear | x x | x x | x x | x x |
| 2. モータ本体 Prime mover | | | | |
| 2-1. Type | squirrel cage induction | squirrel cage induction | squirrel cage induction | squirrel cage induction |
| 2-2. Manufacturer | Reliance Reliance | AC HXPOHH I | B CPE HE | Reliance Reliance |
| 2-3. Year of manufacturing | 1950 1950 | 1969 1969 | 1969 1965 | 1980 1980 |

1GPM = 4.54609lit/min

既存ポンプ場の老朽度調査結果 (8)

| | | | | | | | | | |
|-----------|--------------------------|------------------|--------|------------------|---------|------------------|--------|-------------------|--------|
| 2-4. | Rated output | 60HP | 60HP | 40kW | 40kW | 40kW | 40kW | 135HP | 135HP |
| 2-5. | Voltage | 380V | 380V | 380V | 380V | 380V | 380V | 380V | 380V |
| 2-6. | Ampere | 84.7A | 84.7A | 73A | 73A | 75A | 80A | 185A | 185A |
| 2-7. | Frequency | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz | 50Hz |
| 2-8. | No of revolution | 975rpm | 975rpm | 1470rpm | 1470rpm | 735rpm | 735rpm | 985rpm | 985rpm |
| 2-9. | Present Workability | x | x | x | x | | x | | x |
| 2-10. | Outer appearance | | | | | | | | |
| 2-10-1. | Finish coat | | | | | x | x | | |
| 2-10-2. | Rust | | | x | x | x | x | | |
| 2-11. | Bearing | | | | | | | | |
| 2-11-1. | Noise | | | x | x | | x | | |
| 2-11-2. | Vibration | x | x | x | x | | x | | |
| 2-11-3. | Temperature | x | x | x | x | | x | | |
| 2-11-4. | Oil leak | | | x | x | | x | | |
| 2-12. | Rotor & Fun | | | | | | | (hand-made cover) | |
| 2-12-1. | Noise | x | x | | x | x | x | x | x |
| 2-12-2. | Vibration | x | x | | x | x | x | | x |
| 2-12-3. | Wind pressure | | | | | | | | |
| 2-13. | Others | | | | | | | | |
| 2-13-1. | Rust | | | | | | x | | |
| 2-13-2. | Oil leak | | | x | x | | | | |
| 2-13-3. | Wear | x | x | x | x | x | x | x | x |
| 3. | 真空ポンプ Vacuum pump | one unit | | one unit | | one unit | | one unit | |
| 3-1. | Type | totally enclosed | | totally enclosed | | totally enclosed | | totally enclosed | |
| 3-2. | Manufacturer | VN-Pompen | | VN-Pompen | | Titovi Zavodi | | Sigma Hranice | |
| 3-3. | Year of manufacturing | 1984 | | 1984 | | 1958 | | not described | |
| 3-4. | Country of origin | West Germany | | West Germany | | Italy | | Czech | |
| 3-5. | Capacity | 30m3/h | | 30m3/h | | 5lit/sec | | 7.5lit/sec | |
| 3-6. | No of revolution | 2900rpm | | 2900rpm | | not described | | 415rpm | |
| 3-7. | Present Workability | | | | | | | | |
| 3-8. | Appearance of casing | | | | | | | | |
| 3-8-1. | Finish coat | | x | | x | | x | | x |
| 3-8-2. | Rust | | x | | x | | x | | x |
| 3-9. | Unit assembling | | | | | | | | |
| 3-9-1. | Bolt tightness | | | | | | | | |
| 3-9-2. | Vibration | | x | | | | | | x |
| 3-9-3. | Noise | | x | | x | | x | | x |
| 3-10. | Bearing | | | | | | | | |
| 3-10-1. | Noise | | x | | x | | x | | x |
| 3-10-2. | Vibration | | x | | x | | x | | x |
| 3-10-3. | Temperature | | x | | x | | x | | x |
| 3-10-4. | Oil leak | | x | | x | | x | | |
| 3-11. | Coupling | | | | | | | | |
| 3-11-1. | Bolt tightness | | | | | | | | |
| 3-11-2. | Eccentricity | | | | | | | | |
| 3-11-3. | Wear | | | | | | | x | |
| 3-12. | Stuff box | | | | | | | (missing) | |
| 3-12-1. | Water leak | | x | | x | | x | | x |

既存ポンプ場の老朽度調査結果 (9)

| | | | | | |
|-----------|--|---------------|---------------|------------------|---------------|
| 3-12-2. | Temperature | | | | × |
| 3-13. | Others | | | | |
| 3-13-1. | Rust | | × | × | × |
| 3-13-2. | Oil leak | × | × | × | |
| 3-13-3. | Water leak | × | × | | |
| 3-13-4. | Wear | × | × | × | × |
| 4. | 真空ポンプ用モータ Motor for vacuum pump | | | | |
| 4-1. | Type | squirrel cage | squirrel cage | squirrel cage | squirrel cage |
| 4-2. | Manufacturer | ATB Austria | ATB Austria | AEG Union | Mone/ Nice |
| 4-3. | Year of manufacturing | not described | not described | not described | not described |
| 4-4. | Rated output | not described | not described | 1kW | 3kW |
| 4-5. | Voltage | 380V | 380V | 380V | 380V |
| 4-6. | Ampere | not described | not described | 4.7A | 11.9A |
| 4-7. | Frequency | 50Hz | 50Hz | 50Hz | 50Hz |
| 4-8. | No of revolution | not described | not described | 2820rpm | 1420rpm |
| 4-9. | Present workability | | | | |
| 4-10. | Appearance | | | | |
| 4-10-1. | Finish coat | | | | × |
| 4-10-2. | Rust | × | × | | × |
| 4-11. | Bearing | | | | |
| 4-11-1. | Noise | × | × | | |
| 4-11-2. | Vibration | × | × | | |
| 4-11-3. | Temperature | | | | |
| 4-11-4. | Oil leak | | × | | |
| 4-12. | Others | | | | |
| 4-12-1. | Rust | × | | | |
| 4-12-2. | Oil leak | × | | | |
| 4-12-3. | Wear | × | | × | |
| 5. | 仕切弁 Sluice valve | two units | two units | two units | two units |
| 5-1. | Type | plate | plate | plate | plate |
| 5-2. | Manufacturer | KSB | MR | KSB | not described |
| 5-3. | Year of manufacturing | 1978 | 1978 | 1951 | 1952 |
| 5-4. | Bore | 400 | 250 | 400 | 350 |
| 5-5. | Appearance | | | | |
| 5-5-1. | Finish coat | | | | |
| 5-5-2. | Rust | | | | |
| 5-5-3. | Water leak | × | | | |
| 5-5-4. | Wear | | × | × | × |
| 6. | 逆止弁 Check valve | not equipped | not equipped | two units | not equipped |
| 6-1. | Type | - | - | non-return plate | - |
| 6-2. | Manufacturer | - | - | B & R | - |
| 6-3. | Year of manufacturing | - | - | 1951 | - |
| 6-4. | Bore | - | - | 400 | - |
| 6-5. | Appearance | | | | |
| 6-5-1. | Finish coat | - | - | | - |
| 6-5-2. | Rust | - | - | | - |
| 6-5-3. | Water leak | - | - | | - |

既存ポンプ場の老朽度調査結果 (10)

| | | | | | |
|-----------|----------------------------|-------------------------|------------------------------|-------------------|-------------------|
| 6-5-4. | Wear | - | - | - | - |
| 7. | 接続管 Connection pipe | 吸込管 Suction pipe | 吸込管 Suction pipe | | |
| 7-1. | Type | foot valve | bell bottom with suction pit | flexible joint | flexible joint |
| 7-2. | Manufacturer | local made | local made | local made | local made |
| 7-3. | Year of manufacturing | not described | not described | 1977 | not described |
| 7-4. | Bore | 400 | 300 | 500 | 450 |
| 7-5. | Appearance | | | | |
| 7-5-1. | Finish coat | | | × | × |
| 7-5-2. | Rust | × | | textural | textural |
| 7-5-3. | Water leak | | | | |
| 7-5-4. | Wear | | | × | × |
| 8. | 操作盤 Switch board | | | | |
| 8-1. | Type | self-stand | self-stand | self-stand | self-stand |
| 8-2. | Manufacturer | local made | local made | local made | local made |
| 8-3. | Year of manufacturing | not described | not described | 1978 | 1983 |
| 8-4. | Dimensions (H × W × Dmm) | 2050 × 1350 × 550 | 2050 × 1350 × 550 | 1900 × 1380 × 530 | 2030 × 1400 × 500 |
| 8-5. | Rated voltage | 220/380V | 220/380V | 220/380V | 220/380V |
| 8-6. | Rated frequency | 50Hz | 50Hz | 50Hz | 50Hz |
| 8-7. | Appearance | | | | |
| 8-7-1. | Rust | | | | × |
| 8-7-2. | Wear | | | | |
| 8-7-3. | Noise | | | | |
| 8-7-4. | Tightness | | | | |
| 8-7-5. | Insulation | × | × | × | × |
| 8-8. | Meters | | | | |
| 8-8-1. | Zero setting | | | | × |
| 8-8-2. | Workability | | | | |
| 8-9. | Door opening | | | × | |
| 8-10. | Inner appearance | | | | |
| 8-10-1. | Lighting | × | × | × | × |
| 8-10-2. | Rust | | | × | |
| 8-10-3. | Tightness | | | × | |
| 9. | 台船 Barge | not equipped | not equipped | | |
| 9-1. | Outer appearance of barge | | | | |
| 9-1-1. | Finish coat | - | - | × | × |
| 9-1-2. | Damage | - | - | | × |
| 9-1-3. | Rust | - | - | × | × |
| 9-1-4. | Wear | - | - | × | × |
| 9-2. | Outer appearance of shed | | | | |
| 9-2-1. | Finish coat | - | - | × | × |
| 9-2-2. | Damage | - | - | × | × |
| 9-2-3. | Rust | - | - | wooden made | wooden made |
| 9-2-4. | Wear | - | - | × | × |
| 9-3. | Anchoring | | | | |
| 9-3-1. | Type | - | - | chain | chain |
| 9-3-2. | No. of anchor | - | - | 2 | 2 |
| 9-3-3. | Damage | - | - | | |

既存ポンプ場の老朽度調査結果 (11)

| | | | | | |
|------------|-------------------------------|--------------|--------------|----------------------|-------------|
| 9-3-4. | Rust | - | - | × | × |
| 9-4. | Inner appearance | | | | |
| 9-4-1. | Finish coat | - | - | | |
| 9-4-2. | Damage | - | - | × | × |
| 9-4-3. | Rust | - | - | wooden made | wooden made |
| 9-4-4. | Wear | - | - | × | |
| 9-5. | Appearance of intake hole | | | | |
| 9-5-1. | Finish coat | - | - | × | × |
| 9-5-2. | Damage | - | - | × | × |
| 9-5-3. | Rust | - | - | × | × |
| 9-5-4. | Wear | - | - | × | × |
| 9-6. | Appearance of pipe support | | | | |
| 9-6-1. | Finish coat | - | - | × | |
| 9-6-2. | Damage | - | - | × | |
| 9-6-3. | Rust | - | - | × | |
| 9-6-4. | Wear | - | - | × | |
| 10. | 送水タワー Discharge tower | not equipped | not equipped | not equipped | |
| 10-1. | Material | - | - | - | steel |
| 10-2. | Present workability | - | - | - | |
| 10-3. | Bore | - | - | - | 1000 |
| 10-4. | Outer appearance | | | | |
| 10-4-1. | Finish coat | - | - | - | × |
| 10-4-2. | Damage | - | - | - | |
| 10-4-3. | Rust | - | - | - | |
| 10-4-4. | Wear | - | - | - | |
| 10-4-5. | Water leak | - | - | - | |
| 11. | 送水管 Discharge pipeline | | | | |
| 11-1. | Nominal bore | 600 | 450 | 600 | 700 |
| 11-2. | Material | steel | steel | steel | steel |
| 11-3. | Installation | on ground | on ground | on ground | on ground |
| 11-4. | Present workability | | | | |
| 11-5. | Outer appearance | | | | |
| 11-5-1. | Damage | | | | |
| 11-5-2. | Rust | | | × | × |
| 11-5-3. | Wear | | | | × |
| 11-5-4. | Water leak | | | | × |
| 12. | 電力線 Power cable | | | | |
| 12-1. | Outer appearance | | | | |
| 12-1-1. | Damage | | | | |
| 12-1-2. | Wear | | | | |
| 12-1-3. | Covering | | | (laying under river) | |
| 12-1-4. | Connection | | | | |
| 12-1-5. | Insulation | | | | |
| 13. | 変圧器 Transformer | | | | |
| 13-1. | Type | oil cooling | oil cooling | air cooling | oil cooling |
| 13-2. | Capacity | 200KVA | 200KVA | 100KVA | 500KVA |
| 13-3. | Primary voltage | 11000V | 11000V | 11000V | 11000V |

既存ポンプ場の老朽度調査結果 (12)

| | | | | |
|---------------------------|---|---|--|--|
| 13-4. Secondary voltage | 400V | 400V | 400V | 400V |
| 13-5. Present workability | × | | × | |
| 13-6. Outer appearance | | | | |
| 13-6-1. Rust | × | | no cover | |
| 13-6-2. Wear | | | no cover | |
| 13-6-3. Tightness | × | | no cover | |
| 13-6-4. Insulation | × | × | no cover | × |
| 13-7. Door opening | | | no cover | |
| 13-8. Inner appearance | | | | |
| 13-6-1. Rust | | | × | |
| 13-6-2. Wear | × | | × | |
| 総合評価: | キャピテーションと砂粒子吸込みによりポンプ、モータの老朽化が顕著であり、機材の更新が必要。 | ポンプ、モータ、操作盤の老朽化が進んでおり、ポンプ効率が著しく低下しており、機材の更新が必要。 | 2号機は老朽化のため稼働できない状況であり、また、1号機も老朽化が進んでおり、機材の更新が必要。 | 過剰な動力のモータが組まれており、ポンプの老朽化が著しく、適正なポンプ吐出量とモータ出力を考慮した機材の更新が必要。 |

備考:
 : 稼働可能な状態
 : 動作しているが、老朽化が進んでおり、修理あるいは更新が必要の状態
 × : 早急に更新が必要か、あるいは改善を要する状態
 - : 該当しない

ポンプ運転時間 2001年
phase4

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave. |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| No.27 | 380 | 382 | 384 | 390 | 400 | 420 | 420 | 440 | 430 | 400 | 390 | 380 | 4816 | 440 | 380 | 401.3 |
| Unit 1 | 180 | 182 | 179 | 185 | 180 | 200 | 210 | 220 | 210 | 200 | 190 | 180 | 2316 | 220 | 179 | 193.0 |
| Unit 2 | 200 | 200 | 205 | 205 | 220 | 220 | 210 | 220 | 220 | 200 | 200 | 200 | 2500 | 220 | 200 | 208.3 |
| No.28 | 400 | 400 | 405 | 410 | 540 | 550 | 580 | 580 | 560 | 550 | 500 | 430 | 5905 | 580 | 400 | 492.1 |
| Unit 1 | 400 | 400 | 405 | 410 | 100 | 550 | 580 | 580 | 560 | 550 | 500 | 430 | 5465 | 580 | 100 | 455.4 |
| Unit 2 | 0 | 0 | 0 | 0 | 440 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 440 | 440 | 0 | 36.7 |
| No.29 | 500 | 500 | 520 | 530 | 540 | 550 | 560 | 560 | 500 | 480 | 440 | 400 | 6080 | 560 | 400 | 506.7 |
| Unit 1 | 250 | 250 | 260 | 270 | 270 | 270 | 280 | 280 | 260 | 240 | 220 | 200 | 3050 | 280 | 200 | 254.2 |
| Unit 2 | 250 | 250 | 260 | 260 | 270 | 280 | 280 | 280 | 240 | 240 | 220 | 200 | 3030 | 280 | 200 | 252.5 |
| No.30 | 360 | 360 | 365 | 370 | 380 | 390 | 400 | 410 | 420 | 360 | 340 | 320 | 4475 | 420 | 320 | 372.9 |
| Unit 1 | 180 | 180 | 185 | 185 | 190 | 190 | 200 | 210 | 210 | 180 | 180 | 160 | 2250 | 210 | 160 | 187.5 |
| Unit 2 | 180 | 180 | 180 | 185 | 190 | 200 | 200 | 200 | 210 | 180 | 160 | 160 | 2225 | 210 | 160 | 185.4 |
| No.31 | 226 | 209 | 213 | 263 | 284 | 265 | 214 | 240 | 226 | 232 | 251 | 170 | 2793 | 284 | 170 | 232.8 |
| Unit 1 | 100 | 80 | 70 | 109 | 110 | 100 | 114 | 100 | 103 | 115 | 118 | 48 | 1167 | 118 | 48 | 97.3 |
| Unit 2 | 126 | 129 | 143 | 154 | 174 | 165 | 100 | 140 | 123 | 117 | 133 | 122 | 1626 | 174 | 100 | 135.5 |
| No.32 | 330 | 340 | 360 | 360 | 368 | 400 | 410 | 420 | 430 | 370 | 360 | 320 | 4468 | 430 | 320 | 372.3 |
| Unit 1 | 160 | 180 | 180 | 180 | 190 | 200 | 210 | 210 | 220 | 190 | 180 | 160 | 2260 | 220 | 160 | 188.3 |
| Unit 2 | 170 | 160 | 180 | 180 | 178 | 200 | 200 | 210 | 210 | 180 | 180 | 160 | 2208 | 210 | 160 | 184.0 |
| No.33 | 300 | 300 | 300 | 320 | 340 | 360 | 370 | 400 | 400 | 360 | 340 | 300 | 4090 | 400 | 300 | 340.8 |
| Unit 1 | 150 | 150 | 160 | 180 | 180 | 180 | 190 | 200 | 200 | 180 | 180 | 160 | 2110 | 200 | 150 | 175.8 |
| Unit 2 | 150 | 150 | 140 | 140 | 160 | 180 | 180 | 200 | 200 | 180 | 160 | 140 | 1980 | 200 | 140 | 165.0 |
| No.34 | 200 | 200 | 210 | 220 | 240 | 240 | 250 | 260 | 260 | 230 | 210 | 200 | 2720 | 260 | 200 | 226.7 |
| Unit 1 | 100 | 100 | 110 | 110 | 120 | 120 | 130 | 130 | 130 | 120 | 100 | 100 | 1370 | 130 | 100 | 114.2 |
| Unit 2 | 100 | 100 | 100 | 110 | 120 | 120 | 120 | 130 | 130 | 110 | 110 | 100 | 1350 | 130 | 100 | 112.5 |
| No.35 | 220 | 220 | 220 | 240 | 250 | 290 | 368 | 496 | 340 | 336 | 300 | 208 | 3488 | 496 | 208 | 290.7 |
| Unit 1 | 110 | 110 | 120 | 120 | 120 | 140 | 184 | 248 | 170 | 168 | 150 | 104 | 1744 | 248 | 104 | 145.3 |
| Unit 2 | 110 | 110 | 100 | 120 | 130 | 150 | 184 | 248 | 170 | 168 | 150 | 104 | 1744 | 248 | 100 | 145.3 |
| Max | 500 | 500 | 520 | 530 | 540 | 550 | 580 | 580 | 560 | 550 | 500 | 430 | 6080 | 580 | 400.0 | 506.7 |
| Min | 200 | 200 | 210 | 220 | 240 | 240 | 214 | 240 | 226 | 230 | 210 | 170 | 2720 | 260 | 170.0 | 226.7 |
| Ave. | 324.0 | 323.4 | 330.8 | 344.8 | 371.3 | 385.0 | 396.9 | 422.9 | 396.2 | 368.7 | 347.9 | 303.1 | 4315.0 | 430.0 | 299.8 | 359.6 |

ポンプ運転時間 2002年
phase4

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave. |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| No.27 | 387 | 391 | 380 | 390 | 400 | 420 | 450 | 460 | 450 | 410 | 400 | 370 | 4908 | 460 | 370 | 409.0 |
| Unit 1 | 182 | 186 | 180 | 190 | 200 | 220 | 220 | 230 | 230 | 220 | 200 | 180 | 2438 | 230 | 180 | 203.2 |
| Unit 2 | 205 | 205 | 200 | 200 | 200 | 200 | 230 | 230 | 220 | 190 | 200 | 190 | 2470 | 230 | 190 | 205.8 |
| No.28 | 458 | 492 | 405 | 410 | 550 | 521 | 560 | 560 | 546 | 460 | 430 | 400 | 5792 | 560 | 400 | 482.7 |
| Unit 1 | 200 | 180 | 405 | 410 | 550 | 150 | 560 | 560 | 546 | 460 | 430 | 400 | 4851 | 560 | 150 | 404.3 |
| Unit 2 | 258 | 312 | 0 | 0 | 0 | 371 | 0 | 0 | 0 | 0 | 0 | 0 | 941 | 371 | 0 | 78.4 |
| No.29 | 510 | 520 | 520 | 540 | 560 | 560 | 521 | 570 | 530 | 500 | 420 | 410 | 6161 | 570 | 410 | 513.4 |
| Unit 1 | 260 | 260 | 260 | 270 | 280 | 280 | 290 | 280 | 260 | 240 | 220 | 200 | 3100 | 290 | 200 | 258.3 |
| Unit 2 | 250 | 260 | 260 | 270 | 280 | 280 | 231 | 290 | 270 | 260 | 200 | 210 | 3061 | 290 | 200 | 255.1 |
| No.30 | 370 | 360 | 382 | 380 | 400 | 410 | 420 | 420 | 430 | 390 | 360 | 330 | 4652 | 430 | 330 | 387.7 |
| Unit 1 | 190 | 180 | 192 | 190 | 200 | 210 | 210 | 210 | 220 | 200 | 180 | 170 | 2352 | 220 | 170 | 196.0 |
| Unit 2 | 180 | 180 | 190 | 190 | 200 | 200 | 210 | 210 | 210 | 190 | 180 | 160 | 2300 | 210 | 160 | 191.7 |
| No.31 | 215 | 214 | 251 | 355 | 388 | 258 | 251 | 262 | 270 | 284 | 229 | 183 | 3160 | 388 | 183 | 263.3 |
| Unit 1 | 100 | 100 | 121 | 159 | 181 | 119 | 115 | 125 | 130 | 146 | 114 | 90 | 1500 | 181 | 90 | 125.0 |
| Unit 2 | 115 | 114 | 130 | 196 | 207 | 139 | 136 | 137 | 140 | 138 | 115 | 93 | 1660 | 207 | 93 | 138.3 |
| No.32 | 330 | 350 | 360 | 348 | 395 | 435 | 426 | 483 | 382 | 375 | 343 | 232 | 4459 | 483 | 232 | 371.6 |
| Unit 1 | 170 | 180 | 180 | 182 | 207 | 216 | 215 | 247 | 186 | 188 | 172 | 120 | 2263 | 247 | 120 | 188.6 |
| Unit 2 | 160 | 170 | 180 | 166 | 188 | 219 | 211 | 236 | 196 | 187 | 171 | 112 | 2196 | 236 | 112 | 183.0 |
| No.33 | 310 | 310 | 339 | 454 | 450 | 460 | 474 | 470 | 480 | 370 | 346 | 300 | 4763 | 480 | 300 | 396.9 |
| Unit 1 | 160 | 160 | 156 | 223 | 220 | 230 | 237 | 230 | 240 | 208 | 200 | 180 | 2444 | 240 | 156 | 203.7 |
| Unit 2 | 150 | 150 | 183 | 231 | 230 | 230 | 237 | 240 | 240 | 162 | 146 | 120 | 2319 | 240 | 120 | 193.3 |
| No.34 | 210 | 220 | 220 | 230 | 240 | 250 | 254 | 260 | 268 | 210 | 200 | 170 | 2732 | 268 | 170 | 227.7 |
| Unit 1 | 100 | 110 | 120 | 120 | 120 | 130 | 130 | 130 | 134 | 110 | 100 | 90 | 1394 | 134 | 90 | 116.2 |
| Unit 2 | 110 | 110 | 100 | 110 | 120 | 120 | 124 | 130 | 134 | 100 | 100 | 80 | 1338 | 134 | 80 | 111.5 |
| No.35 | 230 | 220 | 240 | 240 | 304 | 318 | 384 | 426 | 410 | 400 | 364 | 216 | 3752 | 426 | 216 | 312.7 |
| Unit 1 | 110 | 110 | 120 | 130 | 152 | 164 | 192 | 213 | 200 | 200 | 182 | 120 | 1893 | 213 | 110 | 157.8 |
| Unit 2 | 120 | 110 | 120 | 110 | 152 | 154 | 192 | 213 | 210 | 200 | 182 | 96 | 1859 | 213 | 96 | 154.9 |
| Max | 510 | 520 | 520 | 540 | 560 | 560 | 560 | 570 | 546 | 500 | 430 | 410 | 6161 | 570 | 410.0 | 513.4 |
| Min | 210 | 214 | 220 | 230 | 240 | 250 | 251 | 260 | 268 | 210 | 200 | 170 | 2732 | 268 | 170.0 | 227.7 |
| Ave. | 335.6 | 341.9 | 344.1 | 371.9 | 409.7 | 403.6 | 415.6 | 434.6 | 418.4 | 377.7 | 343.6 | 290.1 | 4486.6 | 451.7 | 290.1 | 373.9 |

ポンプ運転時間 2003年
phase4

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave. |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|--------|-------|-------|-------|
| No.27 | 364 | 351 | 360 | 398 | 421 | 453 | 450 | 460 | 454 | 380 | 300 | - | 4391 | 460 | 300 | 399.2 |
| Unit 1 | 161 | 196 | 200 | 220 | 220 | 230 | 230 | 230 | 220 | 200 | 160 | - | 2267 | 230 | 160 | 206.1 |
| Unit 2 | 203 | 155 | 160 | 178 | 201 | 223 | 220 | 230 | 234 | 180 | 140 | - | 2124 | 234 | 140 | 193.1 |
| No.28 | 435 | 416 | 455 | 474 | 475 | 480 | 522 | 504 | 396 | 482 | 428 | - | 5067 | 522 | 396 | 460.6 |
| Unit 1 | 435 | 416 | 455 | 474 | 475 | 480 | 522 | 504 | 396 | 482 | 428 | - | 5067 | 522 | 396 | 460.6 |
| Unit 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0.0 |
| No.29 | 520 | 530 | 540 | 550 | 550 | 560 | 570 | 570 | 560 | 460 | 420 | - | 5830 | 570 | 420 | 530.0 |
| Unit 1 | 260 | 270 | 270 | 280 | 270 | 280 | 290 | 290 | 280 | 220 | 200 | - | 2910 | 290 | 200 | 264.5 |
| Unit 2 | 260 | 260 | 270 | 270 | 280 | 280 | 280 | 280 | 280 | 240 | 220 | - | 2920 | 280 | 220 | 265.5 |
| No.30 | 338 | 280 | 300 | 370 | 370 | 380 | 390 | 400 | 380 | 340 | 320 | - | 3868 | 400 | 280 | 351.6 |
| Unit 1 | 184 | 160 | 180 | 180 | 200 | 200 | 200 | 200 | 180 | 180 | 160 | - | 2024 | 200 | 160 | 184.0 |
| Unit 2 | 154 | 120 | 120 | 190 | 170 | 180 | 190 | 200 | 200 | 160 | 160 | - | 1844 | 200 | 120 | 167.6 |
| No.31 | 212 | 205 | 187 | 252 | 303 | 311 | 223 | 248 | 244 | 299 | 165 | - | 2649 | 311 | 165 | 240.8 |
| Unit 1 | 100 | 80 | 86 | 124 | 118 | 148 | 102 | 122 | 144 | 190 | 80 | - | 1294 | 190 | 80 | 117.6 |
| Unit 2 | 112 | 125 | 101 | 128 | 185 | 163 | 121 | 126 | 100 | 109 | 85 | - | 1355 | 185 | 85 | 123.2 |
| No.32 | 300 | 306 | 340 | 346 | 414 | 377 | 453 | 397 | 425 | 373 | 252 | - | 3983 | 453 | 252 | 362.1 |
| Unit 1 | 160 | 180 | 180 | 180 | 211 | 194 | 229 | 196 | 225 | 198 | 128 | - | 2081 | 229 | 128 | 189.2 |
| Unit 2 | 140 | 126 | 160 | 166 | 203 | 183 | 224 | 201 | 200 | 175 | 124 | - | 1902 | 224 | 124 | 172.9 |
| No.33 | 320 | 320 | 310 | 434 | 448 | 462 | 476 | 474 | 422 | 360 | 336 | - | 4362 | 476 | 310 | 396.5 |
| Unit 1 | 170 | 160 | 160 | 212 | 224 | 231 | 238 | 237 | 211 | 180 | 185 | - | 2208 | 238 | 160 | 200.7 |
| Unit 2 | 150 | 160 | 150 | 222 | 224 | 231 | 238 | 237 | 211 | 180 | 151 | - | 2154 | 238 | 150 | 195.8 |
| No.34 | 190 | 210 | 220 | 230 | 240 | 250 | 230 | 210 | 220 | 210 | 180 | - | 2390 | 250 | 180 | 217.3 |
| Unit 1 | 80 | 100 | 110 | 120 | 120 | 130 | 110 | 100 | 110 | 110 | 80 | - | 1170 | 130 | 80 | 106.4 |
| Unit 2 | 110 | 110 | 110 | 110 | 120 | 120 | 120 | 110 | 110 | 100 | 100 | - | 1220 | 120 | 100 | 110.9 |
| No.35 | 214 | 220 | 230 | 236 | 388 | 388 | 392 | 408 | 424 | 480 | 338 | - | 3718 | 480 | 214 | 338.0 |
| Unit 1 | 120 | 120 | 110 | 116 | 194 | 194 | 196 | 204 | 212 | 240 | 169 | - | 1875 | 240 | 110 | 170.5 |
| Unit 2 | 94 | 100 | 120 | 120 | 194 | 194 | 196 | 204 | 212 | 240 | 169 | - | 1843 | 240 | 94 | 167.5 |
| Max | 520 | 530 | 540 | 550 | 550 | 560 | 570 | 570 | 560 | 482 | 428 | - | 5830 | 570 | 420.0 | 530.0 |
| Min | 190 | 205 | 187 | 230 | 240 | 250 | 223 | 210 | 220 | 210 | 165 | - | 2390 | 250 | 165.0 | 217.3 |
| Ave. | 321.4 | 315.3 | 326.9 | 365.6 | 401.0 | 406.8 | 411.8 | 407.9 | 391.7 | 376.0 | 304.3 | - | 4028.7 | 435.8 | 279.7 | 366.2 |

ポンプ運転時間 2004年
phase4

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave. |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| No.27 | 360 | 240 | 265 | 310 | 319 | 277 | 333 | 391 | 385 | 312 | 248 | 246 | 3686 | 391 | 240 | 307.2 |
| Unit 1 | 180 | 120 | 150 | 150 | 114 | 66 | 102 | 152 | 169 | 102 | 83 | 86 | 1474 | 180 | 66 | 122.8 |
| Unit 2 | 180 | 120 | 115 | 160 | 205 | 211 | 231 | 239 | 216 | 210 | 165 | 160 | 2212 | 239 | 115 | 184.3 |
| No.28 | 284 | 272 | 416 | 385 | 460 | 429 | 434 | 517 | 417 | 406 | 401 | 349 | 4770 | 517 | 272 | 397.5 |
| Unit 1 | 284 | 0 | 416 | 385 | 0 | 429 | 434 | 517 | 417 | 406 | 401 | 0 | 3689 | 517 | 0 | 307.4 |
| Unit 2 | 0 | 272 | 0 | 0 | 460 | 0 | 0 | 0 | 0 | 0 | 0 | 349 | 1081 | 460 | 0 | 90.1 |
| No.29 | 320 | 288 | 390 | 338 | 408 | 416 | 492 | 472 | 456 | 462 | 352 | 418 | 4812 | 492 | 288 | 401.0 |
| Unit 1 | 160 | 144 | 195 | 169 | 204 | 208 | 246 | 236 | 228 | 231 | 176 | 209 | 2406 | 246 | 144 | 200.5 |
| Unit 2 | 160 | 144 | 195 | 169 | 204 | 208 | 246 | 236 | 228 | 231 | 176 | 209 | 2406 | 246 | 144 | 200.5 |
| No.30 | 284 | 247 | 253 | 253 | 236 | 256 | 304 | 270 | 245 | 244 | 268 | 196 | 3056 | 304 | 196 | 254.7 |
| Unit 1 | 153 | 136 | 138 | 140 | 125 | 155 | 168 | 150 | 137 | 132 | 134 | 98 | 1666 | 168 | 98 | 138.8 |
| Unit 2 | 131 | 111 | 115 | 113 | 111 | 101 | 136 | 120 | 108 | 112 | 134 | 98 | 1390 | 136 | 98 | 115.8 |
| No.31 | 183 | 160 | 221 | 245 | 338 | 245 | 194 | 228 | 210 | 293 | 194 | 145 | 2656 | 338 | 145 | 221.3 |
| Unit 1 | 62 | 80 | 112 | 126 | 180 | 127 | 107 | 154 | 106 | 149 | 99 | 80 | 1382 | 180 | 62 | 115.2 |
| Unit 2 | 121 | 80 | 109 | 119 | 158 | 118 | 87 | 74 | 104 | 144 | 95 | 65 | 1274 | 158 | 65 | 106.2 |
| No.32 | 235 | 249 | 286 | 318 | 414 | 371 | 438 | 366 | 372 | 392 | 276 | 247 | 3964 | 438 | 235 | 330.3 |
| Unit 1 | 128 | 130 | 149 | 166 | 224 | 194 | 232 | 189 | 203 | 206 | 142 | 130 | 2093 | 232 | 128 | 174.4 |
| Unit 2 | 107 | 119 | 137 | 152 | 190 | 177 | 206 | 177 | 169 | 186 | 134 | 117 | 1871 | 206 | 107 | 155.9 |
| No.33 | 202 | 214 | 344 | 430 | 444 | 394 | 492 | 380 | 350 | 424 | 280 | 250 | 4204 | 492 | 202 | 350.3 |
| Unit 1 | 101 | 107 | 172 | 215 | 222 | 196 | 246 | 190 | 157 | 208 | 140 | 125 | 2079 | 246 | 101 | 173.3 |
| Unit 2 | 101 | 107 | 172 | 215 | 222 | 198 | 246 | 190 | 193 | 216 | 140 | 125 | 2125 | 246 | 101 | 177.1 |
| No.34 | 32 | 46 | 72 | 86 | 90 | 78 | 64 | 102 | 68 | 46 | 66 | 36 | 786 | 102 | 32 | 65.5 |
| Unit 1 | 32 | 46 | 72 | 86 | 90 | 78 | 64 | 102 | 68 | 46 | 66 | 36 | 786 | 102 | 32 | 65.5 |
| Unit 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| No.35 | 234 | 176 | 240 | 182 | 362 | 348 | 388 | 408 | 344 | 524 | 444 | 300 | 3950 | 524 | 176 | 329.2 |
| Unit 1 | 117 | 88 | 120 | 91 | 181 | 174 | 194 | 204 | 172 | 262 | 222 | 150 | 1975 | 262 | 88 | 164.6 |
| Unit 2 | 117 | 88 | 120 | 91 | 181 | 174 | 194 | 204 | 172 | 262 | 222 | 150 | 1975 | 262 | 88 | 164.6 |
| Max | 360 | 288 | 416 | 430 | 460 | 429 | 492 | 517 | 456 | 524 | 444 | 418 | 4812 | 524 | 288.0 | 401.0 |
| Min | 32 | 46 | 72 | 86 | 90 | 78 | 64 | 102 | 68 | 46 | 66 | 36 | 786 | 102 | 32.0 | 65.5 |
| Ave. | 237.1 | 210.2 | 276.3 | 283.0 | 341.2 | 312.7 | 348.8 | 348.2 | 316.3 | 344.8 | 281.0 | 243.0 | 3542.7 | 399.8 | 198.4 | 295.2 |

ポンプ運転時間 2005年
phase4

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave. |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| No.27 | 247 | 215 | 251 | 225 | 325 | 273 | 282 | 344 | 418 | 336 | 245 | 274 | 3435 | 418 | 215 | 286.3 |
| Unit 1 | 81 | 65 | 94 | 75 | 133 | 88 | 109 | 145 | 209 | 137 | 80 | 89 | 1305 | 209 | 65 | 108.8 |
| Unit 2 | 166 | 150 | 157 | 150 | 192 | 185 | 173 | 199 | 209 | 199 | 165 | 185 | 2130 | 209 | 150 | 177.5 |
| No.28 | 267 | 277 | 278 | 256 | 450 | 468 | 386 | 497 | 480 | 438 | 366 | 324 | 4487 | 497 | 256 | 373.9 |
| Unit 1 | 267 | 6 | 22 | 256 | 363 | 468 | 386 | 0 | 0 | 0 | 0 | 0 | 1768 | 468 | 0 | 147.3 |
| Unit 2 | 0 | 271 | 256 | 0 | 87 | 0 | 0 | 497 | 480 | 438 | 366 | 324 | 2719 | 497 | 0 | 226.6 |
| No.29 | 444 | 330 | 396 | 334 | 480 | 464 | 548 | 484 | 424 | 352 | 352 | 374 | 4982 | 548 | 330 | 415.2 |
| Unit 1 | 222 | 165 | 198 | 167 | 240 | 232 | 274 | 242 | 212 | 176 | 176 | 187 | 2491 | 274 | 165 | 207.6 |
| Unit 2 | 222 | 165 | 198 | 167 | 240 | 232 | 274 | 242 | 212 | 176 | 176 | 187 | 2491 | 274 | 165 | 207.6 |
| No.30 | 210 | 244 | 296 | 255 | 304 | 254 | 220 | 275 | 277 | 316 | 229 | 217 | 3097 | 316 | 210 | 258.1 |
| Unit 1 | 105 | 122 | 162 | 133 | 201 | 115 | 138 | 114 | 170 | 171 | 130 | 117 | 1678 | 201 | 105 | 139.8 |
| Unit 2 | 105 | 122 | 134 | 122 | 103 | 139 | 82 | 161 | 107 | 145 | 99 | 100 | 1419 | 161 | 82 | 118.3 |
| No.31 | 97 | 163 | 253 | 259 | 289 | 222 | 210 | 211 | 220 | 246 | 150 | 170 | 2490 | 289 | 97 | 207.5 |
| Unit 1 | 51 | 68 | 125 | 132 | 154 | 114 | 107 | 166 | 117 | 131 | 82 | 87 | 1334 | 166 | 51 | 111.2 |
| Unit 2 | 46 | 95 | 128 | 127 | 135 | 108 | 103 | 45 | 103 | 115 | 68 | 83 | 1156 | 135 | 45 | 96.3 |
| No.32 | 305 | 266 | 334 | 284 | 351 | 380 | 365 | 389 | 403 | 394 | 328 | 215 | 4014 | 403 | 215 | 334.5 |
| Unit 1 | 151 | 135 | 187 | 146 | 157 | 195 | 192 | 197 | 198 | 197 | 164 | 103 | 2022 | 198 | 103 | 168.5 |
| Unit 2 | 154 | 131 | 147 | 138 | 194 | 185 | 173 | 192 | 205 | 197 | 164 | 112 | 1992 | 205 | 112 | 166.0 |
| No.33 | 272 | 172 | 344 | 436 | 424 | 440 | 476 | 504 | 356 | 421 | 288 | 236 | 4369 | 504 | 172 | 364.1 |
| Unit 1 | 132 | 83 | 184 | 236 | 212 | 220 | 238 | 252 | 178 | 215 | 144 | 118 | 2212 | 252 | 83 | 184.3 |
| Unit 2 | 140 | 89 | 160 | 200 | 212 | 220 | 238 | 252 | 178 | 206 | 144 | 118 | 2157 | 252 | 89 | 179.8 |
| No.34 | 40 | 50 | 56 | 54 | 88 | 78 | 97 | 96 | 70 | 86 | 56 | 60 | 831 | 97 | 40 | 69.3 |
| Unit 1 | 40 | 50 | 56 | 54 | 88 | 78 | 97 | 96 | 70 | 86 | 56 | 60 | 831 | 97 | 40 | 69.3 |
| Unit 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| No.35 | 278 | 144 | 280 | 306 | 316 | 368 | 420 | 384 | 452 | 456 | 262 | 224 | 3890 | 456 | 144 | 324.2 |
| Unit 1 | 139 | 72 | 140 | 153 | 158 | 184 | 210 | 192 | 226 | 252 | 131 | 112 | 1969 | 252 | 72 | 164.1 |
| Unit 2 | 139 | 72 | 140 | 153 | 158 | 184 | 210 | 192 | 226 | 204 | 131 | 112 | 1921 | 226 | 72 | 160.1 |
| Max | 444 | 330 | 396 | 436 | 480 | 468 | 548 | 504 | 480 | 456 | 366 | 374 | 4982 | 548 | 330.0 | 415.2 |
| Min | 40 | 50 | 56 | 54 | 88 | 78 | 97 | 96 | 70 | 86 | 56 | 60 | 831 | 97 | 40.0 | 69.3 |
| Ave. | 240.0 | 206.8 | 276.4 | 267.7 | 336.3 | 327.4 | 333.8 | 353.8 | 344.4 | 338.3 | 252.9 | 232.7 | 3510.6 | 392.0 | 186.6 | 292.5 |

ポンプ運転時間 2005年
phase 1 to 3

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave |
|--------|------|-----|------|-----|-----|------|------|------|------|------|-----|-----|-------|------|-----|--------|
| No.1 | 456 | 488 | 672 | 738 | 816 | 900 | 896 | 751 | 822 | 684 | 574 | 548 | 8345 | 900 | 456 | 695.4 |
| Unit 1 | 230 | 244 | 336 | 369 | 416 | 450 | 448 | 382 | 411 | 342 | 287 | 274 | 4189 | 450 | 230 | 349.1 |
| Unit 2 | 226 | 244 | 336 | 369 | 400 | 450 | 448 | 369 | 411 | 342 | 287 | 274 | 4156 | 450 | 226 | 346.3 |
| No.2 | 876 | 852 | 972 | 858 | 900 | 828 | 792 | 900 | 900 | 936 | 828 | 828 | 10470 | 972 | 792 | 872.5 |
| Unit 1 | 438 | 426 | 486 | 432 | 450 | 414 | 396 | 450 | 450 | 468 | 414 | 414 | 5238 | 486 | 396 | 436.5 |
| Unit 2 | 438 | 426 | 486 | 426 | 450 | 414 | 396 | 450 | 450 | 468 | 414 | 414 | 5232 | 486 | 396 | 436.0 |
| No.3 | 150 | 184 | 308 | 362 | 440 | 428 | 472 | 494 | 420 | 416 | 312 | 368 | 4354 | 494 | 150 | 362.8 |
| Unit 1 | 75 | 103 | 154 | 181 | 220 | 214 | 236 | 247 | 210 | 208 | 156 | 184 | 2188 | 247 | 75 | 182.3 |
| Unit 2 | 75 | 81 | 154 | 181 | 220 | 214 | 236 | 247 | 210 | 208 | 156 | 184 | 2166 | 247 | 75 | 180.5 |
| No.4 | 417 | 380 | 380 | 440 | 284 | 472 | 454 | 448 | 468 | 448 | 354 | 356 | 4901 | 472 | 284 | 408.4 |
| Unit 1 | 211 | 190 | 190 | 220 | 164 | 236 | 227 | 224 | 234 | 224 | 178 | 178 | 2476 | 236 | 164 | 206.3 |
| Unit 2 | 206 | 190 | 190 | 220 | 120 | 236 | 227 | 224 | 234 | 224 | 176 | 178 | 2425 | 236 | 120 | 202.1 |
| No.5 | 1044 | 984 | 1040 | 994 | 994 | 1064 | 1116 | 1064 | 1114 | 1070 | 894 | 906 | 12284 | 1116 | 894 | 1023.7 |
| Unit 1 | 522 | 492 | 520 | 497 | 497 | 532 | 558 | 532 | 557 | 535 | 447 | 453 | 6142 | 558 | 447 | 511.8 |
| Unit 2 | 522 | 492 | 520 | 497 | 497 | 532 | 558 | 532 | 557 | 535 | 447 | 453 | 6142 | 558 | 447 | 511.8 |
| No.6 | 354 | 582 | 186 | 56 | 182 | 459 | 237 | 670 | 407 | 350 | 248 | 514 | 4245 | 670 | 56 | 353.8 |
| Unit 1 | 298 | 474 | 179 | 56 | 182 | 348 | 237 | 497 | 372 | 285 | 202 | 257 | 3387 | 497 | 56 | 282.3 |
| Unit 2 | 56 | 108 | 7 | 0 | 0 | 111 | 0 | 173 | 35 | 65 | 46 | 257 | 858 | 257 | 0 | 71.5 |
| No.7 | 204 | 240 | 332 | 372 | 383 | 442 | 390 | 436 | 416 | 372 | 282 | 230 | 4099 | 442 | 204 | 341.6 |
| Unit 1 | 102 | 120 | 166 | 186 | 202 | 221 | 195 | 218 | 208 | 188 | 140 | 115 | 2061 | 221 | 102 | 171.8 |
| Unit 2 | 102 | 120 | 166 | 186 | 181 | 221 | 195 | 218 | 208 | 184 | 142 | 115 | 2038 | 221 | 102 | 169.8 |
| No.8 | 558 | 504 | 566 | 528 | 554 | 538 | 552 | 576 | 500 | 647 | 541 | 510 | 6574 | 647 | 500 | 547.8 |
| Unit 1 | 283 | 252 | 283 | 264 | 277 | 269 | 276 | 288 | 250 | 329 | 285 | 289 | 3345 | 329 | 250 | 278.8 |
| Unit 2 | 275 | 252 | 283 | 264 | 277 | 269 | 276 | 288 | 250 | 318 | 256 | 221 | 3229 | 318 | 221 | 269.1 |
| No.9 | 308 | 330 | 402 | 355 | 362 | 404 | 434 | 456 | 391 | 358 | 294 | 350 | 4444 | 456 | 294 | 370.3 |
| Unit 1 | 154 | 165 | 201 | 179 | 181 | 202 | 217 | 228 | 195 | 179 | 147 | 175 | 2223 | 228 | 147 | 185.3 |
| Unit 2 | 154 | 165 | 201 | 176 | 181 | 202 | 217 | 228 | 196 | 179 | 147 | 175 | 2221 | 228 | 147 | 185.1 |
| No.10 | 524 | 576 | 646 | 576 | 656 | 624 | 650 | 728 | 660 | 718 | 570 | 576 | 7504 | 728 | 524 | 625.3 |
| Unit 1 | 262 | 288 | 323 | 288 | 328 | 312 | 325 | 364 | 330 | 359 | 285 | 288 | 3752 | 364 | 262 | 312.7 |
| Unit 2 | 262 | 288 | 323 | 288 | 328 | 312 | 325 | 364 | 330 | 359 | 285 | 288 | 3752 | 364 | 262 | 312.7 |
| No.11 | 292 | 236 | 328 | 312 | 370 | 306 | 320 | 382 | 366 | 342 | 268 | 244 | 3766 | 382 | 236 | 313.8 |
| Unit 1 | 146 | 118 | 164 | 156 | 185 | 153 | 160 | 191 | 183 | 171 | 134 | 122 | 1883 | 191 | 118 | 156.9 |
| Unit 2 | 146 | 118 | 164 | 156 | 185 | 153 | 160 | 191 | 183 | 171 | 134 | 122 | 1883 | 191 | 118 | 156.9 |

ポンプ運転時間 2005年
phase 1 to 3

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-------|
| No.12 | 98 | 126 | 154 | 160 | 182 | 149 | 179 | 201 | 188 | 190 | 116 | 109 | 1852 | 201 | 98 | 154.3 |
| Unit 1 | 51 | 65 | 87 | 86 | 94 | 77 | 93 | 103 | 95 | 91 | 62 | 62 | 966 | 103 | 51 | 80.5 |
| Unit 2 | 47 | 61 | 67 | 74 | 88 | 72 | 86 | 98 | 93 | 99 | 54 | 47 | 886 | 99 | 47 | 73.8 |
| No.13 | 298 | 328 | 450 | 380 | 378 | 488 | 366 | 496 | 512 | 441 | 399 | 352 | 4888 | 512 | 298 | 407.3 |
| Unit 1 | 170 | 180 | 225 | 190 | 191 | 251 | 188 | 249 | 256 | 222 | 206 | 182 | 2510 | 256 | 170 | 209.2 |
| Unit 2 | 128 | 148 | 225 | 190 | 187 | 237 | 178 | 247 | 256 | 219 | 193 | 170 | 2378 | 256 | 128 | 198.2 |
| No.14 | 552 | 580 | 672 | 628 | 696 | 654 | 670 | 650 | 676 | 580 | 568 | 472 | 7398 | 696 | 472 | 616.5 |
| Unit 1 | 276 | 290 | 336 | 314 | 348 | 327 | 335 | 325 | 338 | 290 | 284 | 236 | 3699 | 348 | 236 | 308.3 |
| Unit 2 | 276 | 290 | 336 | 314 | 348 | 327 | 335 | 325 | 338 | 290 | 284 | 236 | 3699 | 348 | 236 | 308.3 |
| No.15 | 85 | 58 | 120 | 145 | 144 | 120 | 171 | 158 | 154 | 194 | 104 | 108 | 1561 | 194 | 58 | 130.1 |
| Unit 1 | 41 | 29 | 78 | 92 | 88 | 62 | 89 | 97 | 80 | 107 | 57 | 53 | 873 | 107 | 29 | 72.8 |
| Unit 2 | 44 | 29 | 42 | 53 | 56 | 58 | 82 | 61 | 74 | 87 | 47 | 55 | 688 | 87 | 29 | 57.3 |
| No.16 | 257 | 256 | 312 | 309 | 331 | 346 | 360 | 500 | 393 | 336 | 285 | 280 | 3965 | 500 | 256 | 330.4 |
| Unit 1 | 141 | 126 | 164 | 151 | 165 | 185 | 188 | 250 | 203 | 168 | 141 | 98 | 1980 | 250 | 98 | 165.0 |
| Unit 2 | 116 | 130 | 148 | 158 | 166 | 161 | 172 | 250 | 190 | 168 | 144 | 182 | 1985 | 250 | 116 | 165.4 |
| No.17 | 98 | 128 | 98 | 166 | 148 | 158 | 148 | 182 | 156 | 196 | 115 | 80 | 1673 | 196 | 80 | 139.4 |
| Unit 1 | 66 | 56 | 66 | 80 | 74 | 78 | 70 | 92 | 82 | 78 | 71 | 46 | 859 | 92 | 46 | 71.6 |
| Unit 2 | 32 | 72 | 32 | 86 | 74 | 80 | 78 | 90 | 74 | 118 | 44 | 34 | 814 | 118 | 32 | 67.8 |
| No.18 | 162 | 150 | 162 | 258 | 250 | 246 | 282 | 294 | 310 | 168 | 168 | 180 | 2630 | 310 | 150 | 219.2 |
| Unit 1 | 72 | 84 | 72 | 126 | 136 | 126 | 158 | 138 | 138 | 84 | 78 | 88 | 1300 | 158 | 72 | 108.3 |
| Unit 2 | 90 | 66 | 90 | 132 | 114 | 120 | 124 | 156 | 172 | 84 | 90 | 92 | 1330 | 172 | 66 | 110.8 |
| No.19 | 200 | 224 | 126 | 100 | 222 | 264 | 238 | 248 | 198 | 210 | 236 | 262 | 2528 | 264 | 100 | 210.7 |
| Unit 1 | 100 | 112 | 81 | 50 | 111 | 132 | 119 | 124 | 99 | 105 | 118 | 131 | 1282 | 132 | 50 | 106.8 |
| Unit 2 | 100 | 112 | 45 | 50 | 111 | 132 | 119 | 124 | 99 | 105 | 118 | 131 | 1246 | 132 | 45 | 103.8 |
| No.20 | 405 | 480 | 632 | 576 | 584 | 644 | 646 | 672 | 712 | 696 | 468 | 560 | 7075 | 712 | 405 | 589.6 |
| Unit 1 | 206 | 240 | 316 | 288 | 292 | 322 | 323 | 336 | 356 | 348 | 229 | 280 | 3536 | 356 | 206 | 294.7 |
| Unit 2 | 199 | 240 | 316 | 288 | 292 | 322 | 323 | 336 | 356 | 348 | 239 | 280 | 3539 | 356 | 199 | 294.9 |
| No.21 | 159 | 250 | 266 | 282 | 257 | 410 | 399 | 379 | 376 | 343 | 223 | 220 | 3564 | 410 | 159 | 297.0 |
| Unit 1 | 68 | 132 | 132 | 154 | 144 | 221 | 189 | 177 | 201 | 179 | 135 | 123 | 1855 | 221 | 68 | 154.6 |
| Unit 2 | 91 | 118 | 134 | 128 | 113 | 189 | 210 | 202 | 175 | 164 | 88 | 97 | 1709 | 210 | 88 | 142.4 |
| No.22 | 368 | 336 | 476 | 384 | 628 | 534 | 474 | 556 | 512 | 462 | 384 | 342 | 5456 | 628 | 336 | 454.7 |
| Unit 1 | 184 | 168 | 238 | 192 | 314 | 267 | 237 | 278 | 256 | 231 | 192 | 171 | 2728 | 314 | 168 | 227.3 |
| Unit 2 | 184 | 168 | 238 | 192 | 314 | 267 | 237 | 278 | 256 | 231 | 192 | 171 | 2728 | 314 | 168 | 227.3 |

ポンプ運転時間 2005年
phase 1 to 3

| PS No. | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total | Max | Min | Ave |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|
| No.23 | 570 | 506 | 564 | 564 | 504 | 660 | 714 | 684 | 594 | 624 | 470 | 694 | 7148 | 714 | 470 | 595.7 |
| Unit 1 | 285 | 253 | 282 | 282 | 252 | 330 | 357 | 342 | 297 | 312 | 235 | 347 | 3574 | 357 | 235 | 297.8 |
| Unit 2 | 285 | 253 | 282 | 282 | 252 | 330 | 357 | 342 | 297 | 312 | 235 | 347 | 3574 | 357 | 235 | 297.8 |
| No.24 | 481 | 371 | 476 | 463 | 539 | 608 | 641 | 706 | 472 | 492 | 702 | 418 | 6369 | 706 | 371 | 530.8 |
| Unit 1 | 152 | 299 | 152 | 235 | 539 | 261 | 347 | 322 | 214 | 234 | 40 | 0 | 2795 | 539 | 0 | 232.9 |
| Unit 2 | 329 | 72 | 324 | 228 | 0 | 347 | 294 | 384 | 258 | 258 | 662 | 418 | 3574 | 662 | 0 | 297.8 |
| No.25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Unit 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| Unit 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| No.26 | 298 | 498 | 216 | 56 | 151 | 12 | 374 | 283 | 691 | 608 | 377 | 544 | 4108 | 691 | 12 | 342.3 |
| Unit 1 | 298 | 474 | 179 | 56 | 151 | 12 | 130 | 48 | 250 | 302 | 215 | 188 | 2303 | 474 | 12 | 191.9 |
| Unit 2 | 0 | 24 | 37 | 0 | 0 | 0 | 244 | 235 | 441 | 306 | 162 | 356 | 1805 | 441 | 0 | 150.4 |
| Max | 1044 | 984 | 1040 | 994 | 994 | 1064 | 1116 | 1064 | 1114 | 1070 | 894 | 906 | 12284 | 1116 | 894 | 1023.7 |
| Min | 85 | 58 | 98 | 56 | 144 | 12 | 148 | 158 | 154 | 168 | 104 | 80 | 1561 | 194 | 12 | 130.1 |
| Ave. | 368.6 | 385.9 | 422.2 | 402.5 | 438.2 | 470.3 | 479.0 | 516.6 | 496.3 | 475.2 | 391.2 | 402.0 | 5248.0 | 560.5 | 306.2 | 437.3 |

出典: p. A8-58からp. A8-65の運転記録は、アスワン・イドフルクソールの各管理事務所から収集されたものである。

F-3 現況ポンプ吐出量

作付面積一覧表

| | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 | 合計 |
|------------------|--------|---------|--------|--------|--------|--------|-------|--------|-------|-------|
| 面積 (フィトン) | 175.0 | 2,000.0 | 440.0 | 200.0 | 200.0 | 250.0 | 210.0 | 180.0 | 600.0 | 4,255 |
| 現況作付率 | 96.3% | 70.4% | 106.8% | 113.7% | 103.0% | 95.7% | 94.7% | 97.1% | 96.3% | |
| 現況作付面積 (フィトン) | 168.5 | 1,408.0 | 469.9 | 227.4 | 206.0 | 239.3 | 198.9 | 174.8 | 577.8 | 3,671 |
| 計画作付率 | 111.9% | 101.5% | 107.2% | 115.8% | 113.5% | 113.9% | 94.7% | 114.1% | 96.3% | |
| 計画作付面積 (フィトン) | 195.8 | 2,030.0 | 471.7 | 231.6 | 227.0 | 284.8 | 198.9 | 205.4 | 577.8 | 4,423 |

現況吐出量

2005年

(単位:1,000m3)

| 月 | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-----|----------|-----------|----------|----------|----------|----------|----------|--------|----------|
| Jan | 148.75 | 884.21 | 449.97 | 114.69 | 55.19 | 189.22 | 157.35 | 28.86 | 461.37 |
| Feb | 136.11 | 934.40 | 348.03 | 139.80 | 99.46 | 173.46 | 104.89 | 37.65 | 248.25 |
| Mar | 167.47 | 955.56 | 435.33 | 178.34 | 166.44 | 229.54 | 221.80 | 44.08 | 502.19 |
| Apr | 158.68 | 896.95 | 383.41 | 161.99 | 184.83 | 206.29 | 298.20 | 44.53 | 571.90 |
| May | 243.07 | 1,607.76 | 576.51 | 204.22 | 225.33 | 270.35 | 308.75 | 76.18 | 616.52 |
| Jun | 217.32 | 1,705.69 | 584.34 | 181.04 | 190.75 | 311.49 | 342.56 | 71.07 | 750.93 |
| Jul | 239.92 | 1,435.70 | 725.33 | 167.00 | 200.95 | 319.73 | 398.12 | 93.29 | 898.28 |
| Aug | 273.83 | 1,811.39 | 609.53 | 196.01 | 181.30 | 318.86 | 392.39 | 87.48 | 783.58 |
| Sep | 312.62 | 1,714.94 | 509.25 | 186.08 | 171.53 | 310.40 | 259.24 | 60.60 | 881.85 |
| Oct | 236.96 | 1,534.63 | 404.07 | 200.74 | 175.55 | 286.19 | 287.94 | 70.91 | 852.25 |
| Nov | 163.47 | 1,258.04 | 386.96 | 137.97 | 98.68 | 225.42 | 185.70 | 44.08 | 469.91 |
| Dec | 173.46 | 1,092.95 | 394.43 | 124.33 | 103.73 | 140.21 | 143.92 | 45.18 | 386.17 |
| 計 | 2,471.65 | 15,832.24 | 5,807.15 | 1,992.20 | 1,853.74 | 2,981.15 | 3,100.88 | 703.90 | 7,423.19 |

現況吐出量

2004年

(単位:1,000m3)

| 月 | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-----|----------|-----------|----------|----------|----------|----------|----------|--------|----------|
| Jan | 216.80 | 940.51 | 324.30 | 155.11 | 104.12 | 145.80 | 116.86 | 23.09 | 388.35 |
| Feb | 151.93 | 917.54 | 303.73 | 141.52 | 97.63 | 162.38 | 130.51 | 34.63 | 303.42 |
| Mar | 176.81 | 1,429.91 | 428.73 | 152.43 | 145.39 | 196.55 | 221.80 | 56.67 | 430.45 |
| Apr | 218.63 | 1,348.93 | 388.00 | 160.72 | 174.84 | 230.99 | 294.10 | 70.91 | 340.15 |
| May | 238.58 | 1,643.49 | 490.04 | 158.54 | 263.53 | 318.87 | 323.32 | 77.91 | 706.26 |
| Jun | 220.50 | 1,563.55 | 523.89 | 182.47 | 210.52 | 304.11 | 306.75 | 71.07 | 710.12 |
| Jul | 283.31 | 1,614.24 | 651.21 | 230.76 | 185.64 | 383.68 | 411.51 | 61.55 | 829.84 |
| Aug | 311.25 | 1,884.28 | 594.42 | 192.44 | 195.91 | 300.01 | 295.85 | 92.94 | 832.55 |
| Sep | 287.94 | 1,489.86 | 547.69 | 164.58 | 163.73 | 286.52 | 254.87 | 58.87 | 671.14 |
| Oct | 220.04 | 1,422.51 | 530.35 | 155.00 | 209.09 | 284.74 | 289.99 | 37.93 | 979.33 |
| Nov | 165.47 | 1,378.35 | 386.96 | 161.47 | 127.63 | 189.68 | 180.54 | 51.95 | 796.33 |
| Dec | 155.73 | 1,177.28 | 440.83 | 112.30 | 88.48 | 161.07 | 152.46 | 27.11 | 517.19 |
| 計 | 2,646.99 | 16,810.44 | 5,610.14 | 1,967.33 | 1,966.49 | 2,964.39 | 2,978.55 | 664.64 | 7,505.14 |

現況吐出量 2003年 (単位:1,000m3)

| 月 | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-----|----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| Jan | 219.21 | 1,440.57 | 526.99 | 184.60 | 170.69 | 198.53 | 109.92 | 154.42 | 368.43 |
| Feb | 285.51 | 1,437.03 | 558.95 | 160.42 | 186.72 | 221.72 | 128.07 | 165.64 | 353.41 |
| Mar | 240.19 | 1,563.96 | 593.63 | 180.75 | 223.67 | 213.05 | 141.85 | 181.03 | 335.39 |
| Apr | 280.69 | 1,660.77 | 631.36 | 235.04 | 246.91 | 315.24 | 157.31 | 194.59 | 470.98 |
| May | 314.86 | 1,697.08 | 660.59 | 248.56 | 322.79 | 345.06 | 174.77 | 335.90 | 591.15 |
| Jun | 360.60 | 1,749.43 | 705.24 | 270.85 | 323.94 | 378.70 | 194.64 | 353.55 | 634.62 |
| Jul | 382.86 | 1,941.55 | 754.45 | 296.04 | 433.47 | 416.97 | 192.37 | 377.01 | 476.94 |
| Aug | 366.17 | 1,836.90 | 717.83 | 285.10 | 341.12 | 388.54 | 163.50 | 371.77 | 506.06 |
| Sep | 339.54 | 1,450.56 | 672.60 | 255.27 | 331.37 | 325.03 | 160.20 | 367.06 | 476.04 |
| Oct | 267.99 | 1,688.80 | 528.05 | 215.98 | 266.18 | 261.49 | 143.63 | 395.78 | 558.82 |
| Nov | 200.16 | 1,471.15 | 461.71 | 192.80 | 165.78 | 230.91 | 116.06 | 266.04 | 295.93 |
| Dec | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 計 | 3,257.80 | 17,937.78 | 6,811.39 | 2,525.42 | 3,012.64 | 3,295.24 | 1,682.31 | 3,162.80 | 5,067.79 |

現況吐出量 2002年 (単位:1,000m3)

| 月 | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-----|----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| Jan | 233.06 | 1,516.74 | 516.86 | 202.08 | 187.76 | 192.33 | 121.49 | 165.97 | 356.81 |
| Feb | 247.52 | 1,659.66 | 548.41 | 206.26 | 213.57 | 202.16 | 134.17 | 165.64 | 368.93 |
| Mar | 253.54 | 1,392.10 | 571.64 | 230.15 | 236.83 | 232.98 | 141.85 | 188.91 | 450.18 |
| Apr | 275.05 | 1,436.53 | 619.89 | 241.39 | 248.34 | 329.77 | 157.31 | 197.89 | 663.48 |
| May | 299.16 | 1,965.04 | 672.60 | 268.71 | 307.98 | 346.60 | 174.77 | 263.18 | 756.99 |
| Jun | 334.33 | 1,898.86 | 705.24 | 292.23 | 373.77 | 377.06 | 194.64 | 289.77 | 526.47 |
| Jul | 382.86 | 2,082.89 | 689.59 | 318.81 | 407.63 | 415.21 | 212.44 | 369.32 | 536.83 |
| Aug | 366.17 | 2,041.00 | 717.83 | 299.36 | 415.02 | 385.26 | 202.42 | 388.18 | 534.63 |
| Sep | 336.55 | 1,950.75 | 636.57 | 288.86 | 297.84 | 369.70 | 195.16 | 354.94 | 526.77 |
| Oct | 289.15 | 1,611.71 | 573.97 | 247.75 | 267.60 | 268.76 | 143.63 | 329.82 | 530.78 |
| Nov | 266.88 | 1,478.03 | 461.71 | 216.90 | 225.65 | 237.79 | 128.96 | 286.51 | 410.72 |
| Dec | 234.23 | 1,349.32 | 432.40 | 189.07 | 141.56 | 195.64 | 103.67 | 162.63 | 315.49 |
| 計 | 3,518.51 | 20,382.62 | 7,146.69 | 3,001.57 | 3,323.55 | 3,553.24 | 1,910.50 | 3,162.74 | 5,978.08 |

現況吐出量 2001年 (単位:1,000m3)

| 月 | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-----|----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| Jan | 228.85 | 1,324.66 | 506.72 | 196.62 | 187.76 | 186.12 | 115.70 | 158.75 | 375.07 |
| Feb | 241.83 | 1,349.32 | 527.31 | 206.26 | 207.47 | 195.64 | 121.97 | 165.64 | 360.31 |
| Mar | 256.21 | 1,392.10 | 571.64 | 219.91 | 236.83 | 206.17 | 135.40 | 173.16 | 382.02 |
| Apr | 275.05 | 1,436.53 | 608.41 | 235.04 | 256.90 | 232.44 | 150.47 | 197.89 | 491.54 |
| May | 299.16 | 1,929.31 | 648.58 | 255.27 | 286.93 | 261.87 | 174.77 | 216.43 | 554.08 |
| Jun | 334.33 | 2,004.55 | 692.65 | 277.98 | 343.70 | 295.09 | 186.85 | 264.25 | 540.75 |
| Jul | 357.33 | 2,157.28 | 741.21 | 303.63 | 392.32 | 324.11 | 209.10 | 353.93 | 457.70 |
| Aug | 350.25 | 2,113.89 | 705.24 | 292.23 | 360.88 | 327.88 | 202.42 | 451.96 | 489.74 |
| Sep | 321.60 | 2,000.77 | 600.53 | 282.15 | 335.27 | 308.09 | 189.33 | 294.34 | 440.93 |
| Oct | 282.10 | 1,927.05 | 551.01 | 228.69 | 264.04 | 261.49 | 157.31 | 277.05 | 433.60 |
| Nov | 260.21 | 1,718.64 | 483.69 | 204.85 | 236.83 | 233.66 | 135.40 | 236.13 | 450.18 |
| Dec | 240.56 | 1,450.52 | 421.85 | 183.34 | 195.26 | 195.64 | 121.97 | 156.61 | 293.08 |
| 計 | 3,447.47 | 20,804.61 | 7,058.84 | 2,885.96 | 3,304.18 | 3,028.20 | 1,900.70 | 2,946.14 | 5,268.99 |

合計現況吐出量(2001~2005年) (単位:1,000m3)

| | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 吐出量合計 | 15,342.43 | 91,767.70 | 32,434.21 | 12,372.48 | 13,460.60 | 15,822.22 | 11,572.94 | 10,640.23 | 31,243.19 |

現況吐出力平均(2001～2005年)

(単位:1,000m³)

| 月 | No.27 | No.28 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|-----|--------|---------|--------|--------|--------|--------|--------|--------|--------|
| Jan | 209.33 | 1221.34 | 464.97 | 170.62 | 141.10 | 182.40 | 124.26 | 106.22 | 390.01 |
| Feb | 212.58 | 1259.59 | 457.29 | 170.85 | 160.97 | 191.07 | 123.92 | 113.84 | 326.87 |
| Mar | 218.84 | 1346.72 | 520.19 | 192.31 | 201.83 | 215.66 | 172.54 | 128.77 | 420.05 |
| Apr | 241.62 | 1355.94 | 526.21 | 206.84 | 222.36 | 262.95 | 211.48 | 141.16 | 507.61 |
| May | 278.97 | 1768.53 | 609.66 | 227.06 | 281.31 | 308.55 | 231.27 | 193.92 | 645.00 |
| Jun | 293.42 | 1784.42 | 642.27 | 240.91 | 288.54 | 333.29 | 245.09 | 209.94 | 632.58 |
| Jul | 329.26 | 1846.33 | 712.36 | 263.24 | 324.00 | 371.94 | 284.71 | 251.02 | 639.92 |
| Aug | 333.54 | 1937.49 | 668.97 | 253.03 | 298.85 | 344.11 | 251.32 | 278.47 | 629.31 |
| Sep | 319.65 | 1721.37 | 593.33 | 235.39 | 259.95 | 319.95 | 211.76 | 227.16 | 599.35 |
| Oct | 259.25 | 1636.94 | 517.49 | 209.63 | 236.49 | 272.53 | 204.50 | 222.30 | 670.96 |
| Nov | 211.24 | 1460.84 | 436.20 | 182.80 | 170.91 | 223.49 | 149.33 | 176.94 | 484.61 |
| Dec | 200.99 | 1267.52 | 422.38 | 152.26 | 132.26 | 173.14 | 130.51 | 97.88 | 377.98 |

注1: 現況作付面積は基本設計調査団の農家調査による。

注2: 現況吐出力はポンプ運転記録とポンプ能力から求めた。

Unit cost of O&M before installation of renewal pump

| No. | Station Name | Water Demand (1000m ³) | Estimated total discharge (1000m ³) | Cost of maintenance | Cost of electricity | Cost of oil & grease | Wages & salary | Existing | | Irrigated area (feddan) | Unit cost of Electricity (LE/1000m3) a= / | Unit cost of O&M Cost (LE/1000m3) b= / | Unit Cost of Irrigation (LE/1000m3) c= / |
|-----|----------------------|---------------------------------------|---|------------------------|------------------------|-------------------------|-------------------|----------------------------------|---|----------------------------|--|---|---|
| | | | | | | | | Total O&M Cost (LE) = ~ | Total Cost including salary (LE) =Σ ~ | | | | |
| 27 | Gezeret El-Kobania | | | | | | | | | | | | |
| | 2003 | 3,019.0 | 3,257.8 | 0.0 | 4,745.4 | 107.4 | 10,528.8 | 4,852.8 | 15,381.6 | 168.5 | 1.46 | 1.49 | 4.72 |
| | 2004 | 3,019.0 | 2,647.0 | 0.0 | 4,395.0 | 47.5 | 14,061.8 | 4,442.5 | 18,504.3 | 168.5 | 1.66 | 1.68 | 6.99 |
| | 2005 | 3,019.0 | 2,471.7 | 100.0 | 3,515.4 | 88.2 | 19,873.2 | 3,703.6 | 23,576.8 | 168.5 | 1.42 | 1.50 | 9.54 |
| | Average | 3,019.0 | 2,792.1 | 33.3 | 4,218.6 | 81.0 | 14,821.3 | 4,333.0 | 19,154.2 | 168.5 | 1.51 | 1.56 | 7.08 |
| 29 | Sahel El-Akab Bahary | | | | | | | | | | | | |
| | 2003 | 5,951.0 | 6,811.4 | 0.0 | 18,940.0 | 123.0 | 24,122.2 | 19,063.0 | 43,185.2 | 469.9 | 2.78 | 2.80 | 6.34 |
| | 2004 | 5,951.0 | 5,610.1 | 0.0 | 8,940.0 | 87.1 | 36,039.5 | 9,027.1 | 45,066.6 | 469.9 | 1.59 | 1.61 | 8.03 |
| | 2005 | 5,951.0 | 5,807.2 | 91.7 | 8,260.0 | 92.3 | 43,076.0 | 8,444.0 | 51,520.0 | 469.9 | 1.42 | 1.45 | 8.87 |
| | Average | 5,951.0 | 6,076.2 | 30.6 | 12,046.7 | 100.8 | 34,412.6 | 12,178.0 | 46,590.6 | 469.9 | 1.93 | 1.95 | 7.75 |
| 30 | Gezeret Meneha | | | | | | | | | | | | |
| | 2003 | 2,539.0 | 2,525.4 | 135.0 | 8,952.0 | 93.0 | 40,550.9 | 9,180.0 | 49,730.9 | 227.4 | 3.54 | 3.64 | 19.69 |
| | 2004 | 2,539.0 | 1,967.3 | 270.8 | 7,956.0 | 58.3 | 38,662.5 | 8,285.1 | 46,947.6 | 227.4 | 4.04 | 4.21 | 23.86 |
| | 2005 | 2,539.0 | 1,992.2 | 88.3 | 7,596.0 | 76.6 | 37,788.0 | 7,760.9 | 45,548.9 | 227.4 | 3.81 | 3.90 | 22.86 |
| | Average | 2,539.0 | 2,161.7 | 164.7 | 8,168.0 | 76.0 | 39,000.5 | 8,408.7 | 47,409.1 | 227.4 | 3.80 | 3.91 | 22.14 |
| 31 | El-Sarag | | | | | | | | | | | | |
| | 2003 | 2,871.0 | 3,012.6 | 264.0 | 8,800.0 | 154.9 | 53,616.6 | 9,218.9 | 62,835.5 | 206.0 | 2.92 | 3.06 | 20.86 |
| | 2004 | 2,871.0 | 1,966.5 | 44.7 | 5,900.0 | 99.7 | 37,609.2 | 6,044.4 | 43,653.6 | 206.0 | 3.00 | 3.07 | 22.20 |
| | 2005 | 2,871.0 | 1,853.7 | 115.5 | 8,050.0 | 252.0 | 61,057.0 | 8,417.5 | 69,474.5 | 206.0 | 4.34 | 4.54 | 37.48 |
| | Average | 2,871.0 | 2,277.6 | 141.4 | 7,583.3 | 168.9 | 50,760.9 | 7,893.6 | 58,654.5 | 206.0 | 3.42 | 3.56 | 26.84 |

| No. | Station Name | Water Demand (1000m ³) | Estimated total discharge (1000m ³) | Cost of maintenance | Cost of electricity | Cost of oil & grease | Wages & salary | Existing | | Irrigated area (feddan) | Unit cost of Electricity (LE/1000m3) a= / | Unit cost of O&M Cost (LE/1000m3) b= / | Unit Cost of Irrigation (LE/1000m3) c= / |
|-----|---------------------|---------------------------------------|---|------------------------|------------------------|-------------------------|-------------------|----------------------------------|---|----------------------------|--|---|---|
| | | | | | | | | Total O&M Cost (LE) = ~ | Total Cost including salary (LE) =Σ ~ | | | | |
| 32 | Gezeret El-Fawaza | | | | | | | | | | | | |
| | 2003 | 3,255.0 | 3,295.2 | 369.0 | 11,840.0 | 19.9 | 54,727.3 | 12,228.9 | 66,956.2 | 239.3 | 3.59 | 3.71 | 20.32 |
| | 2004 | 3,255.0 | 2,964.4 | 0.0 | 7,752.0 | 76.0 | 33,739.1 | 7,828.0 | 41,567.1 | 239.3 | 2.62 | 2.64 | 14.02 |
| | 2005 | 3,255.0 | 2,981.2 | 337.3 | 20,000.0 | 210.4 | 39,789.7 | 20,547.7 | 60,337.4 | 239.3 | 6.71 | 6.89 | 20.24 |
| | Average | 3,255.0 | 3,080.3 | 235.4 | 13,197.3 | 102.1 | 42,752.0 | 13,534.9 | 56,286.9 | 239.3 | 4.31 | 4.41 | 18.19 |
| 33 | Middle Fawaza | | | | | | | | | | | | |
| | 2003 | 2,825.0 | 1,682.3 | 49.9 | 8,658.0 | 118.0 | 27,038.8 | 8,825.9 | 35,864.7 | 198.9 | 5.15 | 5.25 | 21.32 |
| | 2004 | 2,825.0 | 2,978.6 | 107.1 | 6,272.0 | 140.1 | 21,023.0 | 6,519.2 | 27,542.2 | 198.9 | 2.11 | 2.19 | 9.25 |
| | 2005 | 2,825.0 | 3,100.9 | 66.3 | 8,776.0 | 139.2 | 32,173.0 | 8,981.5 | 41,154.5 | 198.9 | 2.83 | 2.90 | 13.27 |
| | Average | 2,825.0 | 2,587.2 | 74.4 | 7,902.0 | 132.4 | 26,744.9 | 8,108.9 | 34,853.8 | 198.9 | 3.36 | 3.44 | 14.61 |
| 34 | Gezeret Abo Arafa | | | | | | | | | | | | |
| | 2003 | 2,936.0 | 3,162.8 | 6.0 | 14,935.6 | 83.0 | 69,332.9 | 15,024.6 | 84,357.5 | 174.8 | 4.72 | 4.75 | 26.67 |
| | 2004 | 2,936.0 | 664.6 | 25.4 | 3,138.6 | 23.3 | 18,050.5 | 3,187.3 | 21,237.8 | 174.8 | 4.72 | 4.80 | 31.95 |
| | 2005 | 2,936.0 | 703.9 | 200.5 | 3,324.0 | 55.7 | 29,180.3 | 3,580.2 | 32,760.5 | 174.8 | 4.72 | 5.09 | 46.54 |
| | Average | 2,936.0 | 1,510.4 | 77.3 | 7,132.7 | 54.0 | 38,854.6 | 7,264.0 | 46,118.6 | 174.8 | 4.72 | 4.88 | 35.06 |
| 35 | El-Hegs El-Mostagda | | | | | | | | | | | | |
| | 2003 | 9,734.0 | 5,067.8 | 10.8 | 18,980.0 | 216.5 | 37,706.8 | 19,207.3 | 56,914.1 | 577.8 | 3.75 | 3.79 | 11.23 |
| | 2004 | 9,734.0 | 7,505.1 | 0.0 | 11,700.0 | 76.0 | 29,954.5 | 11,776.0 | 41,730.5 | 577.8 | 1.56 | 1.57 | 5.56 |
| | 2005 | 9,734.0 | 7,423.2 | 111.5 | 19,340.0 | 250.2 | 48,604.1 | 19,701.7 | 68,305.8 | 577.8 | 2.61 | 2.65 | 9.20 |
| | Average | 9,734.0 | 6,665.4 | 40.8 | 16,673.3 | 180.9 | 38,755.1 | 16,895.0 | 55,650.1 | 577.8 | 2.64 | 2.67 | 8.66 |

8 Pump Stations Total

| | | | | | | | | | | | | |
|---------|--------|--------|-------|--------|-------|---------|--------|---------|-------|----|----|-----|
| 2003 | 33,130 | 28,815 | 835 | 95,851 | 916 | 317,624 | 97,601 | 415,226 | 2,263 | 28 | 28 | 131 |
| 2004 | 33,130 | 26,304 | 448 | 56,054 | 608 | 229,140 | 57,110 | 286,250 | 2,263 | 21 | 22 | 122 |
| 2005 | 33,130 | 26,334 | 1,111 | 78,861 | 1,165 | 311,541 | 81,137 | 392,678 | 2,263 | 28 | 29 | 168 |
| Average | 33,130 | 27,151 | 798 | 76,922 | 896 | 286,102 | 78,616 | 364,718 | 2,263 | 26 | 26 | 140 |

No.34の電気代2003年、2004年は記録がないため2005年の比例配分とした。

Unit cost of O&M after installation of renewal pump

| No. | Station Name | Plan | | | | | | | |
|-----------------------|----------------------|---------------------------------------|--------------------------------|---------------------|----------------------------------|---|----------------------------|---|---|
| | | Water demand (1000m ³) | Cost of Electricity (LE) | Maintainace cost | Total O&M Cost (LE) = + | Total Cost including salary (LE) = + | Irrigated area (feddan) | Unit cost of O&M Cost (LE/1000m3) a= / | Unit Cost of Irrigation (LE/1000m3) b= / |
| 27 | Gezeret El-Kobania | 3,542.0 | 9,209.2 | 152.0 | 9,361.2 | 29,234.4 | 195.8 | 2.64 | 8.25 |
| 29 | Sahel El-Akab Bahary | 6,252.0 | 16,255.2 | 268.3 | 16,523.5 | 59,599.5 | 471.7 | 2.64 | 9.53 |
| 30 | Gezeret Meneha | 2,695.0 | 7,007.0 | 115.7 | 7,122.7 | 44,910.7 | 231.6 | 2.64 | 16.66 |
| 31 | El-Sarag | 2,944.0 | 7,654.4 | 126.3 | 7,780.7 | 68,837.7 | 227.0 | 2.64 | 23.38 |
| 32 | Gezeret El-Fawaza | 3,950.0 | 10,270.0 | 169.5 | 10,439.5 | 50,229.2 | 284.8 | 2.64 | 12.72 |
| 33 | Middle Fawaza | 2,825.0 | 7,345.0 | 121.2 | 7,466.2 | 39,639.2 | 198.9 | 2.64 | 14.03 |
| 34 | Gezeret Abo Arafa | 3,530.0 | 9,178.0 | 151.5 | 9,329.5 | 38,509.8 | 205.4 | 2.64 | 10.91 |
| 35 | El-Hegs El-Mostagda | 9,734.0 | 25,308.4 | 417.7 | 25,726.1 | 74,330.2 | 577.8 | 2.64 | 7.64 |
| 8 Pump Stations Total | | 35,472 | 92,227 | 1,522 | 93,750 | 405,291 | 2,393 | 21 | 103 |

注: 1) 用水量 (Water Demand 1,000m³) は計画月別用水量 (p. A8-13 ~ p. A8-42) を参照

2) 電気代 (Cost of Electricity) = 単位用水量1,000m³当り電気代 (Unit cost of Electricity LE/1,000m³) 2.73 ×
 用水量 (Water Demand) (Phase1 ~ 3で更新したポンプ場の維持管理費 p.A8-72参照)

3) 維持管理費 (Maintenance Cost) = 単位用水量1,000m³当り維持管理費 (Unit Cost of Maintenance Cost LE/1,000m³) 0.043 ×
 用水量 (Water Demand) (Phase1 ~ 3で更新したポンプ場の維持管理費 p.A8-72参照)

4) 人件費は2005年と変動ないものとする。

Maintenance Cost of Phase-1 to 3 Floating Pump Stations (2005)

| No. | Station Name | pump capacity m3/s | | Total operating hours (hr) | Estimated total discharge (1000 m3) | Cost of maintenance (LE) | Cost of oil & grease (LE) | Cost of Electricity (LE) | Maintenance Cost (LE) = ~ | Unit Cost of Electricity (LE/1000m3) = / | Unit Cost of Maintenance (LE/1000m3) = / |
|-----|---------------------|--------------------|------|----------------------------|-------------------------------------|--------------------------|---------------------------|--------------------------|------------------------------|---|---|
| | | capacity m3/s | unit | | | | | | | | |
| 1 | El Shelkh Fadl | 0.25 | 2 | 8,345 | 7,510.5 | 294.0 | 11.3 | 36,448.0 | 305.3 | 4.85 | 0.04 |
| 2 | Sahel Wl Hamam | 0.15 | 2 | 10,470 | 5,653.8 | 390.3 | 19.5 | 20,940.0 | 409.8 | 3.70 | 0.07 |
| 3 | El Foza El Baharia | 0.15 | 2 | 4,354 | 2,351.2 | 19.4 | 3.3 | 1,127.0 | 22.7 | 0.48 | 0.01 |
| 4 | Sahel El Kobania | 0.35 | 2 | 4,901 | 6,175.3 | 0.0 | 4.0 | 8,130.0 | 4.0 | 1.32 | 0.00 |
| 5 | Sahel Fares | 0.50 | 2 | 12,284 | 22,111.2 | 534.2 | 1.7 | 80,544.0 | 535.9 | 3.64 | 0.02 |
| 7 | El Twisa | 0.25 | 2 | 4,099 | 3,689.1 | 268.6 | 8.1 | 17,514.0 | 276.7 | 4.75 | 0.08 |
| 8 | Gharb Aswan Baharia | 0.50 | 2 | 6,574 | 11,833.2 | 0.0 | 12.0 | 17,320.0 | 12.0 | 1.46 | 0.00 |
| 9 | Gezirat Fares | 0.50 | 2 | 4,444 | 7,999.2 | 325.2 | 1.7 | 32,340.0 | 326.9 | 4.04 | 0.04 |
| 10 | Gezirat Bahrif | 0.35 | 2 | 7,504 | 9,455.0 | 0.0 | 13.2 | 11,520.0 | 13.2 | 1.22 | 0.00 |
| 11 | Gezirat Ballola | 0.25 | 2 | 3,766 | 3,389.4 | 1,993.1 | 1.7 | 14,725.0 | 1,994.8 | 4.34 | 0.59 |
| 12 | Gezirat Al Arab | 0.15 | 2 | 1,852 | 1,000.1 | 80.7 | 1.7 | 4,200.0 | 82.4 | 4.20 | 0.08 |
| 13 | Kubania | 0.15 | 2 | 4,888 | 2,639.5 | 0.0 | 6.6 | 7,110.5 | 6.6 | 2.69 | 0.00 |
| 14 | Sahel Abu Rish | 0.50 | 2 | 7,398 | 13,316.4 | 0.0 | 8.0 | 31,140.0 | 8.0 | 2.34 | 0.00 |
| 15 | Sahel El Kelh | 0.60 | 2 | 1,561 | 3,371.8 | 4.3 | 12.0 | 1,040.7 | 16.3 | 0.31 | 0.00 |
| 16 | Wadi El Kubania | 0.60 | 2 | 3,965 | 8,564.4 | 0.0 | 8.0 | 10,164.0 | 8.0 | 1.19 | 0.00 |
| 17 | El Sharunia | 1.00 | 2 | 1,673 | 6,022.8 | 975.3 | 3.3 | 1,378.0 | 978.6 | 0.23 | 0.16 |
| 18 | El Owenia | 0.70 | 2 | 2,630 | 6,627.6 | 923.6 | 11.2 | 2,360.0 | 934.8 | 0.36 | 0.14 |
| 19 | Baklous | 0.15 | 2 | 2,528 | 1,365.1 | 0.0 | 8.0 | 3,172.0 | 8.0 | 2.32 | 0.01 |
| 20 | New Sahel Fares | 0.80 | 2 | 7,075 | 20,376.0 | 440.2 | 6.7 | 132,580.0 | 446.9 | 6.51 | 0.02 |
| 21 | El Karabia | 0.50 | 2 | 3,564 | 6,415.2 | 4.0 | 20.8 | 2,095.0 | 24.8 | 0.33 | 0.00 |
| 22 | Sahel Alakaba Kebli | 0.20 | 2 | 5,456 | 3,928.3 | 0.0 | 89.2 | 19,066.8 | 89.2 | 4.85 | 0.02 |
| 23 | Al Rakikin Sahel | 0.10 | 2 | 7,148 | 2,573.3 | 303.8 | 49.1 | 1,872.0 | 352.9 | 0.73 | 0.14 |
| 24 | Blowkher | 1.00 | 2 | 6,369 | 22,928.4 | 800.0 | 37.0 | 157,917.0 | 837.0 | 6.89 | 0.04 |
| | | | | | | | | | | | |
| 6 | El Biadiea El Ollia | 1.30 | 28.0 | 460.0 | 2 | 4,245 | 39,831.5 | 11,360.0 | 35.0 | 491,529.4 | 11,395.0 |
| 26 | | 1.35 | 28.0 | 460.0 | 2 | 4,108 | | | | | |
| | | | | | | | | | | | |
| | Average | | | 5,341 | 7,795.5 | 319.9 | 14.7 | 26,726.3 | 334.6 | 2.73 | 0.043 |

A8-72

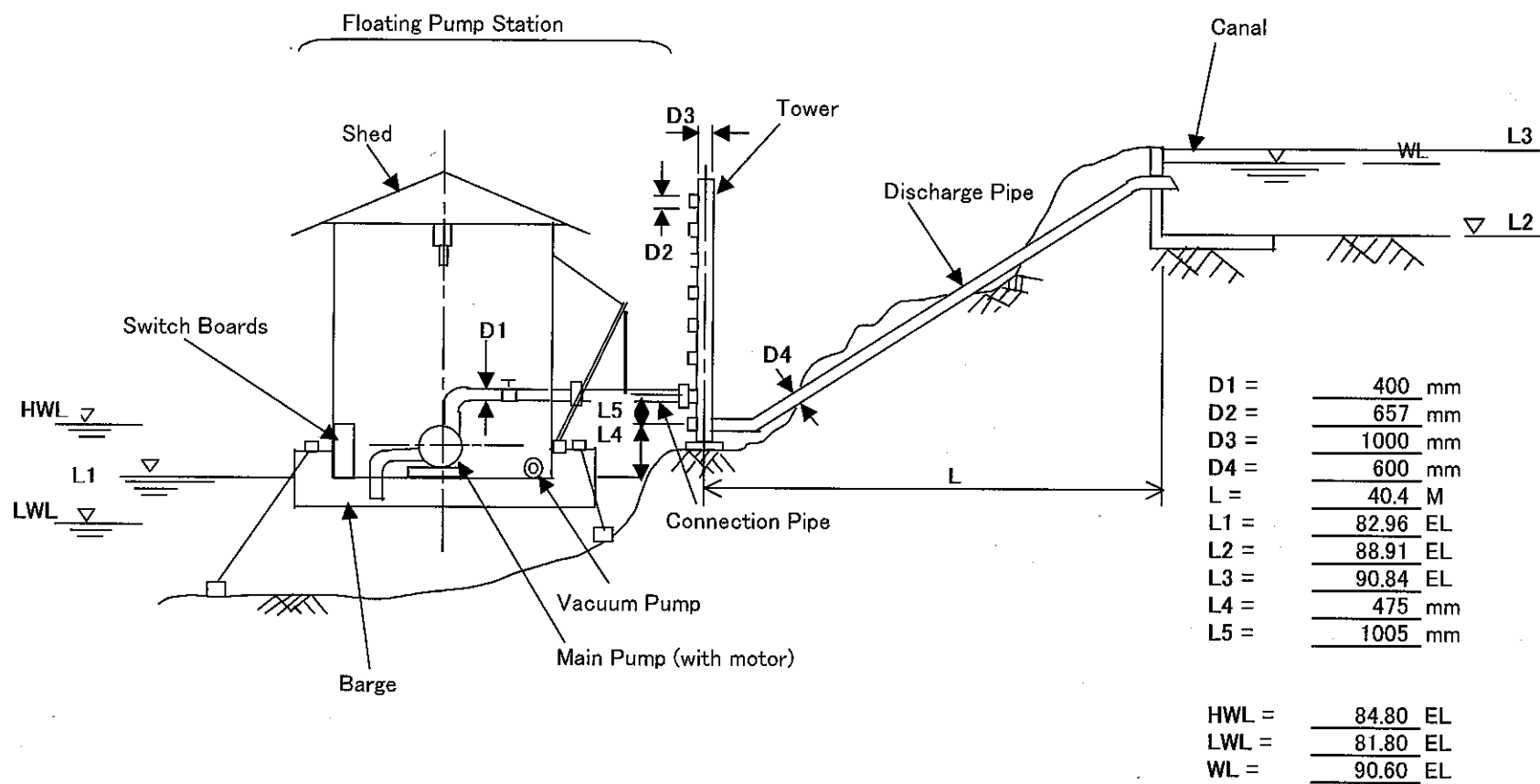
注: p.A8-68からp.A8-72の維持監理費(O/Mコスト)は、アスワン・イドフ・ルクソールの各管理事務所から収集されたものである。

No. 27

Survey Date: March 2006

Name of Pump Station: Gezeret El-Kobania Kelby
 Pump: units: 2 Type: End suction single volute
 discharge: 0.25 m³/sec total head: 13 m
 revolution: 675 min⁻¹
 Motor: 40 kW 380 V 735 min⁻¹
88.8 amp. Type: squirrel cage
 Transformer: 11k/380 V/V 100 kVA (200kVA is required)

A8-73



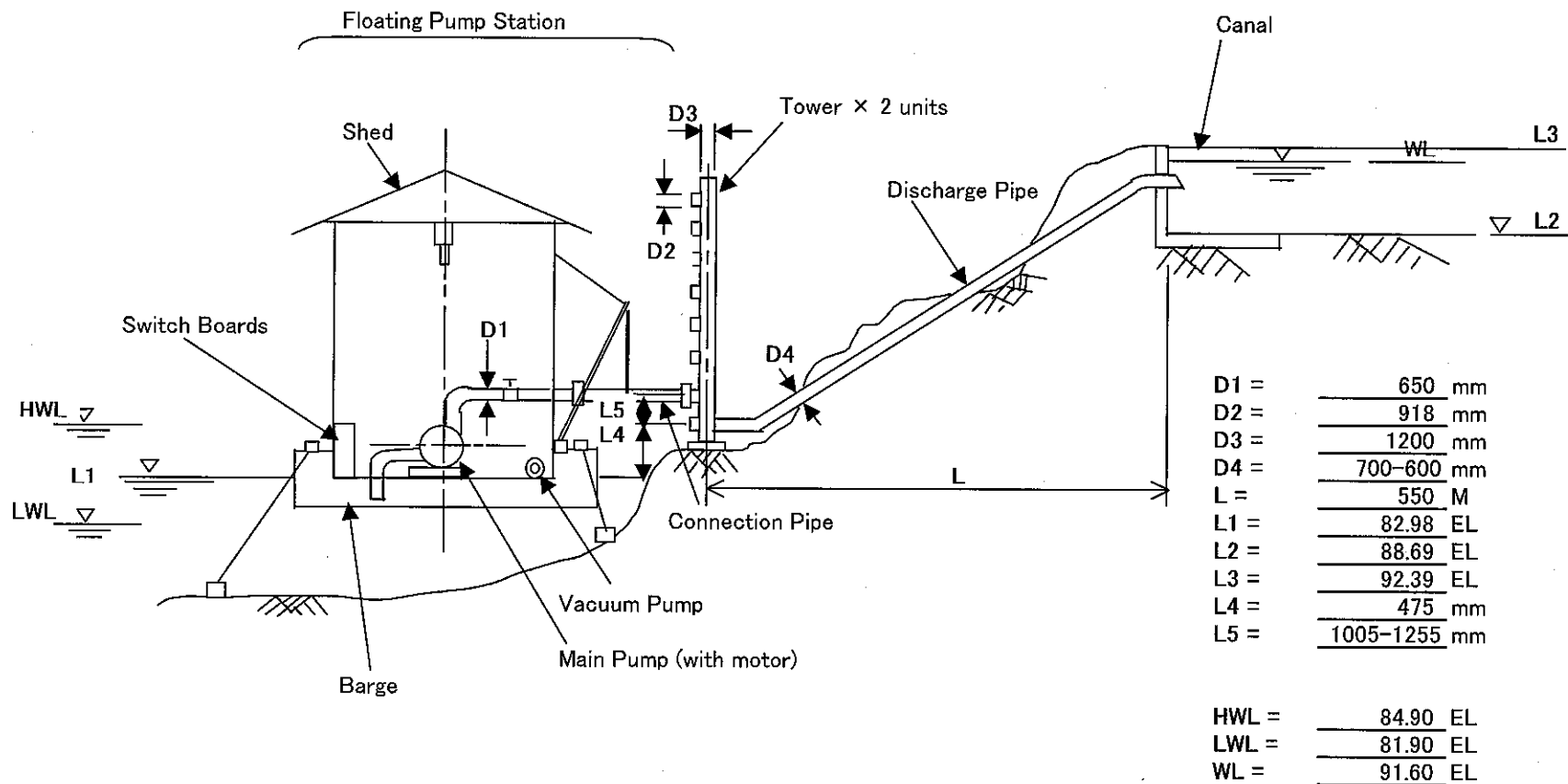
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 28

Survey Date: March 2006

Name of Pump Station: Sahel Al-Khatara
 Pump: units: 2 Type: End suction single volute
 discharge: 1.35 m³/sec total head: 23 m
 revolution: 500 min⁻¹
 Motor: 447.42 kW 6000 V 490 min⁻¹
50.5 amp. Type: winding
 Transformer: 11k/6k V/V 1000 kVA

A8-74



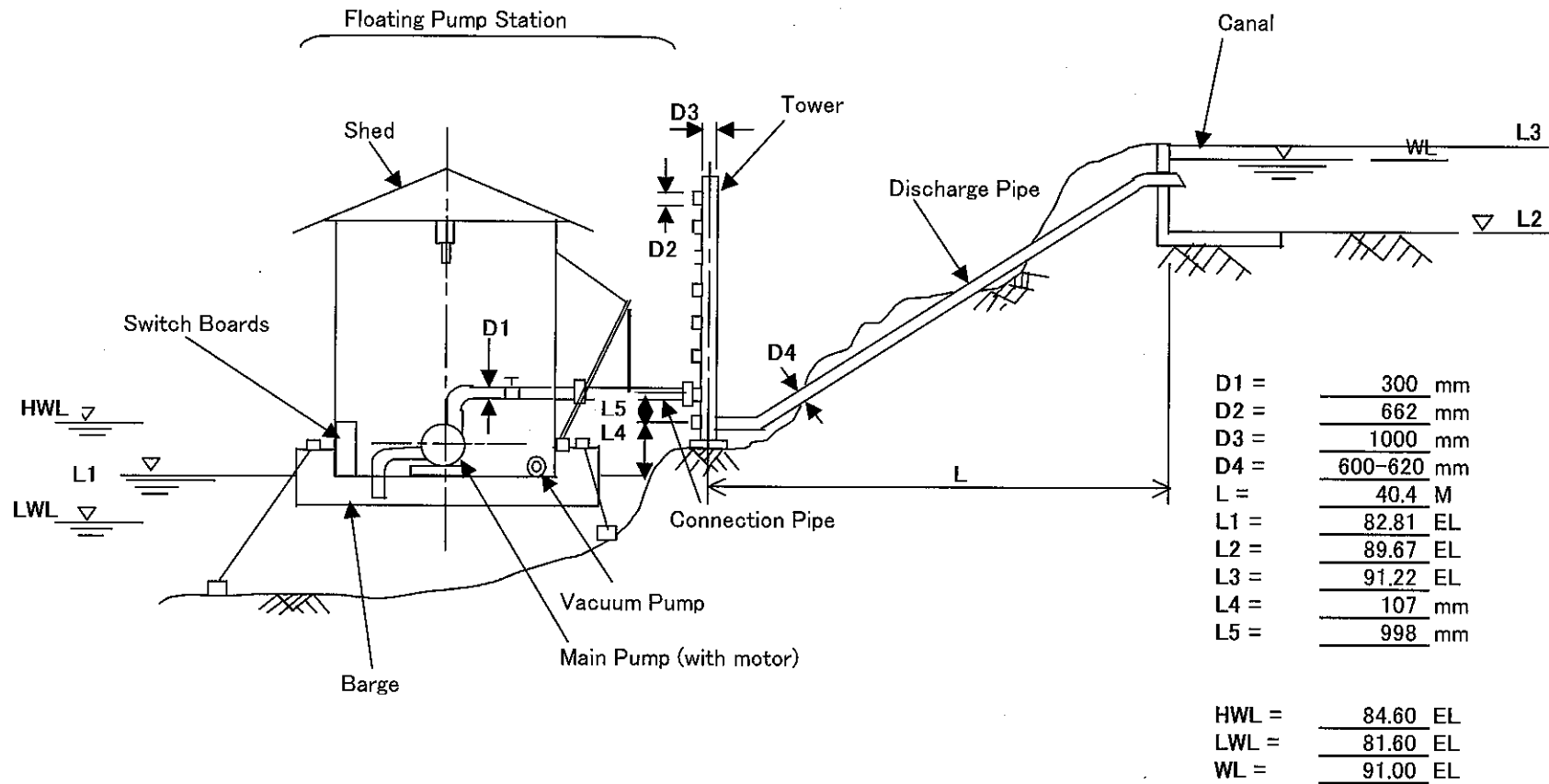
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 29

Survey Date: March 2006

Name of Pump Station: Sahel El-Akab Behary
 Pump: units: 2 Type: End suction single volute
 discharge: 0.35 m³/sec total head: 13 m
 revolution: 1000 min⁻¹
 Motor: 100.67 kW 380 V 985 min⁻¹
110 amp. Type: squirrel cage
 Transformer: 11k/380 V/V 300 kVA

A8-75



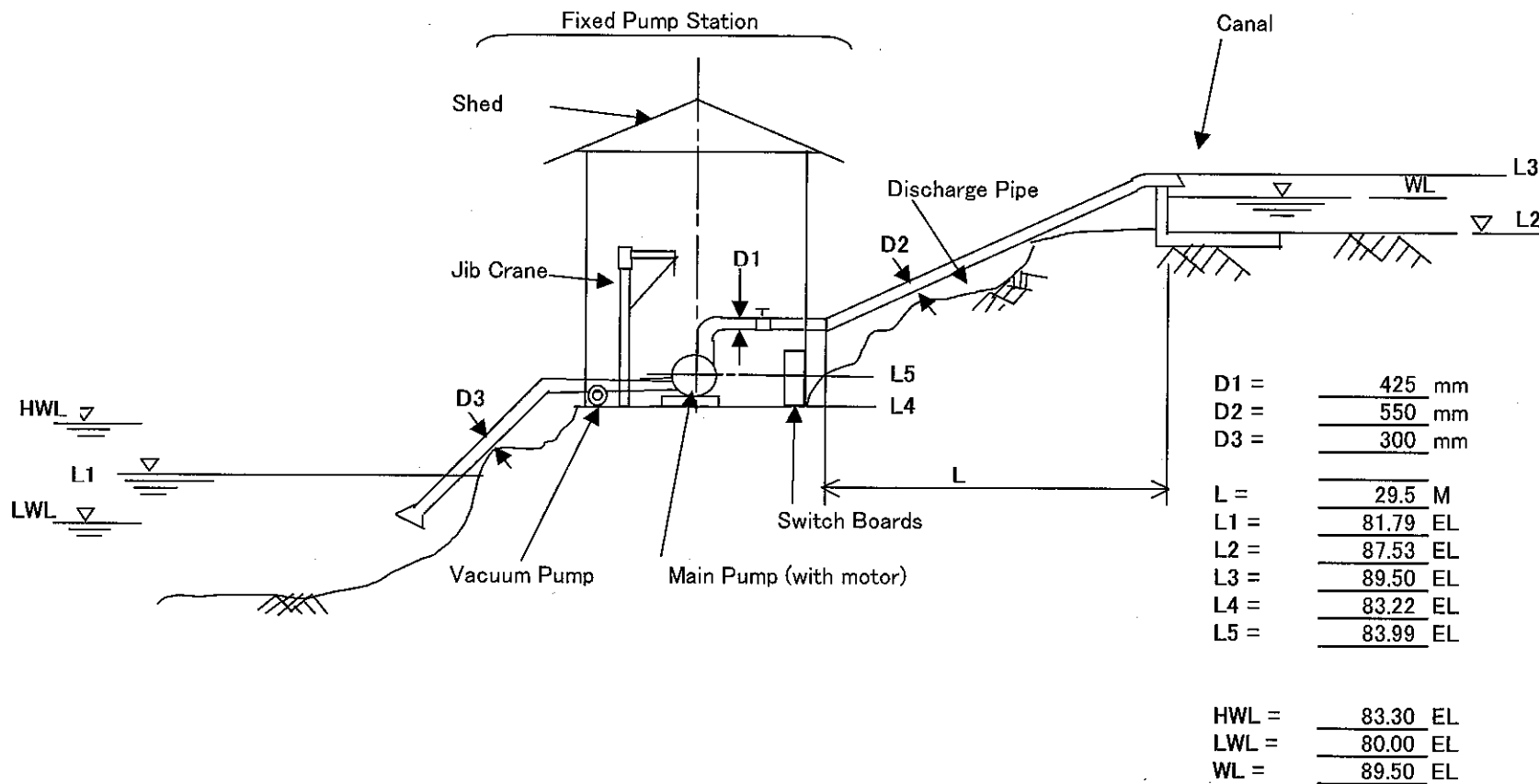
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 30

Survey Date: March 2006

Name of Pump Station: Gezeret Meneha
 Pump: units: 2 Type: End suction single volute
 discharge: 0.23 m³/sec total head: 16 m
 revolution: 960/1500 min⁻¹
 Motor: 44.74 kW 380 V 975 min⁻¹
84.7 amp. Type: squirrel cage
 Transformer: 11k/380 V/V 300 kVA

A8-76



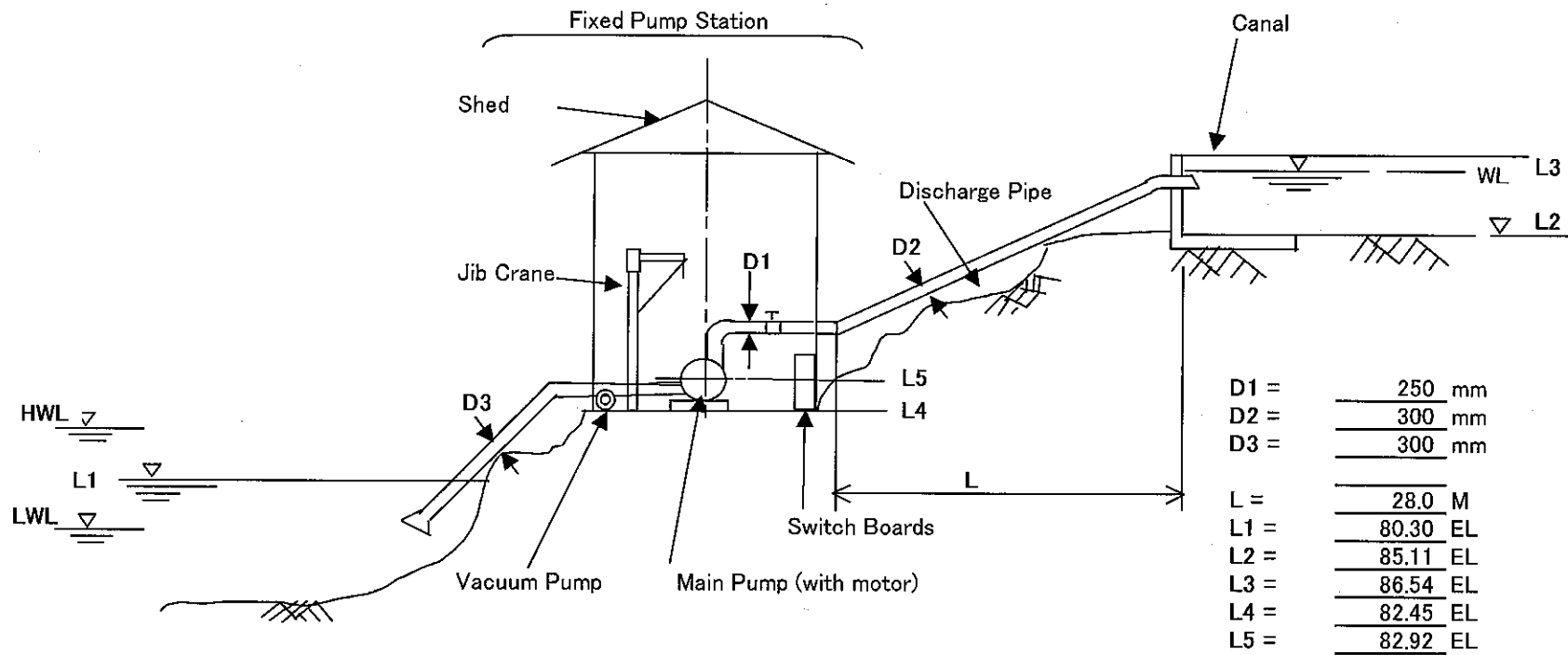
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 31

Survey Date: March 2006

Name of Pump Station: El-Sarag
 Pump: units: 2 Type: End suction single volute
 discharge: 0.15 m³/sec total head: 11 m
 revolution: 960 min⁻¹
 Motor: 40 kW 380 V 1470 min⁻¹
73 amp. Type: squirrel cage
 Transformer: 11k/400 V/V 200 kVA

A8-77



| | | |
|-------|--------------|----|
| D1 = | <u>250</u> | mm |
| D2 = | <u>300</u> | mm |
| D3 = | <u>300</u> | mm |
| L = | <u>28.0</u> | M |
| L1 = | <u>80.30</u> | EL |
| L2 = | <u>85.11</u> | EL |
| L3 = | <u>86.54</u> | EL |
| L4 = | <u>82.45</u> | EL |
| L5 = | <u>82.92</u> | EL |
| | | |
| HWL = | <u>81.70</u> | EL |
| LWL = | <u>78.40</u> | EL |
| WL = | <u>85.80</u> | EL |

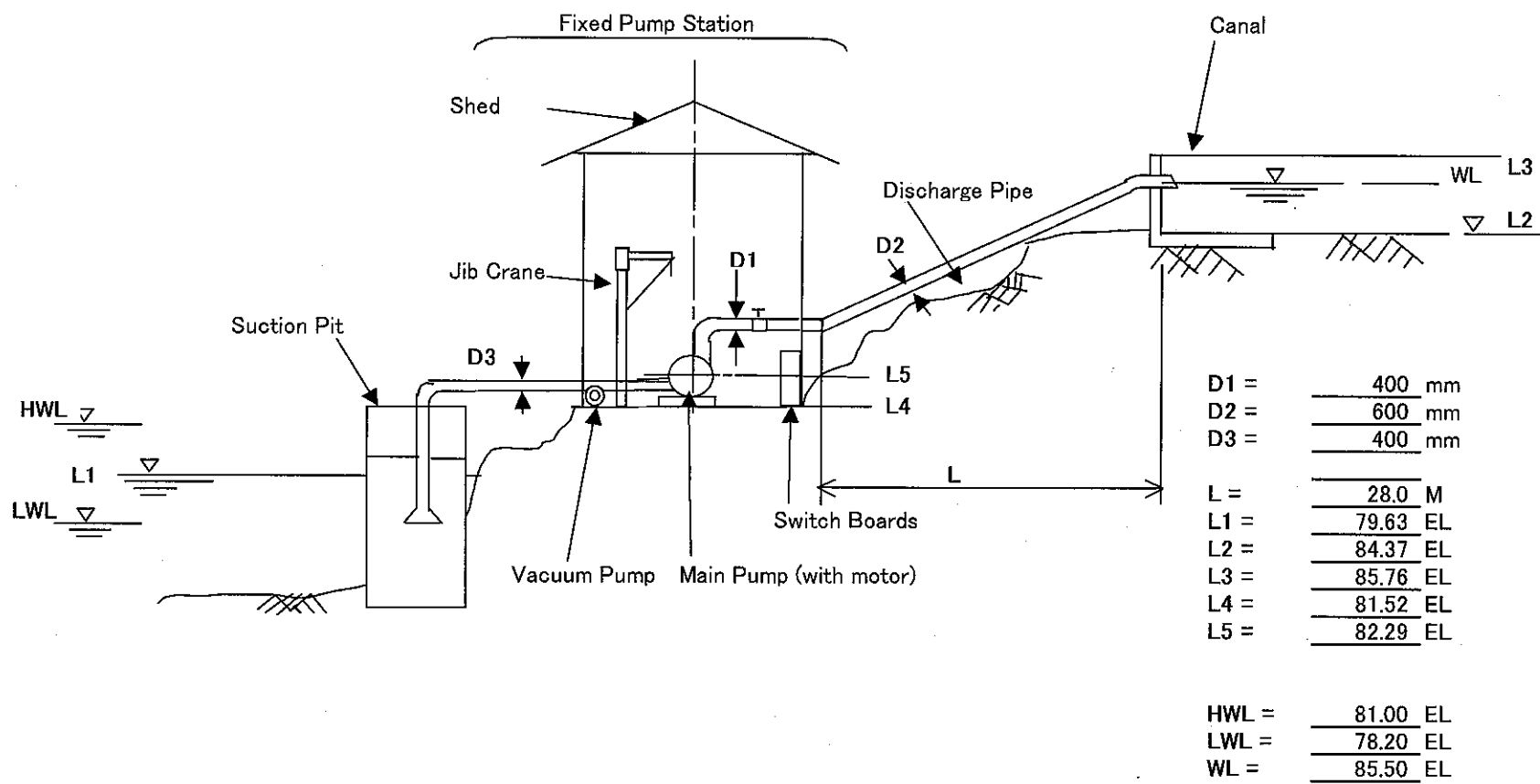
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 32

Survey Date: March 2006

Name of Pump Station: Gezeret El-Fawaza El-Keblia
 Pump: units: 2 Type: End suction single volute
 discharge: 0.23 m³/sec total head: 12 m
 revolution: 960 min⁻¹
 Motor: 44.74 kW 380 V 975 min⁻¹
84.7 amp. Type: squirrel cage
 Transformer: 11k/400 V/V 200 kVA

A8-78



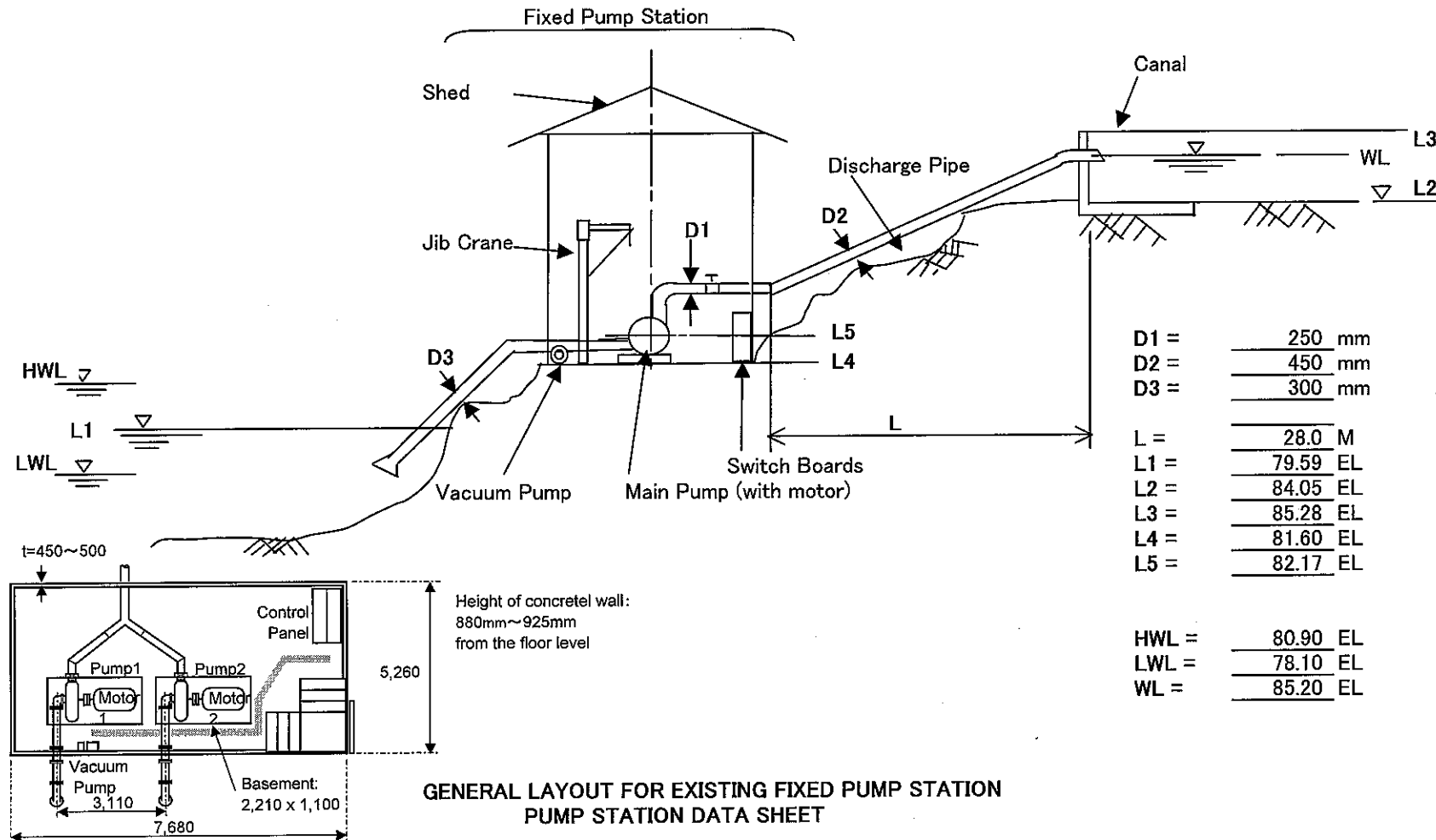
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 33

Survey Date: March 2006

Name of Pump Station: Middle Fawaza
 Pump: units: 2 Type: End suction single volute
 discharge: 0.15 lit/sec total head: 10.6 m
 revolution: 1500 min⁻¹
 Motor: 40 kW 380 V 1470 min⁻¹
73 amp. Type: squirrel cage
 Transformer: 11k/400 V/V 200 kVA

A8-79

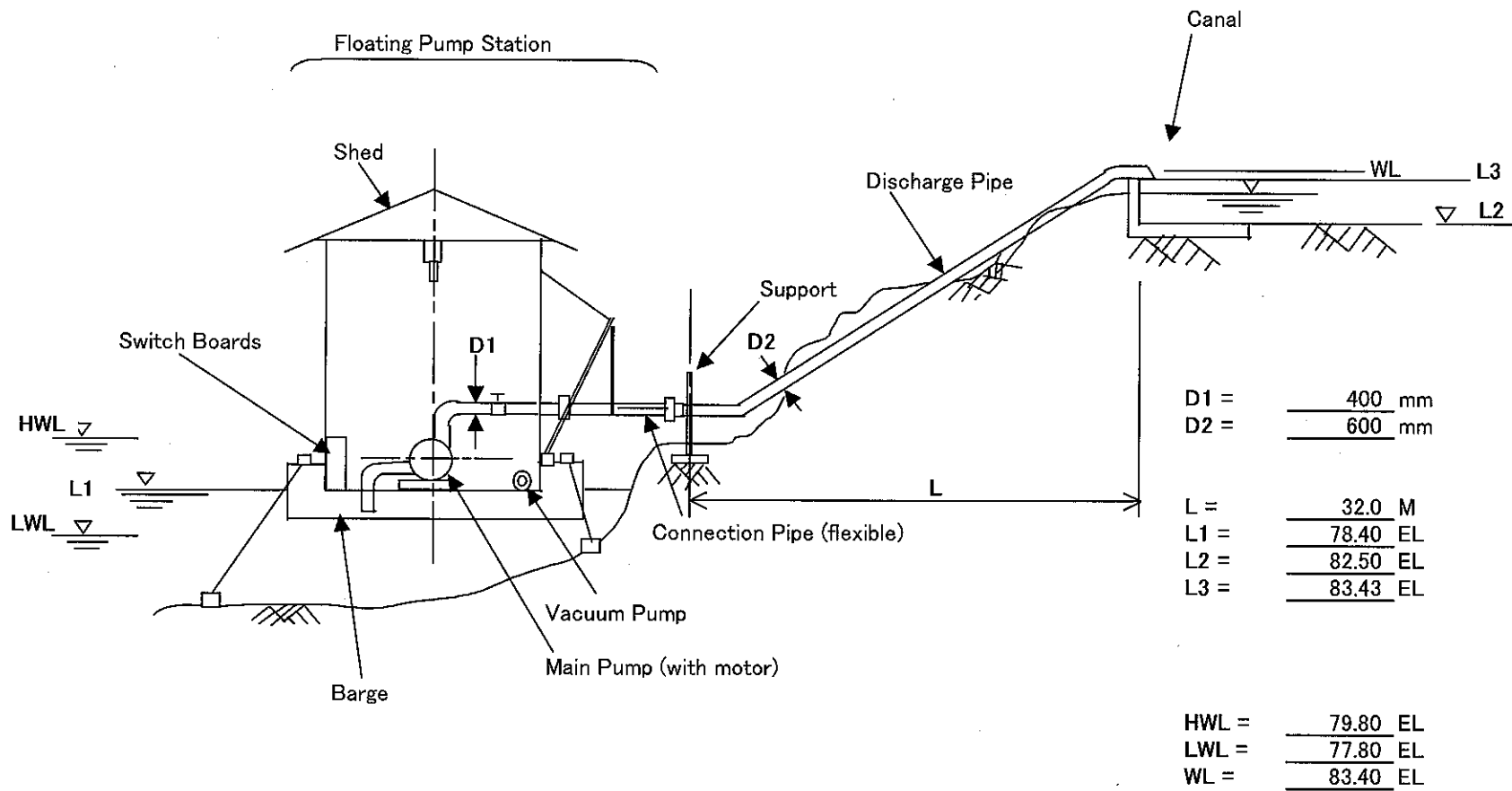


No. 34

Survey Date: March 2006

Name of Pump Station: Gezeret Abo Arafa
 Pump: units: 2 Type: End suction single volute
 discharge: 0.25 m³/sec total head: 13 m
 revolution: 800 min⁻¹
 Motor: 40 kW 380 V 735 min⁻¹
75-80 amp. Type: squirrel cage
 Transformer: 11k/400 V/V 100 kVA

A8-80



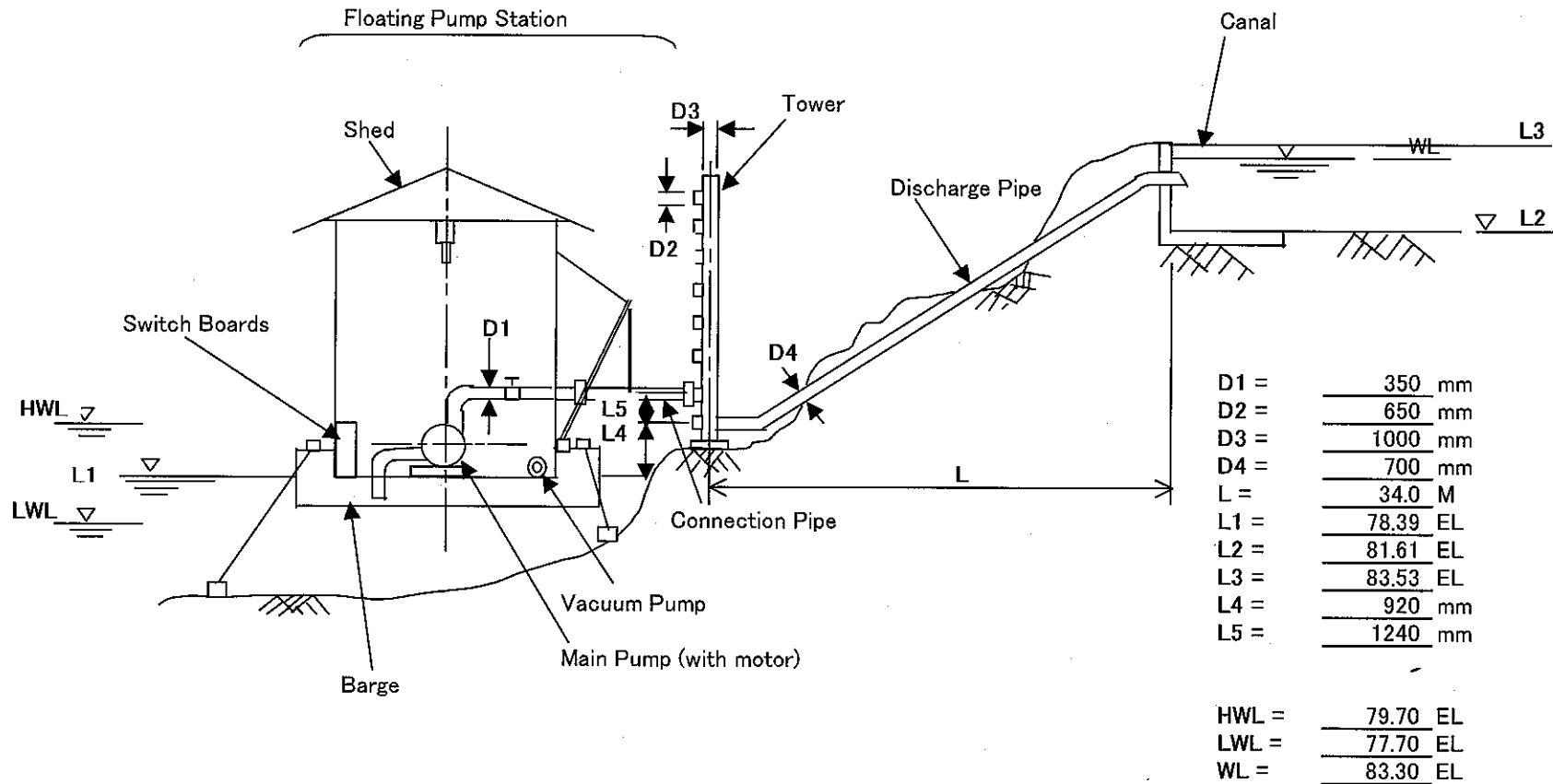
GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

No. 35

Survey Date: March 2006

Name of Pump Station: El-Hegs El-Mostageda
 Pump: units: 2 Type: End suction single volute
 discharge: 0.35 m³/sec total head: 13 m
 revolution: 1000 min⁻¹
 Motor: 100.67 kW 380 V 985 min⁻¹
185 amp. Type: squirrel cage
 Transformer: 11k/400 V/V 500 kVA

A8-81



GENERAL LAYOUT FOR EXISTING FLOATING PUMP STATION
 FLOATING PUMP STATION DATA SHEET

G. ナイル川の水位・流量観測記録

水位(m)

| 年 | 2001 | 2002 | 2003 | 2004 | 2005 | 平均 |
|-----|-------|-------|-------|-------|-------|-------|
| 1月 | 83.01 | 82.64 | 82.40 | 82.43 | 82.30 | 82.55 |
| 2月 | 83.36 | 83.27 | 83.42 | 83.16 | 83.21 | 83.28 |
| 3月 | 83.84 | 84.03 | 83.42 | 83.60 | 83.78 | 83.73 |
| 4月 | 84.11 | 84.28 | 83.68 | 84.54 | 84.06 | 84.14 |
| 5月 | 84.75 | 85.31 | 84.80 | 84.79 | 84.63 | 84.86 |
| 6月 | 85.74 | 85.69 | 85.34 | 85.20 | 85.20 | 85.43 |
| 7月 | 85.60 | 85.57 | 85.11 | 85.11 | 85.14 | 85.31 |
| 8月 | 85.46 | 85.28 | 85.00 | 85.22 | 85.04 | 85.20 |
| 9月 | 85.61 | 83.97 | 83.75 | 83.68 | 83.69 | 84.14 |
| 10月 | 84.56 | 83.15 | 83.40 | 83.33 | 83.49 | 83.59 |
| 11月 | 83.29 | 83.24 | 83.23 | 83.17 | 83.18 | 83.22 |
| 12月 | 82.69 | 82.29 | 82.29 | 82.30 | 82.42 | 82.40 |
| 平均 | 84.33 | 84.06 | 83.82 | 83.88 | 83.85 | - |

流量 (MCM/d)

| 年 | 2001 | 2002 | 2003 | 2004 | 2005 | 平均 |
|-----|--------|--------|--------|--------|--------|-----|
| 1月 | 110 | 94 | 84 | 85 | 79 | 90 |
| 2月 | 128 | 119 | 131 | 123 | 122 | 125 |
| 3月 | 152 | 163 | 131 | 140 | 149 | 147 |
| 4月 | 167 | 177 | 144 | 192 | 164 | 169 |
| 5月 | 204 | 240 | 209 | 205 | 197 | 211 |
| 6月 | 268 | 264 | 232 | 231 | 231 | 245 |
| 7月 | 258 | 256 | 225 | 225 | 227 | 238 |
| 8月 | 248 | 236 | 218 | 231 | 220 | 231 |
| 9月 | 258 | 159 | 147 | 144 | 145 | 171 |
| 10月 | 192 | 118 | 130 | 127 | 135 | 140 |
| 11月 | 124 | 122 | 122 | 119 | 119 | 121 |
| 12月 | 96 | 79 | 79 | 80 | 85 | 84 |
| 平均 | 183.85 | 168.90 | 154.26 | 158.45 | 156.11 | - |

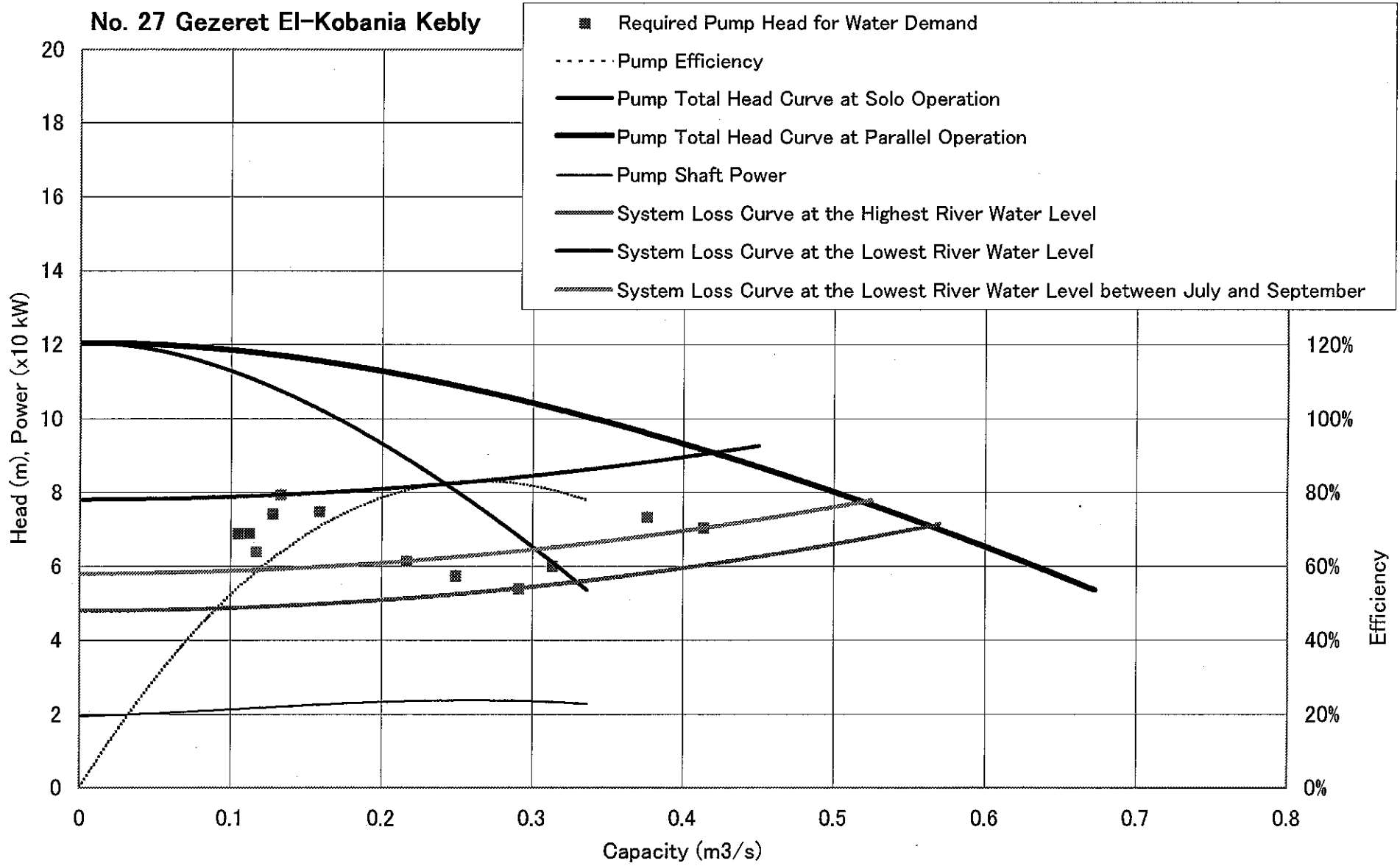
出典：アスワン・ハイ・ダム公社

観測地点：アスワン・ハイ・ダム直下流

流量、水位とも月平均データ

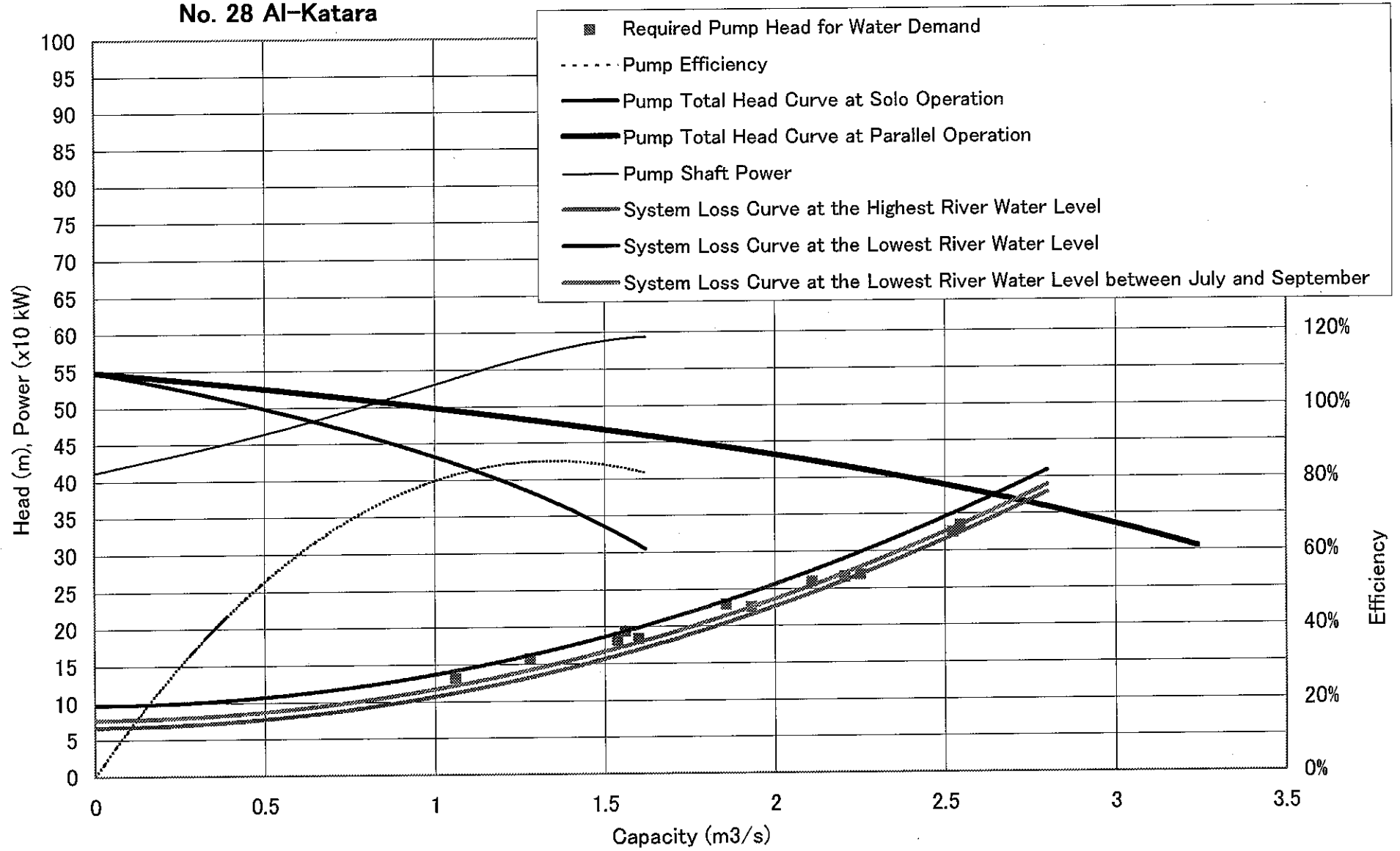
PUMP SYSTEM CURVE

No. 27 Gezeret El-Kobania Kebly



PUMP SYSTEM CURVE

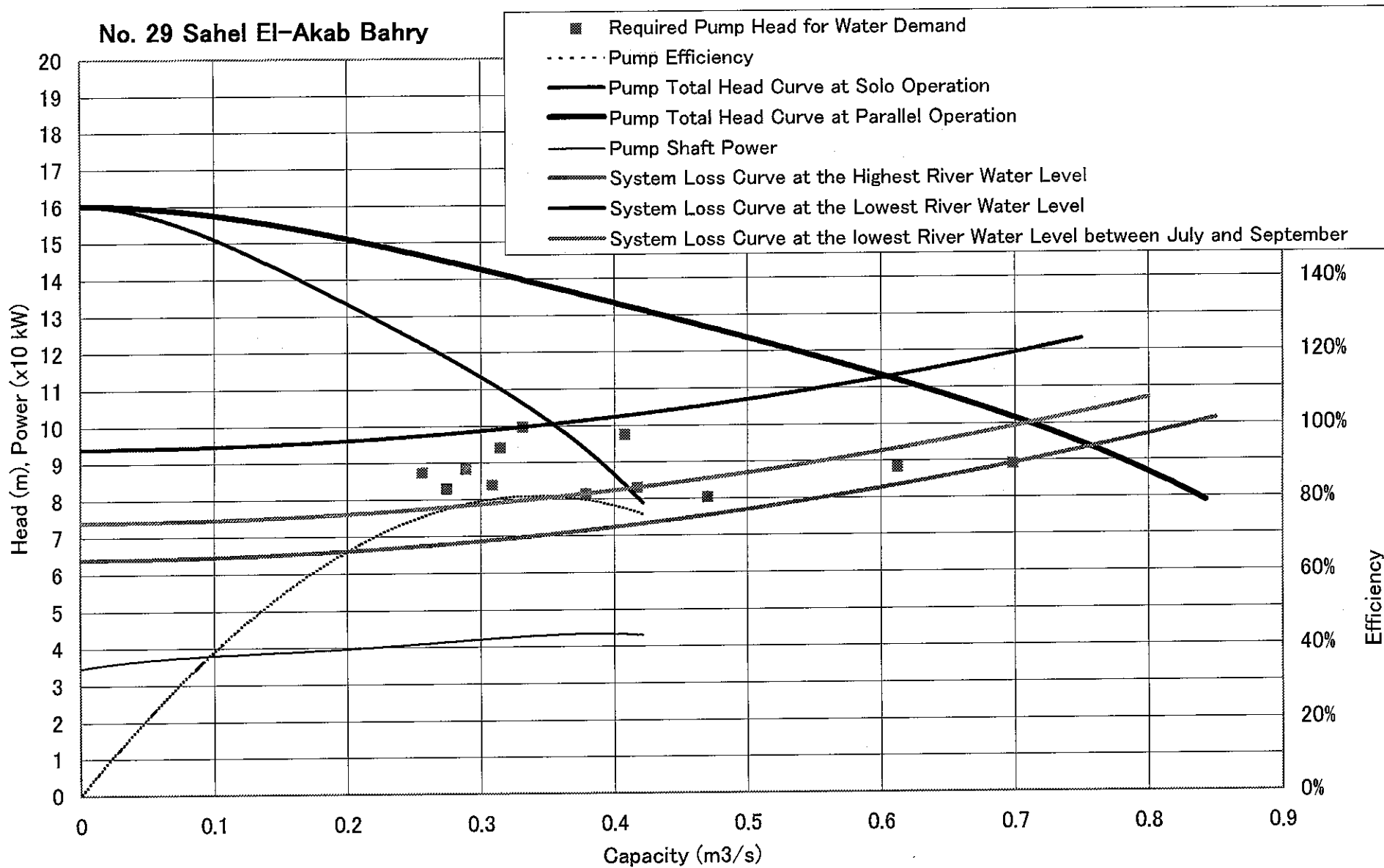
No. 28 Al-Katara



A8-84

PUMP SYSTEM CURVE

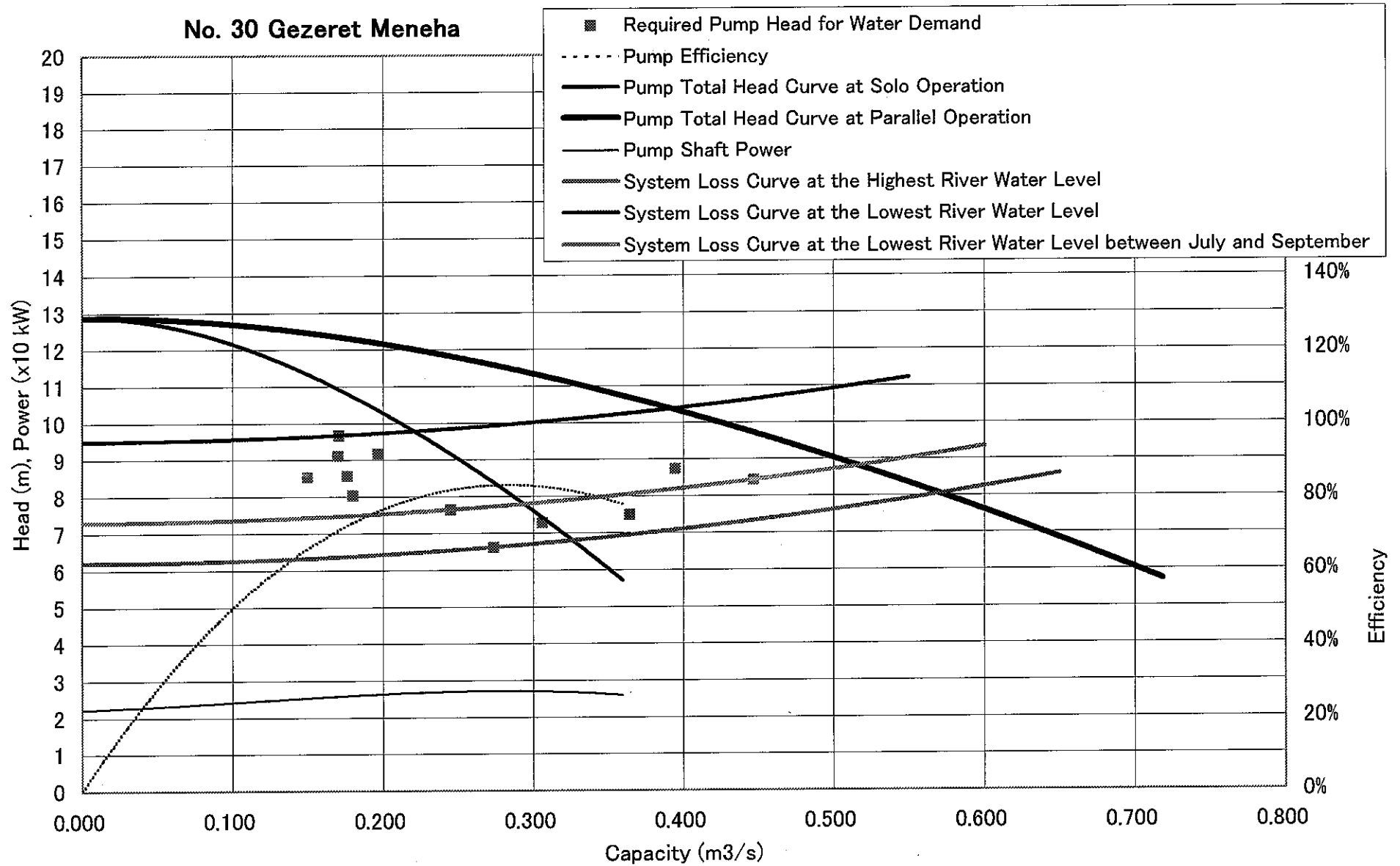
No. 29 Sahel El-Akab Bahry



A8-85

PUMP SYSTEM CURVE

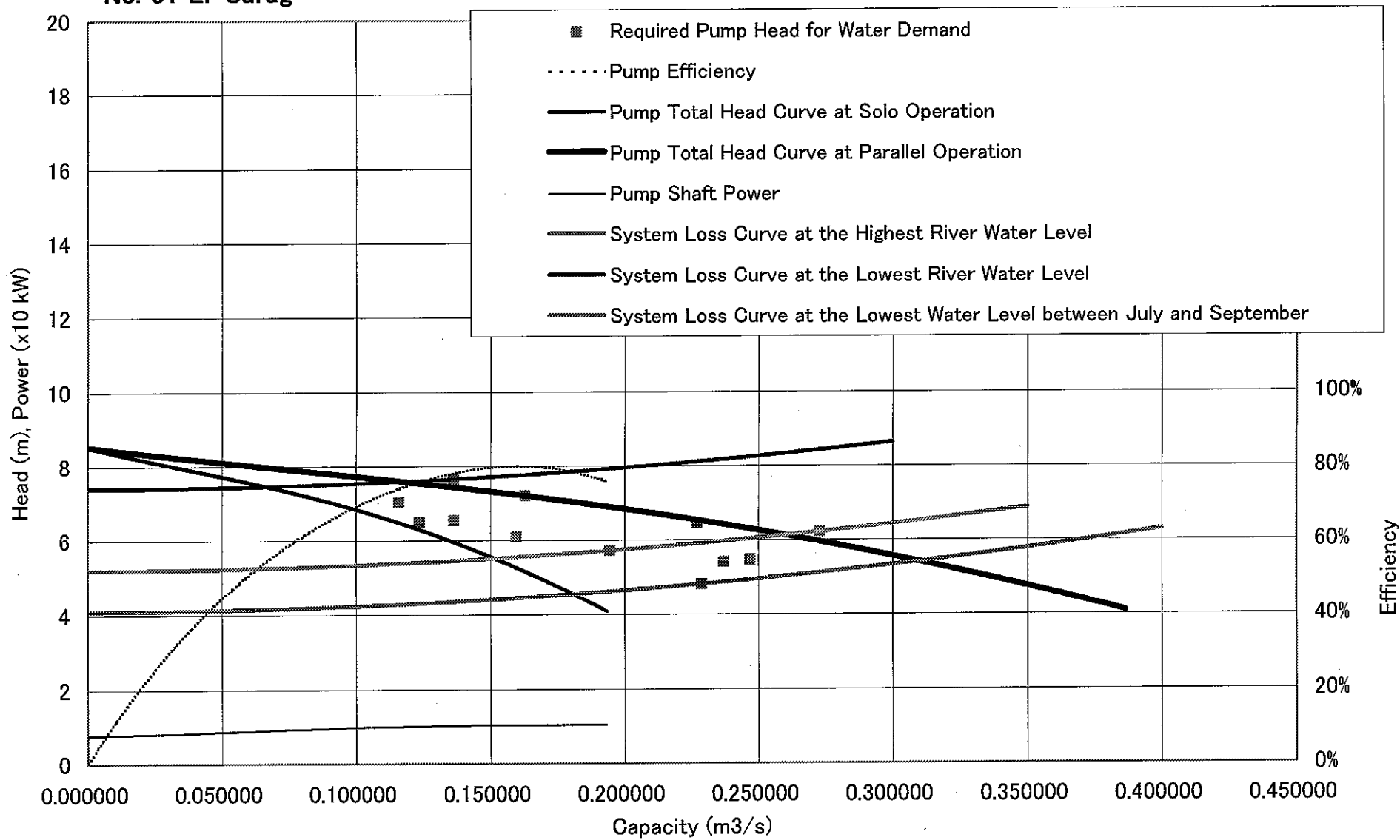
No. 30 Gezeret Meneha



A8-86

PUMP SYSTEM CURVE

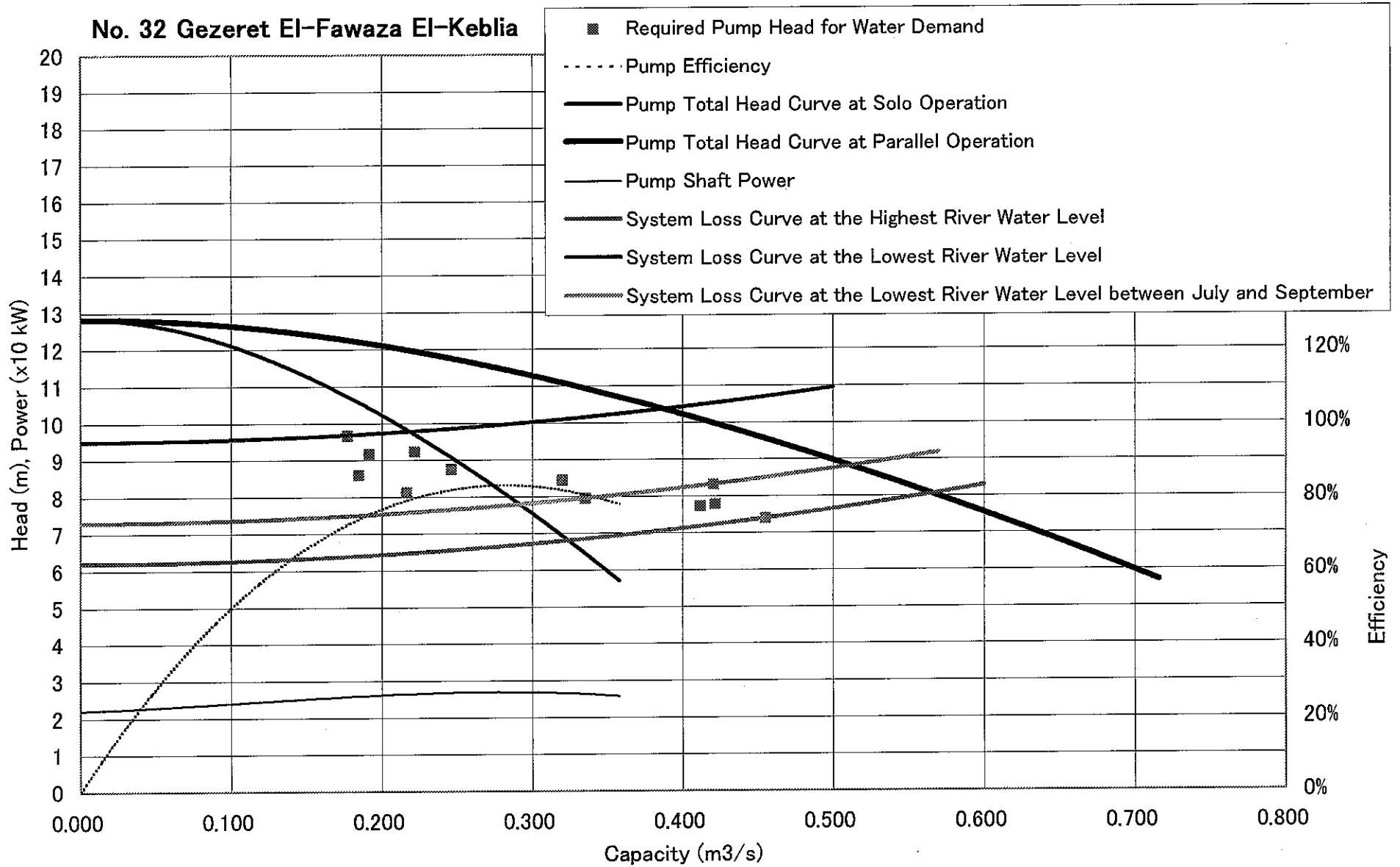
No. 31 El-Sarag



A8-87

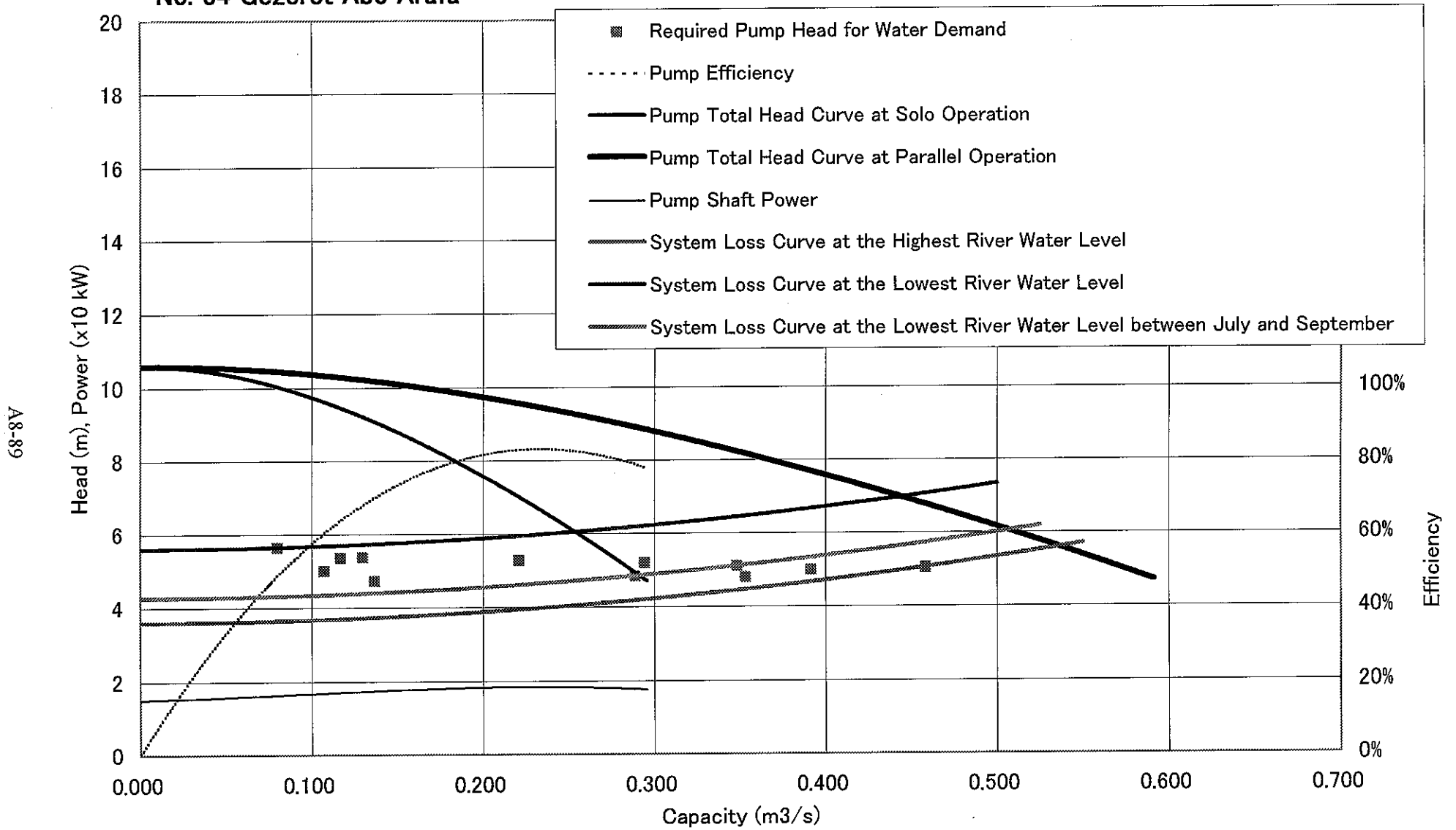
PUMP SYSTEM CURVE

No. 32 Gezeret El-Fawaza El-Keblia



PUMP SYSTEM CURVE

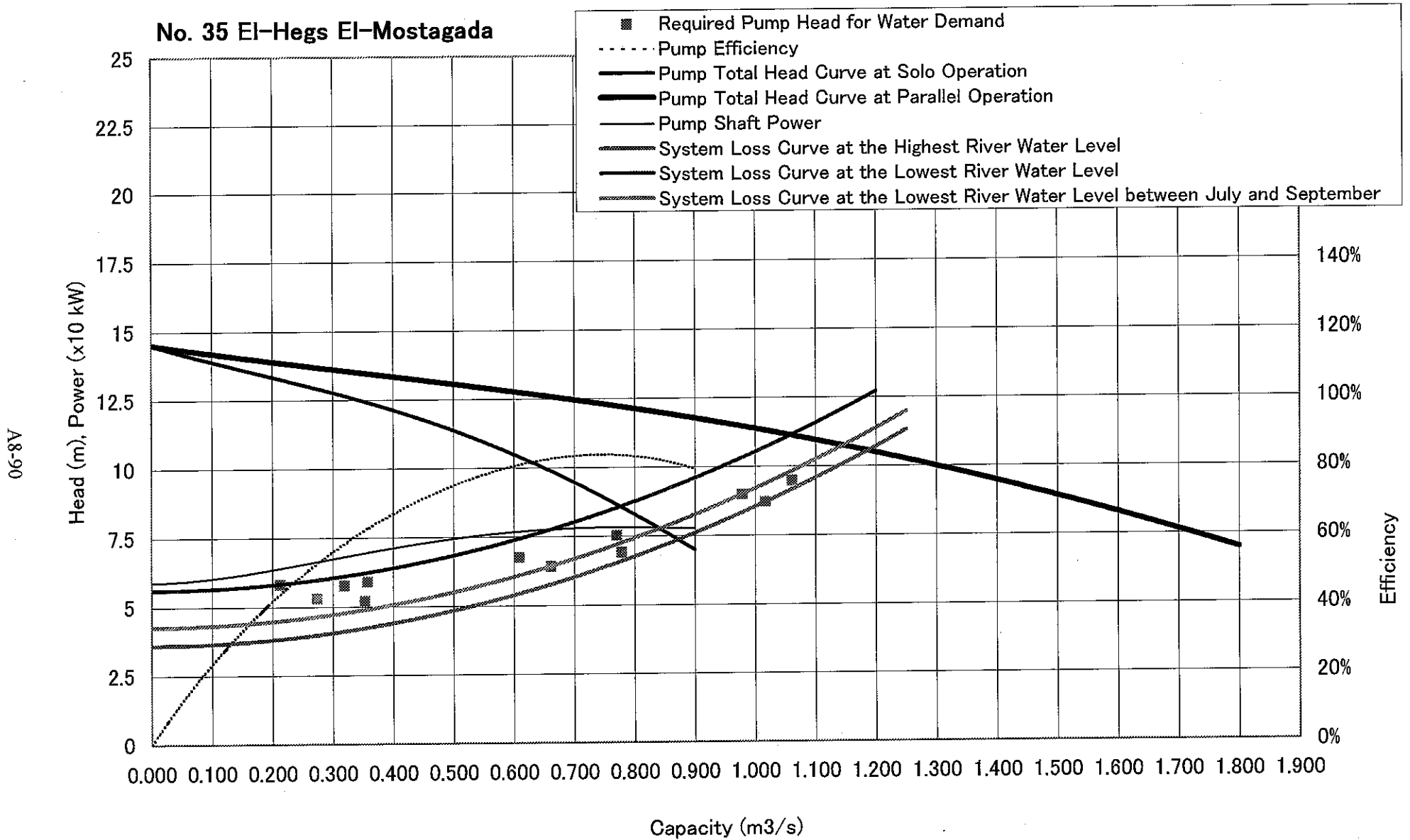
No. 34 Gezeret Abo Arafa



68-87

PUMP SYSTEM CURVE

No. 35 El-Hegs El-Mostagada



Maximum Total Head of Each Pump Station

Total Head at Low Water Level

| | No.27 | No.29 | No.30 | No.31 | No.32 | No.33 | No.34 | No.35 |
|---|---------------|---------------|---------------|--------------|---------------|--------------|--------------|---------------|
| Actual Head (m) At the low water level | 8.800 | 9.400 | 9.500 | 7.400 | 9.500 | 7.100 | 5.600 | 5.600 |
| Head Loss (m) Calculated by friction of piping system | 1.800 | 2.530 | 1.414 | 1.233 | 1.446 | 1.474 | 1.701 | 5.983 |
| Total Head (m) Actual head + Head loss | 10.600 | 11.930 | 10.914 | 8.633 | 10.946 | 8.574 | 7.301 | 11.583 |

Basic Conditions

| | | | | | | | | |
|------------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Nominal Diameter of Discharge Pipe | φ 600mm | φ 600mm | φ 600mm | φ 450mm | φ 600mm | φ 450mm | φ 600mm | φ 600mm |
| Discharge Rate | 0.25m ³ /s 2units | 0.35m ³ /s 2units | 0.25m ³ /s 2units | 0.15m ³ /s 2units | 0.25m ³ /s 2units | 0.15m ³ /s 2units | 0.25m ³ /s 2units | 0.55m ³ /s 2units |

1. Friction Loss of Pipes

(1) Pipe Line Inside Pump Station

Darcy-Weisbach Formula $hf = \lambda \cdot L/D \cdot V^2/2g$

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| hf = Friction loss of pipes (m) | 0.126 | 0.126 | 0.126 | 0.099 | 0.126 | 0.099 | 0.126 | 0.311 |
| λ = Coefficient of friction loss General steel pipe $\lambda = \{0.02 + 1/(2000 \cdot D)\} \cdot 1.5$ | 0.032 | 0.032 | 0.032 | 0.033 | 0.032 | 0.033 | 0.032 | 0.032 |
| L = Length of suction & discharge pipes (m) | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 |
| D = Nominal diameter of pipe (m) | 0.350 | 0.400 | 0.350 | 0.300 | 0.350 | 0.300 | 0.350 | 0.400 |
| V = Water velocity in pipe (m/s) $= Q/(D/2)^2 \cdot \pi$ | 2.598 | 2.785 | 2.598 | 2.122 | 2.598 | 2.122 | 2.598 | 4.377 |
| Q = | 0.250 | 0.350 | 0.250 | 0.150 | 0.250 | 0.150 | 0.250 | 0.550 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

(2) Pipe Line Outside Pump Station

Hazen-Williams Formula $hf = 10.666 \cdot Q^{1.85} / (C^{1.85} \cdot D^{4.87}) \cdot L$

| | | | | | | | | |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| hf = Friction loss of pipes (m) | 0.237 | 0.535 | 0.210 | 0.314 | 0.242 | 0.314 | 0.227 | 1.039 |
| Q = Water volume (m ³ /s) | 0.500 | 0.700 | 0.500 | 0.300 | 0.500 | 0.300 | 0.500 | 1.100 |
| D = Nominal diameter of pipe (m) | 0.600 | 0.600 | 0.600 | 0.450 | 0.600 | 0.450 | 0.600 | 0.600 |
| L = Length of pipe (m) | 40.4 | 40.4 | 29.5 | 28.0 | 34.0 | 28.0 | 32.0 | 34.0 |
| C = Coefficient of water velocity | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

2. Head Loss in Suction $hi = fi \cdot Vin^2/2g$

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| hi = Head loss in suction (m) | 0.026 | 0.031 | 0.026 | 0.015 | 0.026 | 0.015 | 0.026 | 0.073 |
| Vin = Water velocity in suction (m/s) | 1.133 | 1.238 | 1.133 | 0.943 | 1.133 | 0.943 | 1.133 | 1.945 |
| fi = Coefficient of suction loss for steel made bell mouth | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 | 0.400 |
| D = Nominal diameter of bell mouth (m) | 0.530 | 0.600 | 0.530 | 0.450 | 0.530 | 0.450 | 0.530 | 0.600 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

3. Head Loss in Discharge $h0 = f0 \cdot Vout^2/2g$

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| h0 = Head loss in discharge (m) | 0.159 | 0.313 | 0.159 | 0.181 | 0.159 | 0.181 | 0.159 | 0.172 |
| Vout = Water velocity in discharge (m/s) | 1.768 | 2.476 | 1.768 | 1.886 | 1.768 | 1.886 | 1.768 | 3.890 |
| f0 = Coefficient of discharge loss for steel made pipe | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

4. Head Loss in Change of Cross Sectional Areas (Loss in Water Tower)

(1) Rapid expansion (Borta Formula) $h_{se} = V_1^2/2g \cdot (1 - A_1/A_2)^2 = f_{se} \cdot V_1^2/2g$

| | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| h_{se} = Head loss in rapid expansion (m) | 0.186 | 0.233 | 0.186 | 0.067 | 0.186 | 0.067 | 0.186 | 0.532 |
| V_1 = Water velocity before expansion (m/s) | 2.546 | 2.946 | 2.546 | 1.528 | 2.546 | 1.528 | 2.546 | 4.630 |
| A_1 = Sectional area of pipe before rapid expansion (m ²) = $(D_{pipe}/2)^2/\pi$ Connection pipe dia.= | 0.196 | 0.238 | 0.196 | 0.196 | 0.196 | 0.196 | 0.196 | 0.238 |
| A_2 = Sectional area of pipe after rapid expansion (m ²) = $(D_{tower}/2)^2/\pi$ Water tower dia.= | 0.785 | 0.866 | 0.785 | 0.785 | 0.785 | 0.785 | 0.785 | 0.785 |
| f_{se} = Loss coefficient of rapid expansion $(1 - A_1/A_2)^2$ | 0.563 | 0.527 | 0.563 | 0.563 | 0.563 | 0.563 | 0.563 | 0.487 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

(2) Rapid contraction (Weisbach coe $h_{sc} = V_2^2/2g \cdot (1 - A_2/A_1)^2 = f_{sc} \cdot V_2^2/2g$

| | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| h_{sc} = Head loss in rapid contraction (m) | 0.029 | 0.063 | 0.029 | 0.047 | 0.029 | 0.047 | 0.029 | 0.139 |
| V_1 = Water velocity before contraction (m/s) | 0.637 | 0.808 | 0.637 | 0.382 | 0.637 | 0.382 | 0.637 | 1.401 |
| A_1 = Sectional area of pipe before rapid contraction (m ²) = $(D_{tower}/2)^2/\pi$ Water tower dia.= | 0.785 | 0.866 | 0.785 | 0.785 | 0.785 | 0.785 | 0.785 | 0.785 |
| A_2 = Sectional area of pipe after rapid contraction (m ²) = $(D_{pipe}/2)^2/\pi$ Discharge pipe dia.= | 0.283 | 0.283 | 0.283 | 0.159 | 0.283 | 0.159 | 0.283 | 0.283 |
| f_{sc} = Loss coefficient of rapid contraction $(1 - A_2/A_1)^2$ | 0.180 | 0.200 | 0.180 | 0.260 | 0.180 | 0.260 | 0.180 | 0.180 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |
| V_2 = Water velocity after contraction (m/s) | 1.768 | 2.476 | 1.768 | 1.886 | 1.768 | 1.886 | 1.768 | 3.890 |

5. Head Loss in Bend and Refraction

(1) Refraction in water tower $h_{be} = f_{be} \cdot V^2/2g$

| | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| h_{be} = Head loss in refraction (m) | 0.023 | 0.037 | 0.023 | 0.008 | 0.023 | 0.008 | 0.023 | 0.110 |
| V = Water velocity (m/s) $Q/A_1 =$ | 0.637 | 0.808 | 0.637 | 0.382 | 0.637 | 0.382 | 0.637 | 1.401 |
| f_{be} = Loss coefficient regarding Reynolds figure (Re) and angle (α) | 1.100 | 1.100 | 1.100 | 1.100 | 1.100 | 1.100 | 1.100 | 1.100 |
| Angle $\alpha =$ | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |
| Total $h_{be} =$ $h_{be} \times 2$ times refraction in water tower | 0.045 | 0.073 | 0.045 | 0.016 | 0.045 | 0.016 | 0.045 | 0.220 |

(2) Bend in discharge pipe $h_{be} = f_{be} \cdot V^2/2g$

| | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| h_{be} = Head loss in bend (m) | 0.008 | 0.000 | 0.040 | 0.045 | 0.040 | 0.045 | 0.008 | 0.039 |
| V = Water velocity (m/s) | 1.768 | 2.476 | 1.768 | 1.886 | 1.768 | 1.886 | 1.768 | 3.890 |
| f_{be} = Loss coefficient regarding Reynolds figure (Re) and angle (α) | 0.050 | 0.000 | 0.250 | 0.250 | 0.250 | 0.250 | 0.050 | 0.050 |
| Angle $\alpha =$ | 20 | — | 45 | 45 | 45 | 45 | 20 | 20 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

(3) Bend in suction pipe $h_b = f_b \cdot V^2/2g$

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| h_b = Head loss in bend (m) | 0.059 | 0.067 | 0.059 | 0.039 | 0.059 | 0.039 | 0.059 | 0.166 |
| V = Water velocity (m/s) | 2.598 | 2.785 | 2.598 | 2.122 | 2.598 | 2.122 | 2.598 | 4.377 |
| f_b = Loss coefficient regarding Reynolds figure (Re) and angle (α) | 0.170 | 0.170 | 0.170 | 0.170 | 0.170 | 0.170 | 0.170 | 0.170 |
| Angle $\alpha =$ | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

6. Head Loss in Joint

(1) T-shape joint $h_{13} = f_{13} \cdot V_3^2 / 2g$

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| h_{13} = Head loss in joint (m) | 0.104 | 0.203 | 0.104 | 0.118 | 0.104 | 0.118 | 0.104 | 0.502 |
| f_{13} = Loss coefficient of Joint in T-shape | 0.650 | 0.650 | 0.650 | 0.650 | 0.650 | 0.650 | 0.650 | 0.650 |
| V_3 = Average water velocity after joint (m/s) | 1.768 | 2.476 | 1.768 | 1.886 | 1.768 | 1.886 | 1.768 | 3.890 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

7. Head Loss in Valves

(1) Butterfly valve $h_v = f_v \cdot V^2 / 2g$

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| h_v = Head loss in valve (m) | 0.069 | 0.079 | 0.069 | 0.046 | 0.069 | 0.046 | 0.069 | 0.195 |
| f_v = Loss coefficient of valve, opened at 100% | 0.200 | 0.200 | 0.200 | 0.200 | 0.200 | 0.200 | 0.200 | 0.200 |
| V = Water velocity (m/s) | 2.598 | 2.785 | 2.598 | 2.122 | 2.598 | 2.122 | 2.598 | 4.377 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

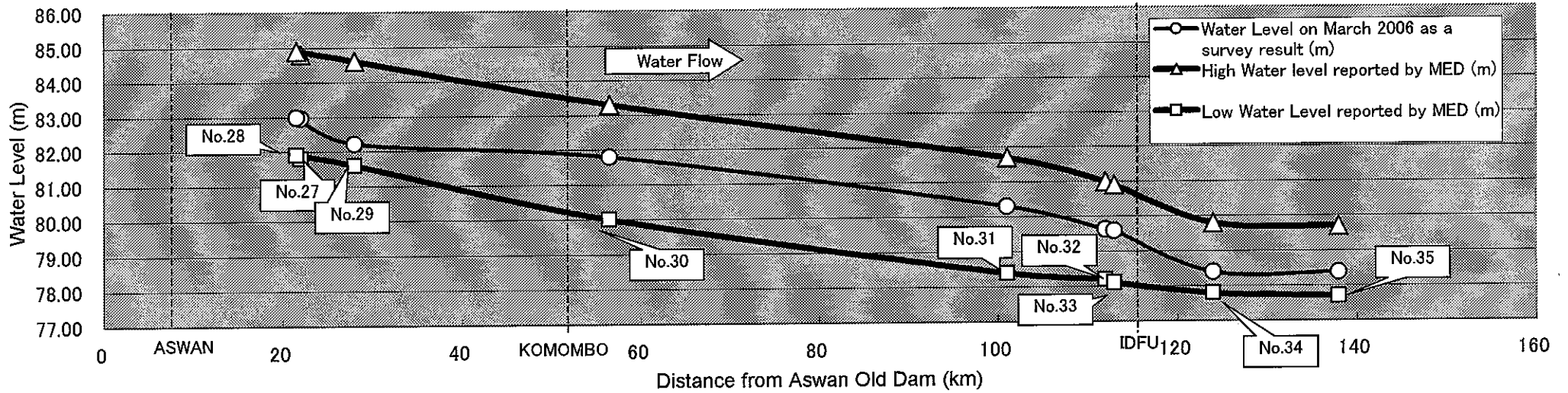
(2) Check valve

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| h_v = Head loss in valve (m) | 0.361 | 0.415 | 0.361 | 0.241 | 0.361 | 0.241 | 0.361 | 1.026 |
| f_v = Loss coefficient of valve | 1.050 | 1.050 | 1.050 | 1.050 | 1.050 | 1.050 | 1.050 | 1.050 |
| V = Water velocity (m/s) | 2.598 | 2.785 | 2.598 | 2.122 | 2.598 | 2.122 | 2.598 | 4.377 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

(3) Flap valve/ Foot valve for fixed pump station

| | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| h_v = Head loss in valve (m) | 0.341 | 0.392 | 0.000 | 0.000 | 0.000 | 0.241 | 0.301 | 0.967 |
| f_v = Loss coefficient of valve | 0.990 | 0.990 | 0.000 | 0.000 | 0.000 | 1.050 | 0.875 | 0.990 |
| V = Water velocity (m/s) | 2.598 | 2.785 | 2.598 | 2.122 | 2.598 | 2.122 | 2.598 | 4.377 |
| g = Gravitational acceleration (m/s ²) | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 | 9.807 |

Change of Water Levels of the River Nile in Upper Egypt



Water Level and Design Total Head of Each Pump Station

| Pump Station | Distance from Aswan Old Dam (km) | Water Level on March 2006 as a survey result | High Water level reported by MED (m) | Low Water Level reported by MED (m) A | Water Level on Maximum Water Demand (m) B | Discharge Water Level (m) C | Maximum Water Head (m) D=C-B | Head Loss (m) E | Total Head at Low Water Level (m) F=D+E | Total Head at Maximum Water Demand (m) G=C-B+E | Design Total Head (m) | Head of Existing Pump (m) |
|------------------------|----------------------------------|--|--------------------------------------|--|--|--------------------------------|---------------------------------|--------------------|--|---|-----------------------|---------------------------|
| No.27 (Left, Island) | 22.0 | 82.96 | 84.800 | 81.800 | 83.827 | 90.600 | 8.800 | 1.800 | 10.600 | 8.573 | 9 | 13 |
| No.28 (Right Bank) | 21.5 | 82.98 | 84.900 | 81.900 | 83.927 | 91.600 | 9.700 | 31.080 | 40.780 | 38.753 | N.A. | 23 |
| No.29 (Right Bank) | 28.0 | 82.21 | 84.600 | 81.600 | 84.611 | 91.000 | 9.400 | 2.530 | 11.930 | 8.919 | 10 | 13 |
| No.30 (Right, Island)) | 56.5 | 81.79 | 83.300 | 80.000 | 82.486 | 89.500 | 9.500 | 1.414 | 10.914 | 8.428 | 9 | 11 |
| No.31 (Left, Island) | 101.0 | 80.30 | 81.700 | 78.400 | 80.814 | 85.800 | 7.400 | 1.233 | 8.633 | 6.219 | 7 | 16 |
| No.32 (Right, Island) | 112.0 | 79.63 | 81.000 | 78.200 | 81.749 | 87.700 | 9.500 | 1.446 | 10.946 | 7.397 | 9 | 12 |
| No.33 (Right, Island) | 113.0 | 79.59 | 80.900 | 78.100 | 80.400 | 85.200 | 7.100 | 1.474 | 8.574 | 6.274 | 7 | 10.6 |
| No.34 (Right, Island) | 124.0 | 78.40 | 79.800 | 77.800 | 80.039 | 83.400 | 5.600 | 1.701 | 7.301 | 5.062 | 6 | 13 |
| No.35 (Right Bank) | 138.0 | 78.39 | 79.700 | 77.700 | 79.783 | 83.300 | 5.600 | 5.983 | 11.583 | 9.500 | 11 | 13 |