BASELINE REPORT

NAFCC PROJECT

INTEGRATED SURFACE WATER MANAGEMENT THROUGH CLIMATE CHANGE ADAPTATION IN U.T. OF PUDUCHERRY

सत्यमेव जयते
Government of Puducherry

PUDUCHERRY CLIMATE CHANGE CELL
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DEPARTRTMENT OF PUBILC WORKKS
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GOVT. OF PUDUCHERRY

Contents

Baseline Survey of Tanks

1. Olandai tank

Tank type : System (Pillayarkuppam)

Location of the tank

Village & Commune - Tank : Olandai/ Pondicherry town

- Ayacut : Olandai/ Pondicherry town (P&B)

Bund and culvert separates the Olandai and Murungapakkam tanks' water spread. The entire ayacut is has been converted as urbanised area. The survey numbers have also been changed as town survey numbers. It is in urban area.

Physical characteristics

Ayacut : 72.47 ha

Cultivable ayacut area : 2.54 ha (3%) (This was reduced due to urbanization)

Tank poromboke area : 42.57 ha

Storage capacity : 0.396 Million m^3

No. of sluices : 3

No. of weirs and type : 2, BC-calingulah, culvert

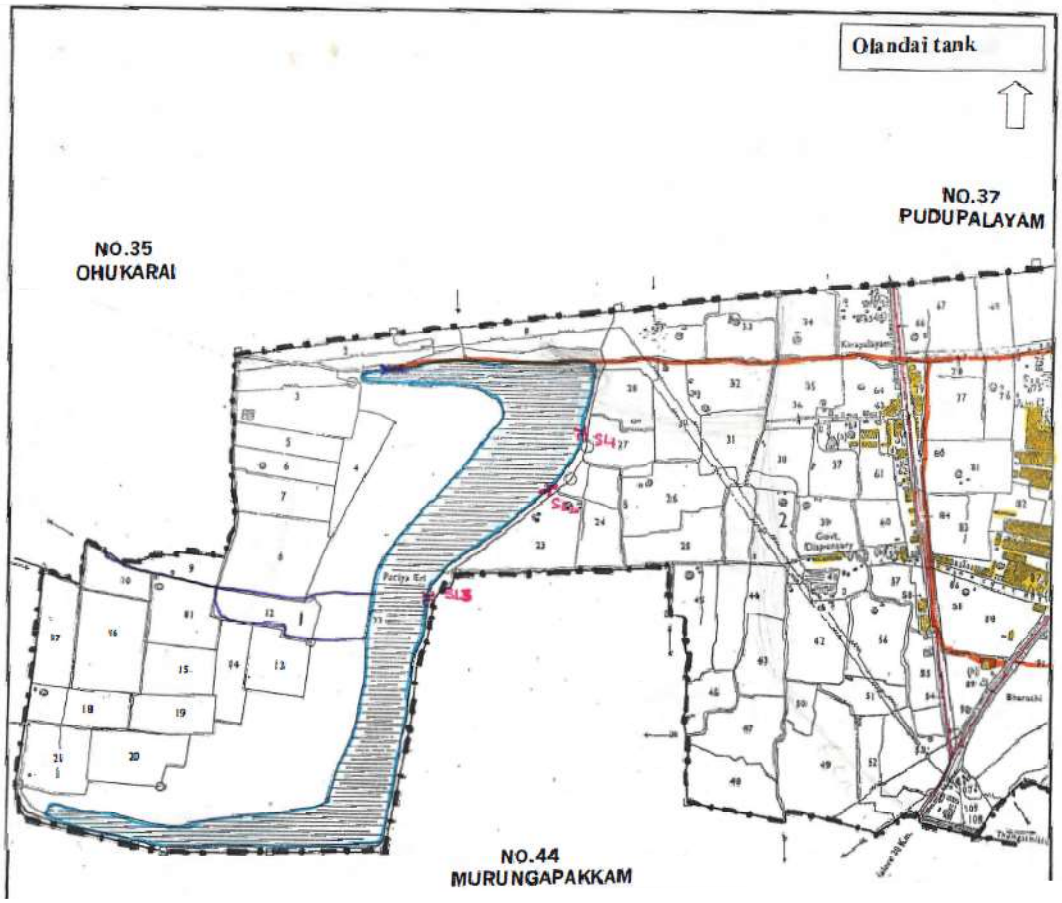
Bund length : 2365 m

Maximum water depth : 2.10 m

Condition of the tank components

Components		Condition	Remarks
Tank bund		Good	
Tank bed		Good	
Sluices	1	Poor	Head and wing wall – not is use
	2	Poor	Head and wing wall – not is use
	3	Poor	Head wall – not in use
Field channels	1	Poor	Earthen channel – more vegetation; silted; fully encroached; not in use
	2	Poor	Earthen channel – more vegetation; silted; fully encroached; not in use
	3	Poor	No defined channels
Weir	1	Poor	BC calingulah – major damages;
	2	Average	Culvert between Murungappakkam and Olandai tanks – constructed ten years back; currently used as surplus arrangement
Feeder canals	1	Good	
Surplus courses	1	Poor	Designed to reach sea; currently used also as sewage and drainage channel

Tank photos before execution of the work:



Currently there is no cultivation in this ayacut due to urbanisation

LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank	: **Olandai tank**	Ayacut	: 72.47 ha (PWD)
Geo-coordinates	: 11° 55' 04" N, 79° 48'01" E	WSA	: 42.57 ha
Village / Commune	: Olandai / Pondicherry town	No. of Sluices	: 3
Tank Type	: System (Pillayar kuppam)	Weir Type(s)	: BC-calingulah, Culvert

2. Murungappakkam tank

Tank type : System (Pillayarkuppam)

Location of the tank

Village & Commune - Tank : Murungappakkam / Pondicherry town

- Ayacut : Murungappakkam / Pondicherry town (P&B)

The entire village including ayacut is on the verge of total urbanisation. Ideally this tank can be used as percolation pond or as picnic spot of properly maintained and prevent sewage flowing in to the tank.

Physical characteristics

Ayacut : 158.30 ha

Cultivable ayacut area : 46.73 ha (30%)

Tank poromboke area : 41.08 ha

Storage capacity : 0.878 Million m^3

No. of sluices : 4

No. of weirs and type : 1, culvert

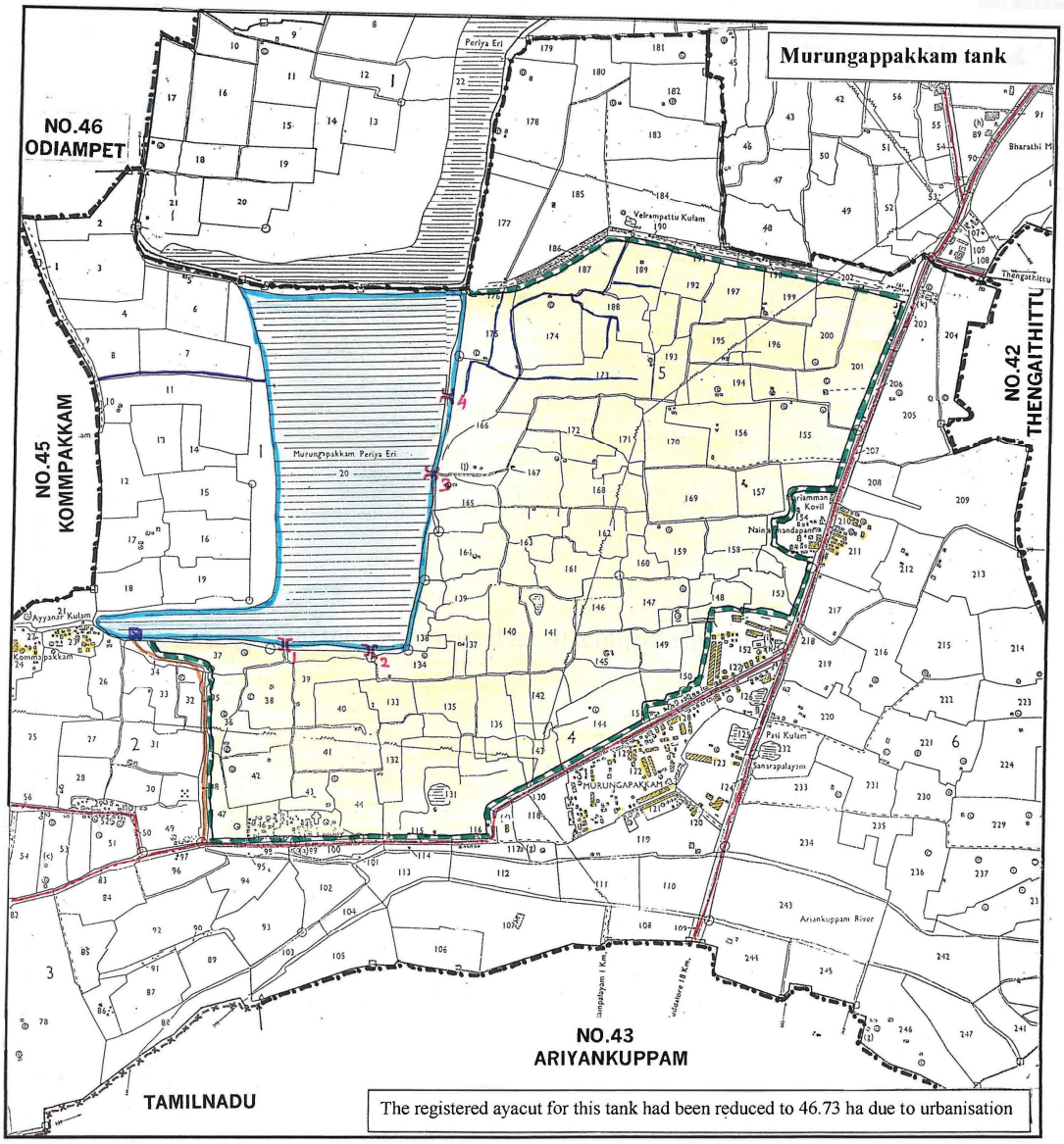
Bund length : 2350 m

Maximum water depth : 1.63 m

Condition of the components

Components		Condition	Remarks
Tank bund		Good	Road for full length at top;
Tank bed		Good	
Sluices	1	Good	Head wall – high level sluices; shutter exists; completely closed
	2	Average	Head and wing wall – deepest sluice; no shutter; currently in use for irrigation
	3	Average	Head and wing wall – no shutter ; pipe blockage 20%; currently not used for irrigation; rear cistern used for domestic purposes
	4	Poor	Head wall – no shutter; piping problem; more damages; currently not used for irrigation;
Field channels	1	Poor	Earthen channel – more vegetation; silted not in use and falls into surplus course
	2	Poor	Earthen channel – more vegetation; silted; encroached
	3	Urbanised	
	4	Urbanised	
Weir	1	Good	Culvert – minor damages
Feeder canals	1	Good	
Surplus courses	1	Average	Falls into Ariankuppam river – defined but more vegetation

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank	: **Murungappakkam tank**	Ayacut	: 158.30 ha
Geo-coordinates	: 11° 54' 35" N, 79° 47'25" E	WSA	: 41.08 ha
Village / Commune	: Murungapakkam / Pondicherry town	No. of Sluices	: 4
Tank Type	: System (Pillayar kuppam)	Weir Type(s)	: Culvert

3. Tondamanattam Velleri

Tank type : System (Suttukeni)

Location of the tank

Village & Commune - Tank : Tondmanattam / Villianur

- Ayacut : Tondmanattam / Villianur (P&B)
Ramanathapuram /Villaanur (P&B)

Physical characteristics

Ayacut : 51.07 ha

Cultivable ayacut area : 49.97 ha

Water Spread Area : 35.79 ha

Storage capacity : 0.353 Million m^3**

No. of sluices : 6

No. of weirs and type : 1, BC

Bund length : 1580 m

Maximum water depth : 2.20 m

**This data is obtained from PWD. As per conical formula it is 0.276 million m^3

Water resources

Name of the immediate upper tank : No

Name of the immediate lower tank/river : Usteri

	Collect drain from free catchment	Upper tank surplus course	Feeder channel
Name	No	No	Tondamanattam branch channel
From	------	------	Suttukeni Vaykkal
Length (m)	------	------	800 m

Water source	Upper tanks	No	Irrigation source	Tank water	Nil
	Feeder canal	60%	(Main season)	Groundwater	100 %
	Free catchment	40%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 196%

Paddy percentage to gross cropped area : 87%

Paddy average yields per ha (samba) : 3.0 tonnes

The cropping pattern in the cultivable area was

Paddy –I 57% Paddy – II 57% Paddy – III 57%

Cotton 09%

Casuarina 04%

Sugarcane 14%

Groundnut 02%

Fallow 14%

Encroachment in the water spread area

No. of encroachers : Insignificant

Area of patta lands : No

Area of encroachment to WSA : 2 %

Removal of encroachment : Easy

Five foreshore farmers extended their limit into the water spread area, which is almost equivalent to 1.0 ha. The encroachments were evicted five years back and a foreshore bound was provided.

Condition of the tank components

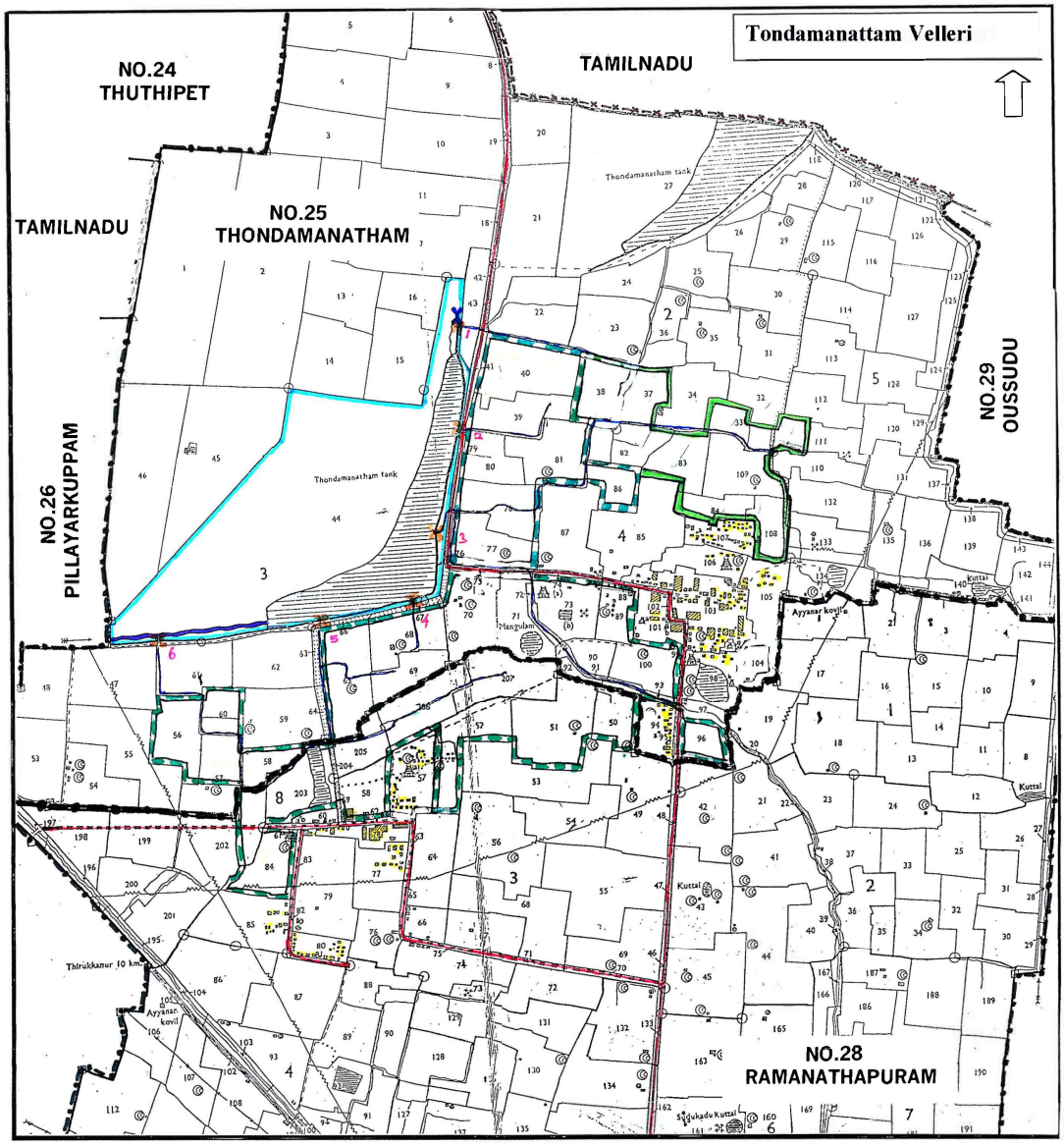
Components		Condition	Remarks
Tank bund		Average	Metalled road for full length at toe and it has few weak points as per farmers' view
Tank bed		Poor	Heavily silted and insignificant encroachment; partly infested with ipomea
Sluices	1	Average	Weir vent – Weak. to be repaired
	2	Good	Head and wing wall – leaky; shutter exists; pipe blockage 50%
	3	Good	Head and wing wall – leaky; shutter exists; pipe blockage 50%
	4	Good	Head wall – shutter exists; pipe blockage 10%
	5	Good	Head wall – leaky; shutter exists; pipe blockage 50%; minor damages

	6	Average	Head wall – no shutter; leaky; minor damages; pipe blockage 90%
Field channels	1	Average	Line channel – more vegetation; silted
	2	Average	Line channel – less vegetation; silted
	3	Average	Line channel – less vegetation; silted
	4	Good	Earthen channel – less vegetation; less encroachment
	5	Good	Lined channel – less vegetation
	6	Poor	Earthen channel – more encroachment; more vegetation; silted
Weir	1	Average	BC – leaky; minor damages
Feeder canals	1	Average	Suttukeni vaykkal – less encroachment
Surplus courses	1	Average	Sluice 1 field channels acts as surplus channel' which is not sufficient during the surplus periods due to its present width of 0.3m

Requirements on priority

Works (on priority)	**What is required?**
Tank bed	Removal of weeds and desiltation
Tank bund	Widening and strengthening
Field channels	Clearing and repairing the lined channels and lining for the remaining portion; it will help reducing the drainage problem
Feeder canals	Clearing
Community well	Small farmers opt for community well and they are willing to contribute

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	Combined Ayacut Boundary (8.13 ha)
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Tondamanattam Velleri**	Ayacut	: 51.07 ha
Geo-coordinates	: 11° 57'45" N, 79° 43'11" E	WSA	: 35.79 ha
Village / Commune	: Thondamanatham / Villiyanur	No. of Sluices	: 6
Tank Type	: System (Suttukeni)	Weir(s)	: Broadcrested

4. Katterikuppam tank

Tank type	:	System (Vidur)
Location of the tank		
Village & Commune - Tank	:	Katteri / Mannadipattu
		Kuppam / Mannadipattu
		Suttukanni / Mannadipattu.
Village & Commune - Ayacut	:	Katteri / / Mannadipattu (P&B)
		Kuppam / Mannadipattu (P&B)
		Lingareddipalayam (hamlet) (B)

Water spread area of this tank lies in three different revenue villagers viz. Katterikuppam and Suthukkeny. Of four sluices, 2 each in Kuppam and Katteri.

The ayacut as per PWD is different from the VAO record, because the ayacut of another tank Kuppam thangal was also added to this tank's ayacut. Whereas Kuppam tank has its own ayacut and it is located away from this tank, without any direct link.

Physical characteristics

Ayacut	: 94.97 ha
Cultivable ayacut area	: 93.79 ha
(0.90 ha of ayacut has already been converted as housing plots)	
Water Spread Area	: 49.80 ha
Storage capacity	: 0.184 Million m^3**
No. of sluices	: 4
No. of weirs and type	: 1, BC - calingulah
Bund length	: 2225 m
Maximum water depth	: 2.95 m

** This capacity is obtained from PWD. The capacity as per conical formula is 0.514 million m^3.

Water resources

Name of the immediate upper tank	: Suttukeni periya eri
Name of the immediate lower tank / river	: Kuppam tank and Usteri feeder canal

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	Suttukeni periya eri surplus	Katteri feeder canal
From	----	Offtake at Otteri inflow	Vidur reservoir
Length (m)	----	15 m	18100 m

Water source	Upper tanks	50%	Irrigation source	Tank water	50%
	Feeder canal	40%	(Main season)	Groundwater	50%
	Free catchment	10%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 130 %

Paddy percentage to gross cropped area : 39 %

Paddy average yield per ha (samba) : 4.8 tonnes

The cropping pattern in the cultivable area was

Paddy – I	18%	Paddy – II	18%	Paddy – III	16%
Casuarinas	39%				
Sugarcane	37%				
Fallow	04%				
Coconut, banana, vegetables	02%				

Encroachment in the water spread area

No. of encroachers : No

Area of patta lands : No

Area of encroachment to WSA : 0%

Removal of encroachment : No encroachment

Condition of the components

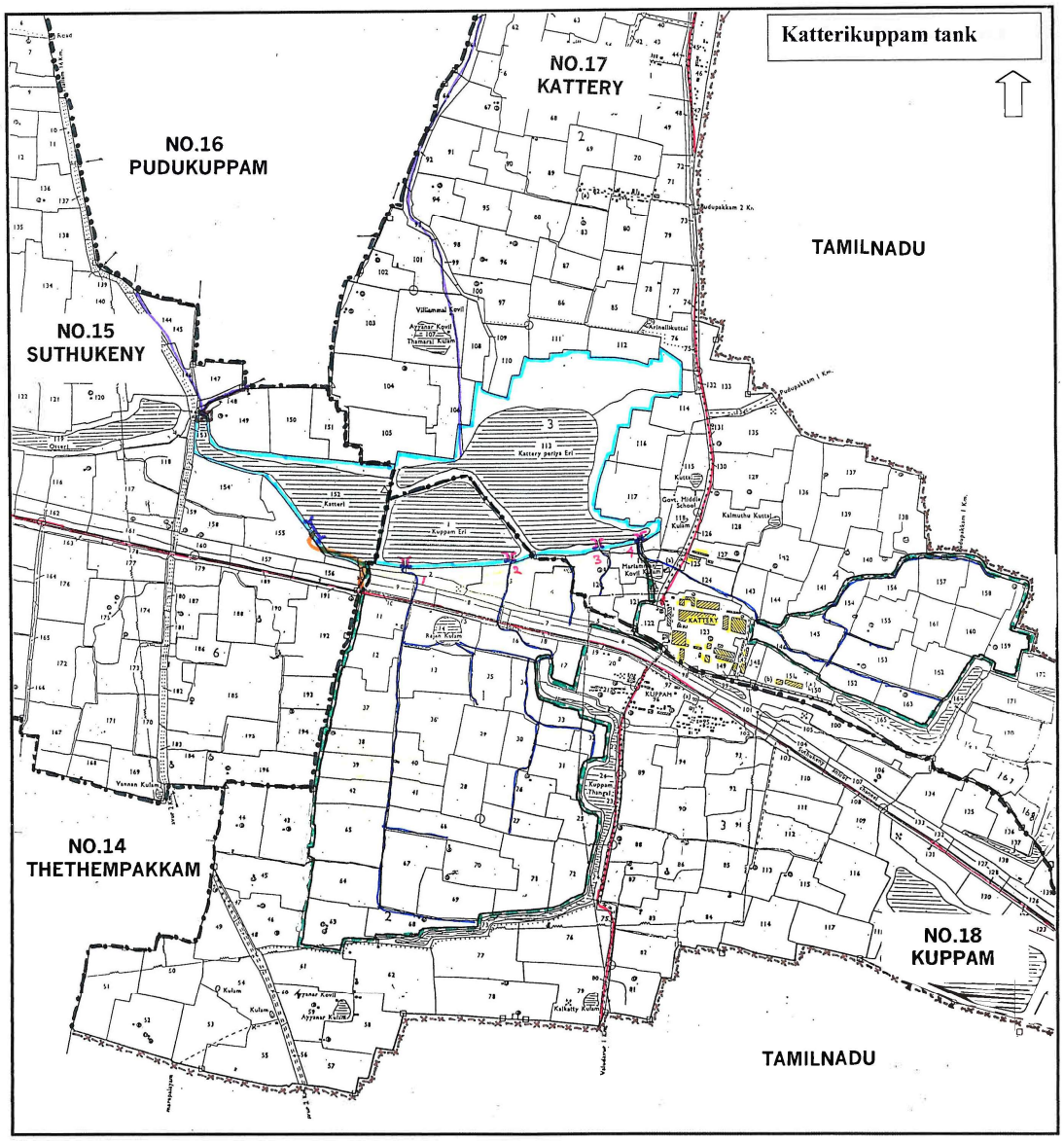
Components	Condition	Remarks
Tank bund	Poor	Four vulnerable points; not in designed dimension; no approach road on top
Tank bed	Poor	Heavily silted and insignificant encroachment; infested with ipomea
Sluices 1	Average	Head wall – no shutter; leaky ; piping problem; pipe blockage 50%; minor damages
2	Poor	Head wall –no shutter ; leaky; pipe blockage 75% major damages

	3	Average	Head and wing wall; no shutter leaky; pipe blockage 80%; minor damages
	4	Average	Head wall – no shutter; leaky; pipe blockage 100% minor damages
Field channels	1	Poor	Earthen channel with more vegetation and obstruction; more encroachment; silted
	2	Poor	Earthen channel with more vegetation and obstruction; more encroachment; silted
	3	Poor	Earthen channel with more vegetation and obstruction; more encroachment; silted
	4	Poor	Earthen channel with more vegetation and obstruction; more encroachment; silted
Weir	1	Average	BC- Calingulah – minor damages to dam stones
Feeder canals	1	Poor	Suttukeni periya eri surplus channel – encroached, more vegetation
	2	Poor	Vidur channel – no supply for the past ten years due to encroachment, siltation and vegetation
Surplus courses	1	Poor	Leads to Kuppam tank (partly) and the rest flow to Suttukeni vaykkal – encroached, more vegetation; silted up

Requirements on priority

Works (on priority)	**What is required?**
Tank bed	Desiltation
Sluice	Reconstruction and shutters provision
Tank bund	Strengthening and standardisation
Feeder canals	Removal of encroachment and clearance of Vidur channel
Surplus courses	Clearing and removal of encroachment

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Katterikuppam tank**	Ayacut	: 94.97 ha
Geo-coordinates	: 12° 00'22" N, 79° 41' 48" E	WSA	: 49.80 ha
Village / Commune	: Kattery, Kuppam & Suthukeny / Mannadipet	No. of Sluices	: 4
Tank Type	: System (Vidur)	Weir(s)	: BC-calingulah

5. Kunichampattu pazhaya eri

Tank type : System (Vikravandi)

Location of the tank

Village & Commune - Tank : Kunichampattu / Manadipattu

- Ayacut : Kunichampattu / Manadipattu (P&B)
  K.R. Palayam (hamlet) (B)

Physical characteristics

Ayacut : 32.07 ha

Cultivable ayacut area : 32.07 ha

Tank poromboke area : 16.12 ha

Storage capacity : 0.131 Million m^3**

No. of sluices : 3

No. of weirs and type : 1, BC

Bund length : 1060 m

Maximum water depth : 2.80 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.158 million m^3.

Water resources

Name of the immediate upper tank : No

Name of the immediate lower tank/river : Mannadipet Tank

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	No	Kunichampattun pazhaya eri branch feeder canal
From	----	-------	Vikravandi canal
Length (m)	----	--------	1015 m

Water source	Upper tanks	No	Irrigation source	Tank water	20%
	Feeder canal	50%	(Main season)	Groundwater	80%
	Free catchment	50%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 181%

Paddy percentage to gross cropped area : 70%

Paddy average yields per ha (samba) : 5.5 tonnes

The cropping pattern in the cultivable area was

Paddy –I	45%	Paddy – II	43%	Paddy – III	40%
Sugarcane	32%				
Casuarinas	22%				
Groundnut	01%				

Encroachment in the water spread area

No. of encroachers	: No
Area of patta lands	: No
Area of encroachment to WSA	: Nil
Removal of encroachment	: Nil

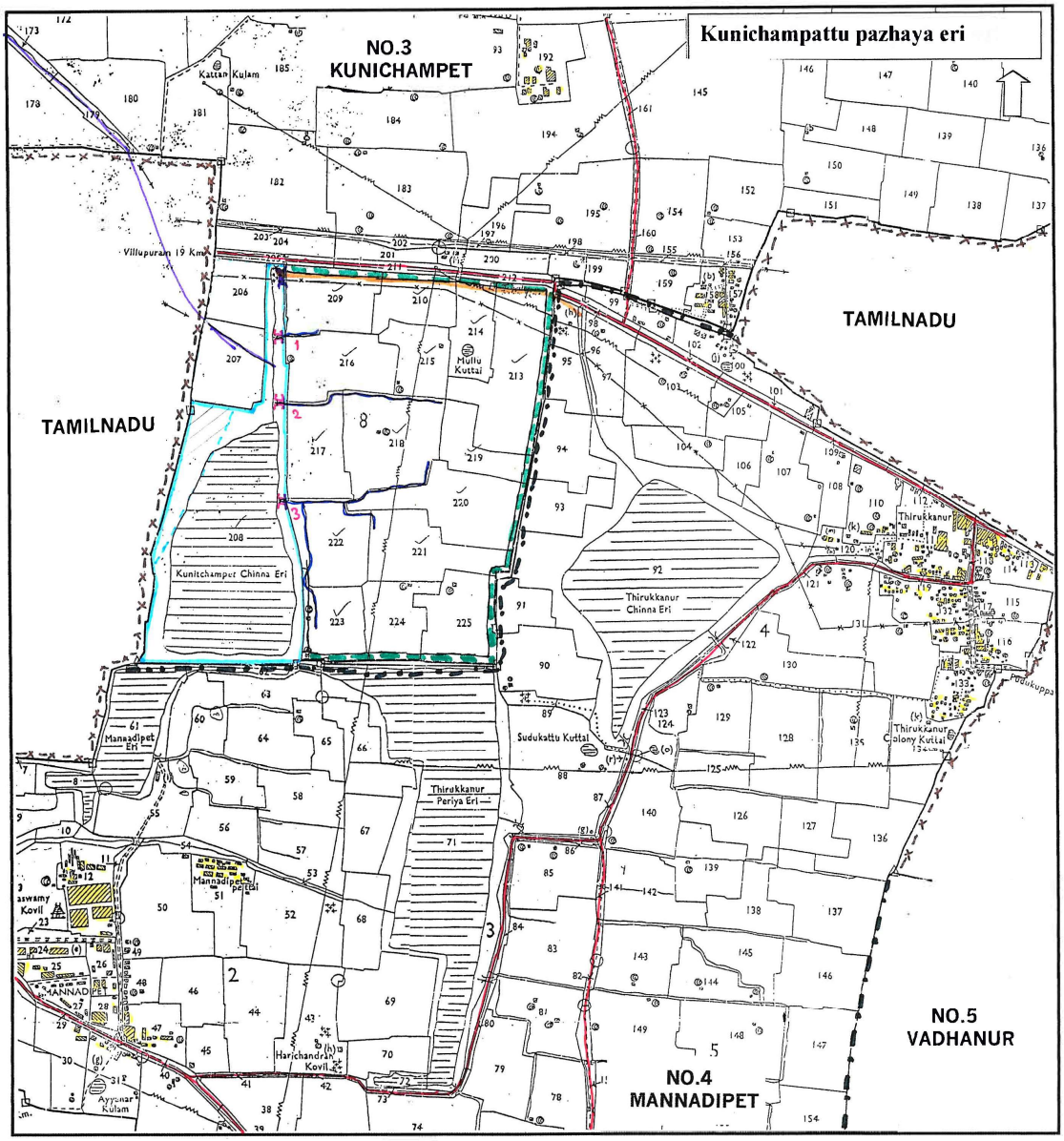
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	BT road formed during 14-15
Tank bed		Average	Heavily Silted and covered with bushes
Sluices	1	Poor	Entirely damaged
	2	Poor	Entirely damaged
	3	Poor	Entirely damaged
Field channels	1	Poor	Earthen channel with more vegetation and obstruction; more encroachment; heavily silted
	2	Poor	Earthen channel with more vegetation and obstruction; more encroachment; silted
	3	Average	Earthen channel with less vegetation; less encroachment
Feeder canals	1	Good	Kunichampattu pazhaya eri feeder channel from the Vikravandi channel – recently cleared
Surplus courses	1	Poor	Leads to Vikkravandy Main Channel and partly encroached and vegetation

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Desiltation
Tank bund	Standardisation, widening to enable cart movement and new bund between the foreshore and tank
Field channel	Clearing and lining
Sluice	Repairs and shutter provision
Injection wells	Bore holes in the tank to recharge the groundwater

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Kunichampattu pazhaya eri**	Ayacut	: 32.07 ha
Geo-coordinates	: 11° 59'32" N, 79° 37' 38" E	WSA	: 16.12 ha
Village / Commune	: Kunitchampet / Mannadipet	No. of Sluices	: 3
Tank Type	: System (Vikravandi)	Weir(s)	: Broadcrested

6. Mannadipattu tank

Tank type : System (Vikravandi)

Location of the tank

Village & Commune - Tank : Mannadipattu / Mannadipattu

- Ayacut : Mannadipattu / Mannadipattu (P&B)

Physical characteristics

Ayacut : 11.69 ha

Cultivable ayacut area : 11.69 ha

Tank poromboke area : 4.17 ha

Storage capacity : 0.057 Million m^3**

No. of sluices : 1

No. of weirs and type : No

Bund length : 370

Maximum water depth : 1.80 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.026 million m^3.

Water resources

Name of the immediate upper tank : Kunichampattu pazhaya eri

Name of the immediate lower tank / river : Tirukkanur periya eri

	Collector drain from free catchment	Upper tank surplus course	Feeder canal (From Vikkravandy Main Channel)
Name	No	No	Mannadipattu branch channel
From	----	----	Tirukkanur periya eri feeder channel
Length (m)	----	----	200 m from Tirukkanur periya eri feeder channel

Water source	Upper tanks	No	Irrigation source	Groundwater	100%
	Feeder canal	75%	(Main season)	Free catchment	25%

Cropping pattern and production

Cropping intensity in ayacut : 200%

Paddy percentage to gross cropped area : 100%

Paddy average yields per ha (samba) : 3.5 tonnes

All the area is under paddy cultivation. Only two seasons.

Encroachment in the water spread area

No. of encroachers : 1 Nos

Area of patta lands : No

Area of encroachment to WSA : 5 %

Removal of encroachment : easy

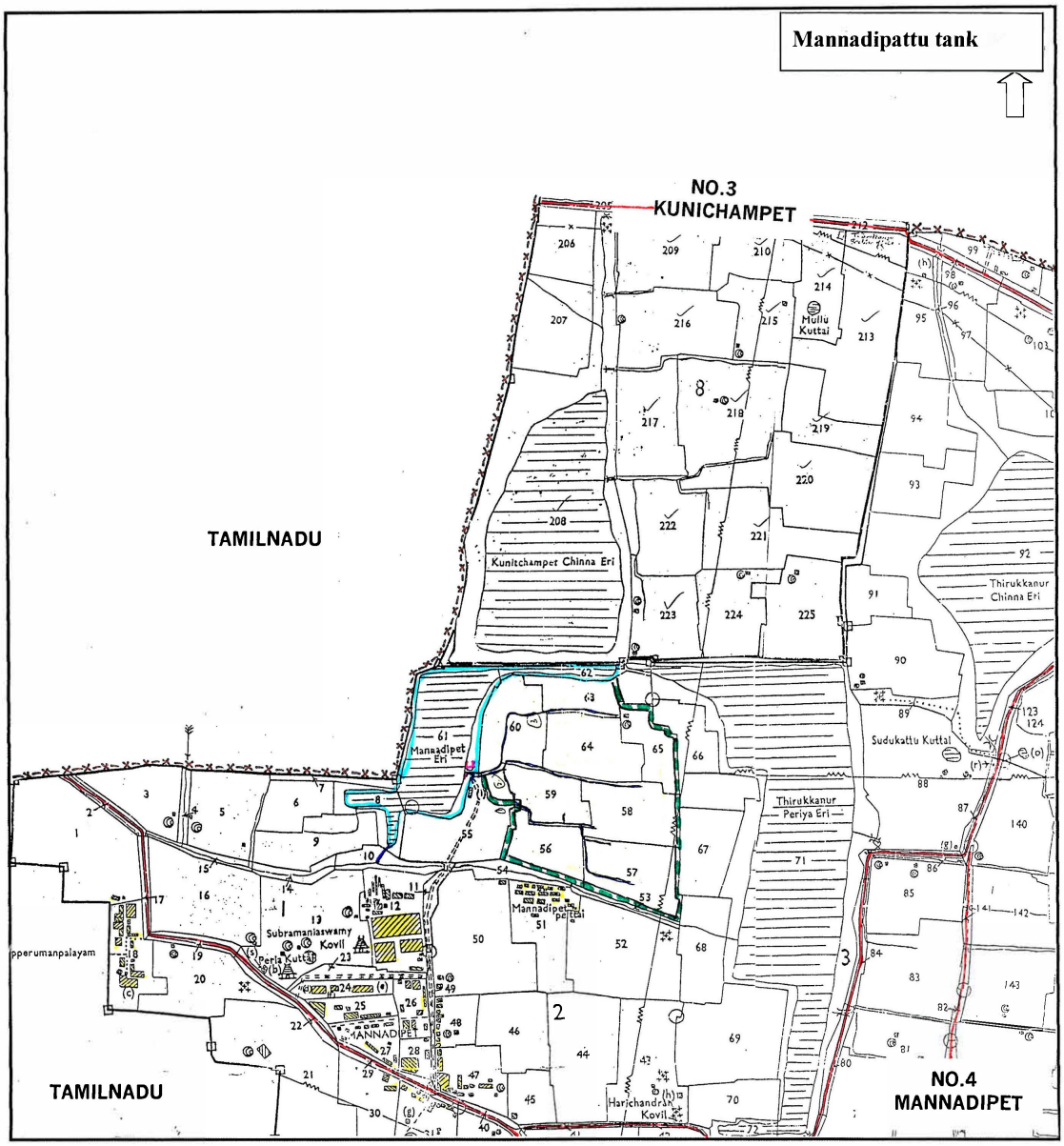
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	BT road formed in the offshore bund
Tank bed		Average	Moderately silted and less encroachment
Sluices	1	Average	Sluice under repair
Field channels	1	Poor	Earthen channel with less vegetation and obstruction; more encroachment; silted
Weir	1	No	No weir, cut opening bund to release water in practice
Feeder canals	1	Good	Branch channel from Tirukkanur peria eri feeder channel from vikravandy main channel- recently desilted
Surplus courses	1	No	No surplus channel

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Desiltation
Tank bund	Standardisation and needs a cart track
Field channels	Clearing and lining
Diversion structure	Inlet shutter is damaged and needs to be repaired.
Community well	New community well to supply water to small farmers. These are more than 30 farmers having less than 1 ha of land.
Sluice	Sluice arrangement needs to be replaced

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **26. Mannadipattu tank**	Ayacut	: 11.69 ha
Geo-coordinates	: 11° 59'19" N, 79° 37' 31" E	WSA	: 4.17 ha
Village / Commune	: Mannadipet / Mannadipet	No. of Sluices	: 1
Tank Type	: System (Vikravandi)	Weir(s)	: No weir

7. Tirukkanur Periya eri

Tank type : System (Vikravandi)

Location of the tank

Village & Commune - Tank : Manadipattu / Manadipattu

- Ayacut : Manadipattu / Manadipattu (P)
  Tirukkanur (hamlet) (B)

Physical characteristics

Ayacut : 63.77 ha

Cultivable ayacut area : 63.77 ha

Tank poromboke area : 18.43 ha

Storage capacity : 0.369 Million m^3**

No. of sluices : 3

No. of weirs and type : No

Bund length : 1490 m

Maximum water depth : 2.31 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.148 million m^3.

Water resources

Name of the immediate upper tank : Mannadipattu tank

Name of the immediate lower tank / river : Tirumangalam tank (TN)

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	No	Tirukkanur periya eri branch channel
From	----	-------	Vikravandi channel
Length (m)	----	--------	2630 m

Water source	Upper tanks	20%	Irrigation source	Tank water	0%
	Feeder canal	70%	(Main season)	Groundwater	100%
	Free catchment	10%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 215 %

Paddy percentage to gross cropped area : 89 %

Paddy average yields per ha (samba) : 3.5 tonnes

The cropping pattern in the cultivable area was

Paddy - I	64%	Paddy - II	64%	Paddy - III	64%
Sugarcane	24%				
Fallow	02%				

Encroachment in the water spread area

No. of encroachers	: 3
Area of patta lands	: No
Area of encroachment to WSA	: 8 %
Removal of encroachment	: Easy

The tank poromboke area is partly encroached by an extension of foreshore lands.

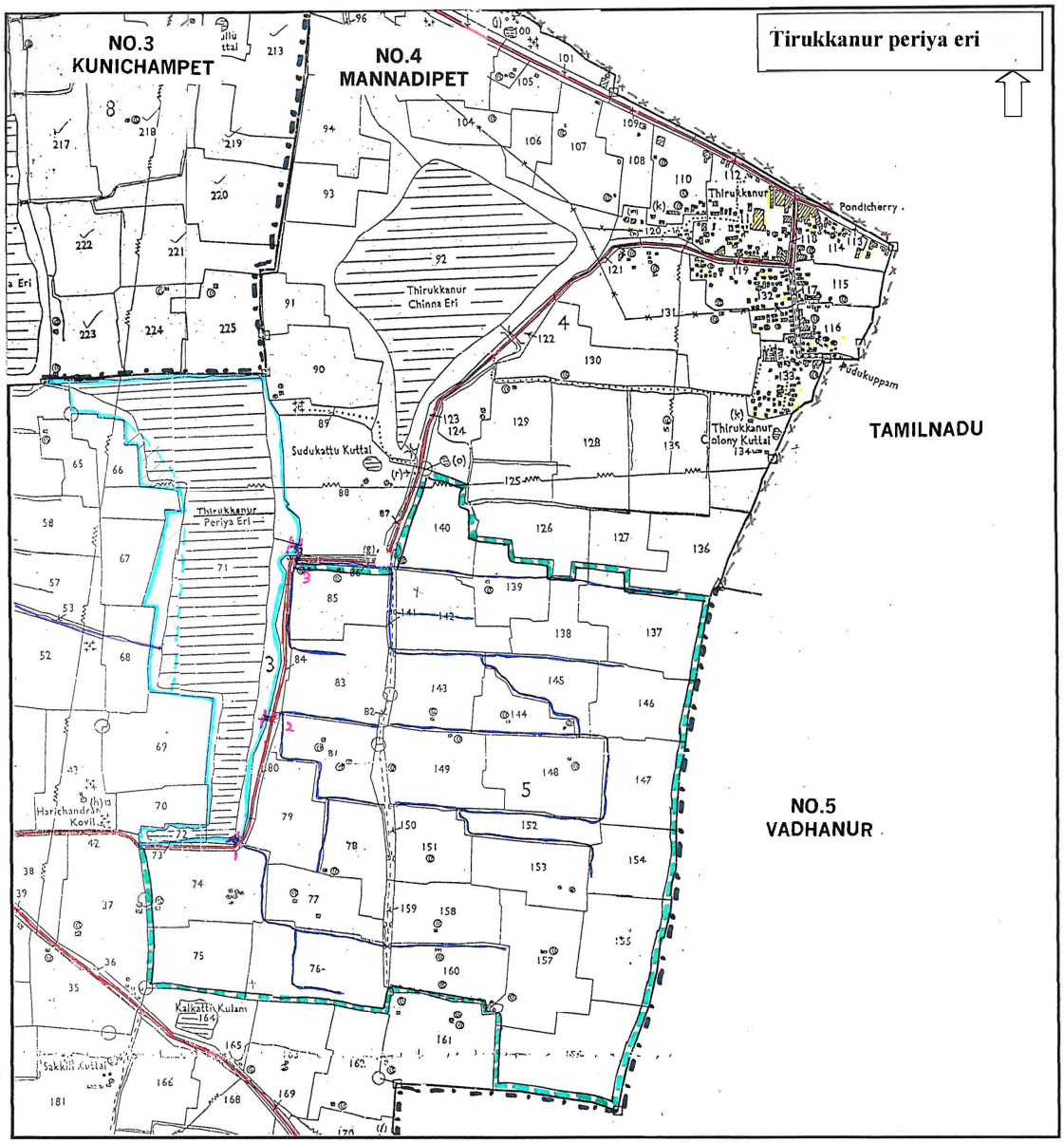
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Partly metal road, at toe; not to the standard height and width.
Tank bed		Poor	Heavily silted and less encroachment;
Sluices	1	Poor	Heavily damaged
	2	Poor	Heavily damaged
	3	Poor	Heavily damaged
Field channels	1	Poor	Earthen channel with more vegetation and obstructions; more encroachment; silted
	2	Poor	Earthen channel with more vegetation and obstructions; more encroachment; silted
	3	Poor	Earthen channel with more vegetation and obstructions; more encroachment; silted
Weir	1	No	No weir, sluice acts as surplus channel
Feeder canals	1	Good	Tirukkanur peria eri feeder channel from Vikravandi channel – recently cleared
Surplus courses	1	No	Over the fields

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Desiltation
Tank bund	Standardisation
Sluice	Reconstruction and shutters provision
Field channel	Clearing and lining

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Tirukkanur periya eri**	Ayacut	: 63.77 ha
Geo-coordinates	: 11° 59'05" N, 79° 37' 51" E	WSA	: 18.43 ha
Village / Commune	: Mannadipet / Mannadipet	No. of Sluices	: 3
Tank Type	: System (Vikravandi)	Weir(s)	: No weir

8. Vadanur tank

Tank type : System (Vadanur)

Location of the tank

Village & Commune - Tank : Vadanur / Mannadipattu

- Ayacut : Vadanur / Mannadipattu (P&B)
P.S. Palayam / Tamil Nadu (P&B)
Mannadipattu and Kadanichampattu (hamlets)(B)

This is one of the three pilot tanks. It has mixed territory ayacut.

Physical characteristics

Ayacut : 164.73 ha

Cultivable ayacut area : 164.73 ha

Tank poromboke area : 106.37 ha

Storage capacity : 1.019 million m^3 **

No. of sluices : 5

No. of weirs and type : 1, BC - Calingulah

Bund length : 2250 m

Maximum water depth : 2.58 m

** Based on the conical formula the capacity is 0.960 million m^3.

Water resources

Name of the immediate upper tank : Vakkur tank (TN) and Sompattu tank (PY)
Name of the immediate lower tank / river : Thirumangalam tank (TN)

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	Sompattu	Vakkur feeder canal
From	----	Pambai River	Konamunchi Channel
Length (m)	----	5	6500 + 3670 m

Water source	Upper tanks	05%	Irrigation source	Tank water	30%
	Feeder canal	85%	(Main season)	Groundwater	70%
	Free catchment	10%		Canal water	00%

Cropping pattern and production

Cropping intensity in ayacut : 150%

Paddy percentage to gross cropped area : 45%

Paddy average yields per ha (samba) : 3.8 tonnes

The cropping pattern in the cultivable area was

Paddy –I	21%	Paddy – II	21%	Paddy – III	23%
Groundnut	07%				
Sugarcane	53%				
Banana	01%				
Casuarinas	16%				
Trees	01%				

Encroachment in the water spread area

No. of encroachers : No

Area of patta lands : No

Area of encroachment to WSA : Nil

Removal of encroachment : Nil

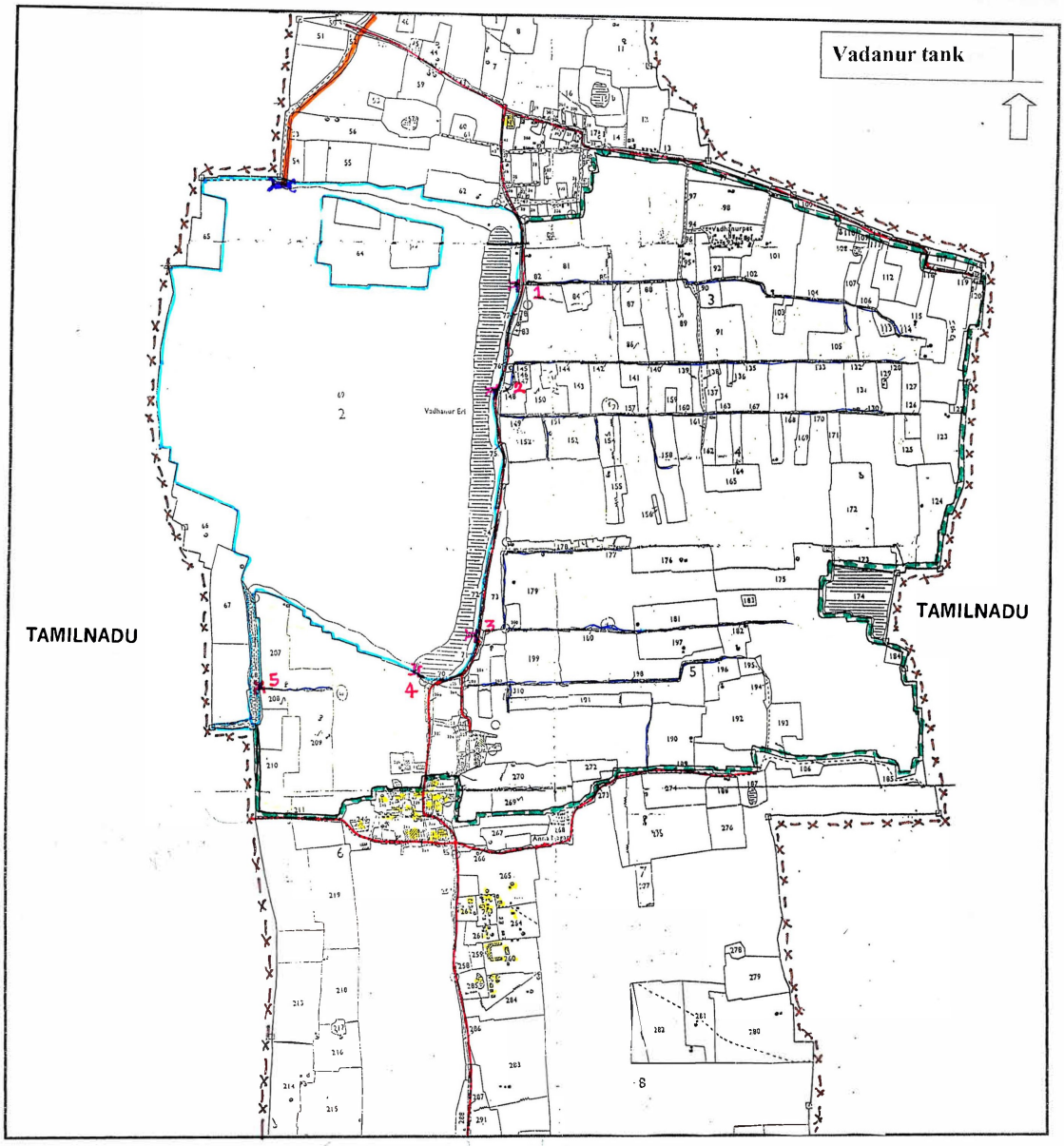
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Partly metal road, at toe;
Tank bed		Poor	Heavily silted
Sluices	1	Poor	Heavily damaged
	2	Poor	Heavily damaged
	3	Poor	Heavily damaged
	4	Poor	Heavily damaged
	5	Poor	Heavily damaged
Field channels	1	Good	Earthen channel with more vegetation and obstructions; more encroachment; silted
Weir	1	Poor	Heavily damaged
Feeder canals	1	Good	Recently desilted
Surplus courses	1	Good	Over the fields

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Desiltation
Tank bund	Standardisation
Sluice	Reconstruction and shutters provision
Field channel	Clearing and lining

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank	: **Vadanur tank**	Ayacut	: 164.73 ha
Geo-coordinates	: 11° 57' 44" N, 79° 37'58" E	WSA	: 106.37 ha
Village / Commune	: Vadhanur /Mannadipet	No. of Sluices	: 5
Tank Type	: System (Vadanur)	Weir Type(s)	: BC-calingulah

9. Tiruvandarkovil tank

Tank type : System (Chinna chellangal)

Location of the tank

Village & Commune - Tank : Tiruvandarkovil / Mannadipattu

- Ayacut : Tiruvandarkovil / Mannadipattu (P&B)
Kothapurinatham (hamlet) (B)

Physical characteristics

Ayacut : 75.32 ha

Cultivable ayacut area : 66.23 ha

(9.80 ha of ayacut has been converted as industrial area)

Tank poromboke area : 16.45 ha

Storage capacity : 0.056 Million m^3 **

No. of sluices : 2

No. of weirs and type : 1, BC - calingulah

Main Bund length : 1650 m

Maximum water depth : 2.30 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.132 million m^3.

Water resources

Name of the immediate upper tank : Tirubhuvanai tank

Name of the immediate lower tank / river : Pannakuppam tank (TN)

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	No	Tiruvandarkovil feeder channel
From	----	-------	Tirubhuvanai weir
Length (m)	----	--------	900 m

Water source	Upper tanks	80%	Irrigation source	Tank water	0%
	Feeder canal	0%	(Main season)	Groundwater	100%
	Free catchment	20%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 180 %

Paddy percentage to gross cropped area : 71 %

Paddy average yields per ha (samba) : 4.2 tonnes

The cropping pattern in the cultivable area was

Paddy –I	43%	Paddy – II	43%	Paddy – III	43%
Sugarcane	52%				
Fallow	05%				

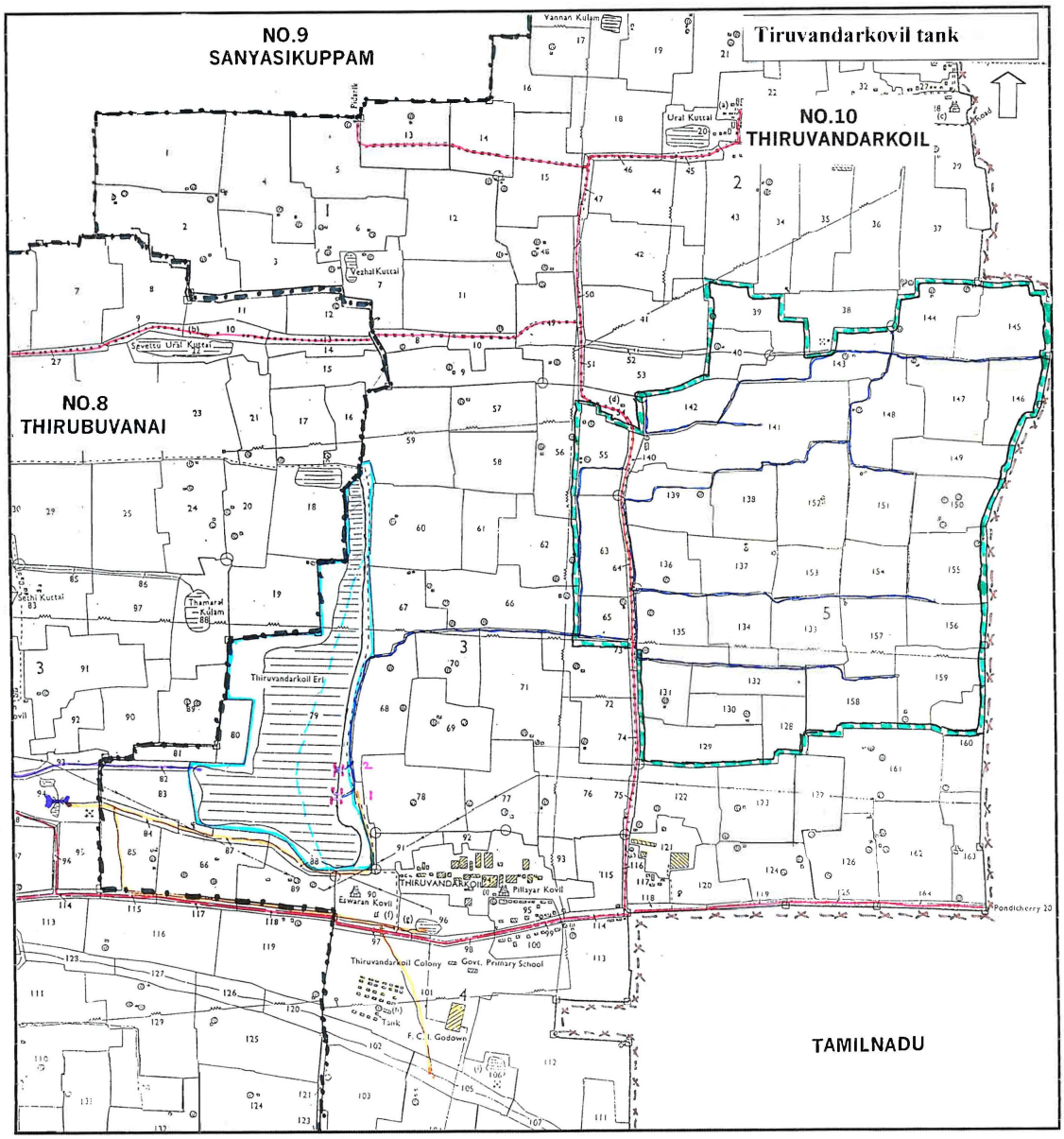
Condition of the tank components

Components		Condition	Remarks
Tank bund		Poor	Cart track at toe (partly); Not to the standard with two vulnerable points.
Tank bed		Poor	Heavily silted;
Sluices	1	Average	Head and wing wall – shutter exists; less leaky pipe blockage 70%; and minor repair
	2	Average	Head and wing wall – shutter exists; less leaky pipe blockage 50%; and minor repair
Field channels	1	Average	Earthen channel with less vegetation and obstructions; less encroachment; silted
	2	Average	Earthen channel with less vegetation and obstructions; less encroachment; silted
Weir	1	Poor	BC - Caligulah – located far away on the u/s side of the inflow channel; Dam stone is fully damaged by the village people (Tirubhuvanai peria pettai) since their houses are located just above the weir.
Feeder canals	1	Poor	It receives surplus from the Tirubhuvanai tank after filling the Ural kuttai, which is located in Kalilthirthalkuppam village – partly lined however damaged; encroached and less vegetation
Surplus courses	1	Poor	Leads to Pannakuppam Eri (TN) after joining with the sluice channels – heavily silted and no defined course before the confluence
	2	Poor	Lead partly to Kovil kulam and Mandagapattu Eri (TN); not functioning for last 30 years due to encroachment by roads, factories, and houses

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Feeder canals	Clearing
Tank bed	Removal of weeds, eviction of encroachment and desiltation
Tank bund	Strengthening and standardisation
Sluice	Minor repairs
Surplus courses	Clearing the Mandagapattu channel which also feeds the Kovilkulam
Field channels	Clearing and lining

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Tiruvandarkovil tank**	Ayacut	: 75.32 ha
Geo-coordinates	: 11° 55'19" N, 79° 39' 23" E	WSA	: 16.45 ha
Village / Commune	: Thiruvandarkoil / Mannadipet	No. of Sluices	: 2
Tank Type	: System (Chinna Chellangal)	Weir(s)	: BC-calingulah

10. Madagadipattu tank

Tank type : System (Chinna chellangal)

Location of the tank

Village & Commune - Tank : Madagadipattu / Mannadipattu

- Ayacut : Madagadipattu / Mannadipattu (P&B)
Kalitheerthalkuppam / Mannadipattu (B)

Physical characteristics

Ayacut : 87.89 ha

Cultivable ayacut area : 86.09 ha

(1.8 ha has been converted as housing plots)

Tank poromboke area : 20.93 ha

Storage capacity : 0.184 Million m^3**

No. of sluices : 3

No. of weirs and type : No

Main Bund length : 2800 m

Maximum water depth : 1.60 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.117 million m^3.

Water resources

Name of the immediate upper tank : No

Name of the immediate lower tank/ river : Pallianallur tank

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	No	Madagadipattu branch
From	----	----	Tirubhuvanai feeder channel
Length (m)	----	----	450 m

Water source	Upper tanks	0%	Irrigation source	Tank water	25%
	Feeder canal	70%	(Main season)	Groundwater	75%
	Free catchment	30%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 250 %

Paddy percentage to gross cropped area : 90 %

Paddy average yields per ha (samba) : 3.7 tonnes

The cropping pattern in the cultivable area was

Paddy –I	75%	Paddy – II	75%	Paddy – III	37%
Sugarcane	18%				
Casuarina	03%				
Coconut	04%				

Encroachment in the water spread area

No. of encroachers	: 10
Area of patta lands	: No
Area of encroachment to WSA	: 31%
Removal of encroachment	: Easy

Most of the encroachment is in the right flank tank bed. Totally ten persons occupied approximately 30 percent of the water spread area for more than 15 years. It is easy to remove the encroachment.

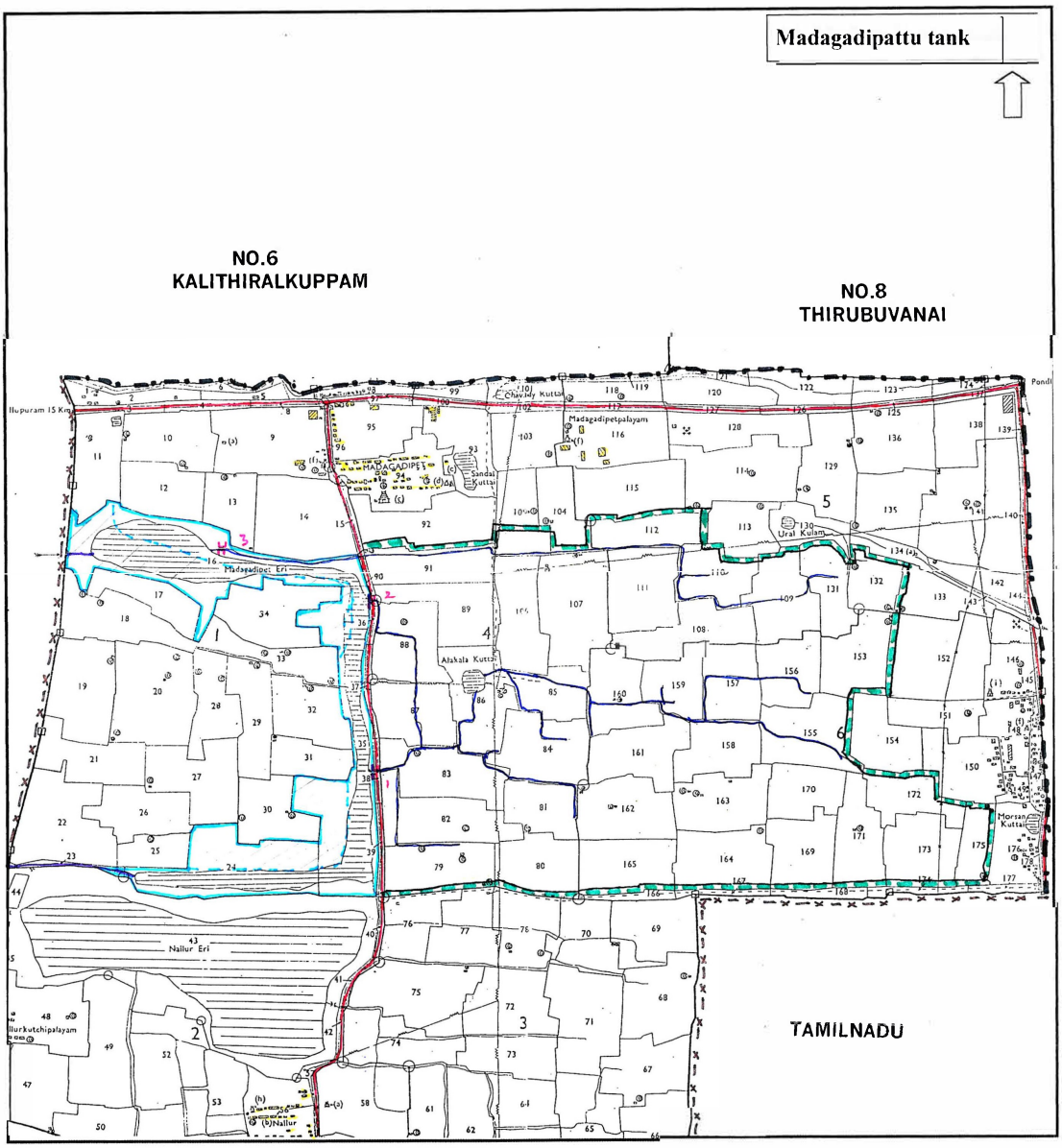
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Both the flank ends are weak with vulnerable points (broken points), metal road on toe (partly).
Tank bed		Poor	Heavily silted;
Sluices	1	Poor	Head wall – it is located in the right flank end and u/s of the small bund across the tank water spread area, which has balancing regulator (not included in the PWD list) – no shutter, heavily damaged; not in use for the past five years.
	2	Average	Head wall – no shutter; less leaky; pipe blockage 20%; and minor repair
	3	Good	Head & wing wall; plug and rod exists – no leakage; pipe blockage 20% and minor repair
Field channels	1	Poor	Earthen channel with more vegetation and obstructions; less encroachment; silted
	2	Poor	Just downstream side Manakkula Vinayagar Engineering collage were constructed – no channel
	3	Poor	Earthen channel with more vegetation and obstructions; less encroachment; silted
Weir		No weir	Sluices act as weir
Diversion structures	1	Poor	Right flank – temporary arrangement with wooden flanks
	2	Poor	Left flank – temporary arrangement with wooden flanks
Feeder canals	1	Average	It receives water from Tirubhuvanai feeder channel from Valavanur eri, it receives on both flanks from the same channel – more vegetation; less encroachment
Surplus courses	1	No	No weir and surplus course

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Desiltation
Diversion structures	Reconstruction and regulator provision
Feeder canals	Clearing of channels
Field channel	Clearing lining
Tank bund	Strengthening and Standardisation
Community well	New well
Sluices	Reconstruction and shutters provision

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Madagadipattu tank**	Ayacut	: 87.89 ha
Geo-coordinates	: 11° 54'36" N, 79° 38' 06" E	WSA	: 20.93 ha
Village / Commune	: Madagadipet / Mannadipet	No. of Sluices	: 3
Tank Type	: System (Chinna Chellangal)	Weir(s)	: No weir

11. Abhishekapakkam tank

Tank type : System (Malattar)

Location of the tank

Village & Commune - Tank : Thimmanaickkanpalayam/ Ariankuppam

- Ayacut : Abhishekapakkam / Ariankuppam (P&B)
  Thimmanaickkanpalayam /
  Ariankuppam (P&B)
  Thavalakuppam / Ariankuppam (P&B)

Physical characteristics

Ayacut : 320.91 ha

Cultivable ayacut area : 285.14 ha

(35.77 ha has been converted as housing plots and industry)

Tank poromboke area : 42.43 ha

Storage capacity : 1.51 Million m^3**

No. of sluices : 5

No. of weirs and type : 1, BC - calingulah

Bund length : 2530 m

Maximum water depth : 2.74 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.341 million m^3.

Water resources

Name of the immediate upper tank : Karikalampakkam
Name of the immediate lower tank/ river : Manakkulam

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	Free catchment odai	Sellanjeri vaykkal	Athu vaykkal
From	U/s side lands	Manapanthangal	Kumaramangalam regulator
Length (m)	850 m	2400 m	2320 m

Water source	Upper tanks	30%	Irrigation source	Tank water	70%
	Feeder canal	40%	(Main season)	Groundwater	30%
	Free catchment	30%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 158%

Paddy percentage to gross cropped area : 88%

Paddy average yields per ha (samba) : 4.2 tonnes

The cropping pattern in the cultivable area was

Paddy –I	70%	Paddy – II	70%	Paddy – III	0%
Sugarcane	03%				
Causurina	01%				
Coconut	13%				
Other trees	1%				
Fallow	12%				

Encroachment in the water spread area

No. of encroachers : Around 50

Area of patta lands : No

Area of encroachment to WSA and over tank bund : 50 %

Removal of encroachment : Difficult

Condition of the tank components

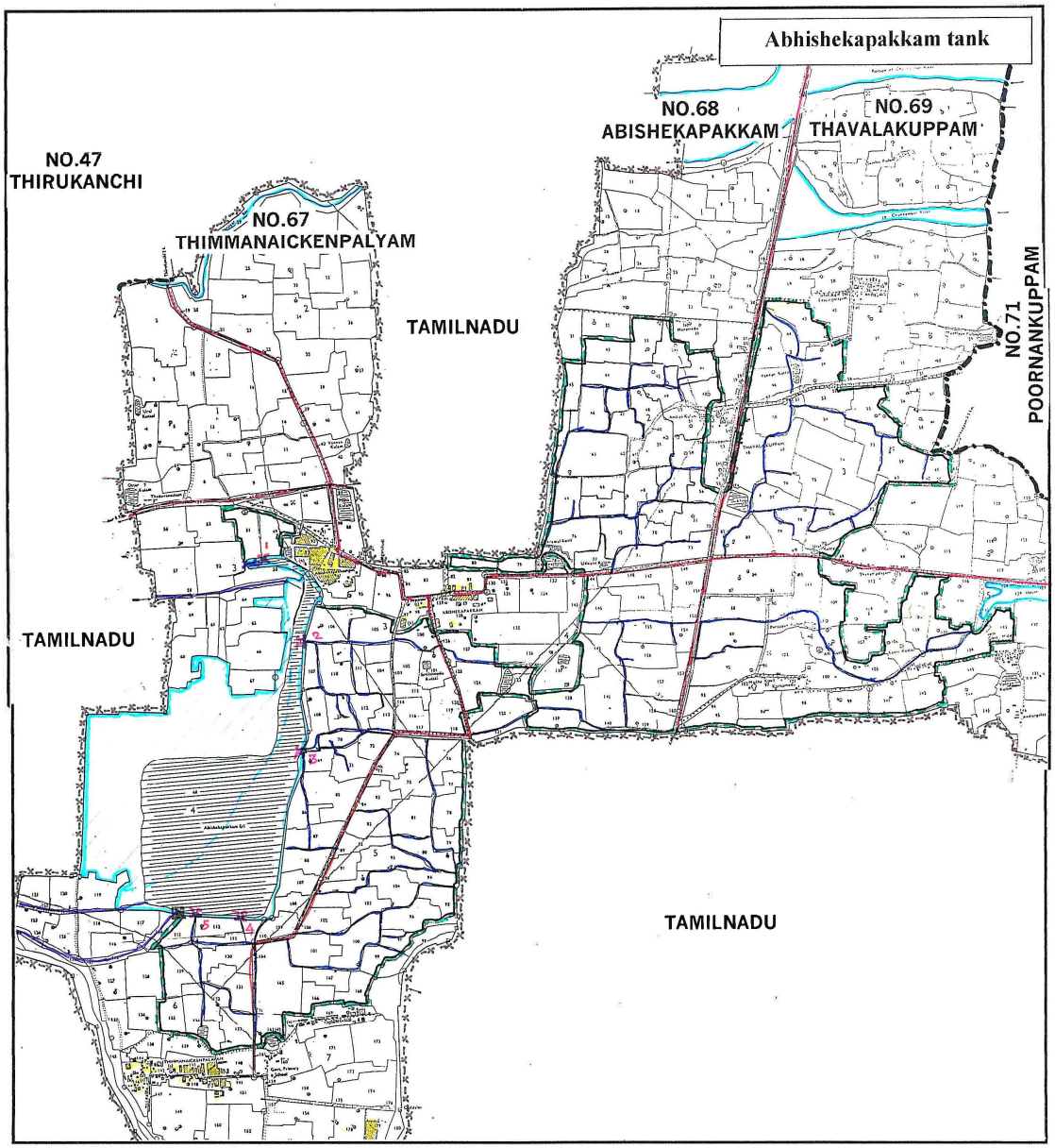
Components		Condition	Remarks
Tank bund		Poor	Half of the tank bund in TN Palayam side in good condition; Whereas in Abhishekapakkam side the bund is not to the standard and twice the tank bund breached in the last 30 years.
Tank bed		Poor	Heavily silted; Infested with Ipomea and water hyacinth; Medium encroachment
Sluices	1	Poor	Reconstruction is required.
	2	Poor	Reconstruction is required.
	3	Average	Reconstruction is required.
	4	Average	Reconstruction is required.
	5	Average	Reconstruction is required.
Field channels	1	Poor	Earthen channel – more vegetation and obstructions; heavy encroachment;
	2	Average	Earthen channel – less vegetation and more encroachment
	3	Average	Earthen channel – less vegetation and more encroachment
	4	Average	Earthen channel – less vegetation and more encroachment
	5	Average	Earthen channel – less vegetation and more encroachment
Weir	1	Average	In good condition. Shutter only to be newly provided.
Feeder canals	1	Average	Athuvaykkal – more vegetation
	2	Poor	Manapanthangal surplus channel – more vegetation and more encroached
	3	Poor	Free catchment right end channel - more vegetation and encroached

Surplus courses 1	Poor	Leads to Ariyankulam and then to Manakkulam and enters into TN side – fully encroached

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	**What is required?**
Sluice	Major repairs and shutter provision
Tank bed	Encroachment removal, clearing and weeds desiltation
Feeder canals	Clearing and desiltation
Field channels	Removal of encroachment, clearing; The clearance of Nallavadu vaikkal would assist in drainage problem
Tank bund	Strengthening and Standardisation
Surplus courses	Lining and Strenthening

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank	: **Abhishekapakkam tank**	Ayacut	: 320.91 ha
Geo-coordinates	11° 51' 18" N, 79° 46'21" E	WSA	: 42.43 ha
Village / Commune	: Thimmanaickanpalayam / Ariankuppam	No. of Sluices	: 5
Tank Type	: System (Malattar)	Weir Type(s)	: BC-calingulah

12. Korkkadu tank

Tank type : System (Kilur)

Location of the tank

Village & Commune - Tank : Korkkadu / Nettapakkam
Embalam / Nettapakkam
Karikalampakkam / Nettapakkam

- Ayacut : Korkkadu / Nettapakkam (P&B)

Physical characteristics

Ayacut : 202.97 ha

Cultivable ayacut area : 184.37 ha

(18.61 ha has been converted as housing plots and industries)

Tank poromboke area : 62.25 ha + 18.63 ha (SRDL) inside the tank

Storage capacity : 1.370 million m^3**

No. of sluices : 3

No. of weirs and type : 2, Regulator, BC- calingulah

Bund length : 4000 m

Maximum water depth : 1.50 m

** This capacity is obtained from PWD. Based on the conical formula the storage capacity is around 0.440 million m^3.

Water resources

Name of the immediate upper tank : Embalam vakran eri, Sitheri

Name of the immediate lower tank / river : Kuduvaiyar odai

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	Only sluice channels	Korkkadu feeder channel
From	----	----	Kilur anicut
Length (m)	----	----	7000 m

Water source	Upper tanks	40%	Irrigation source	Tank water	40%
	Feeder canal	40%	(Main season)	Groundwater	60%
	Free catchment	20%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 268%

Paddy percentage to gross cropped area : 98%

Paddy average yields per ha (samba) : 4.2 tonnes

The cropping pattern in the cultivable area was

Paddy –I	88%	Paddy – II	88%	Paddy – III	88%
Sugarcane	01%				
Casurina	01%				
Coconut	01%				
Fallow	09%				

Encroachment in the water spread area

No. of encroachers	: 20 Nos.
Area of patta lands	: 18.63 ha inside the ayacut
Area of encroachment to WSA	: 30% within the waterspread poromboke
Removal of encroachment	: easy

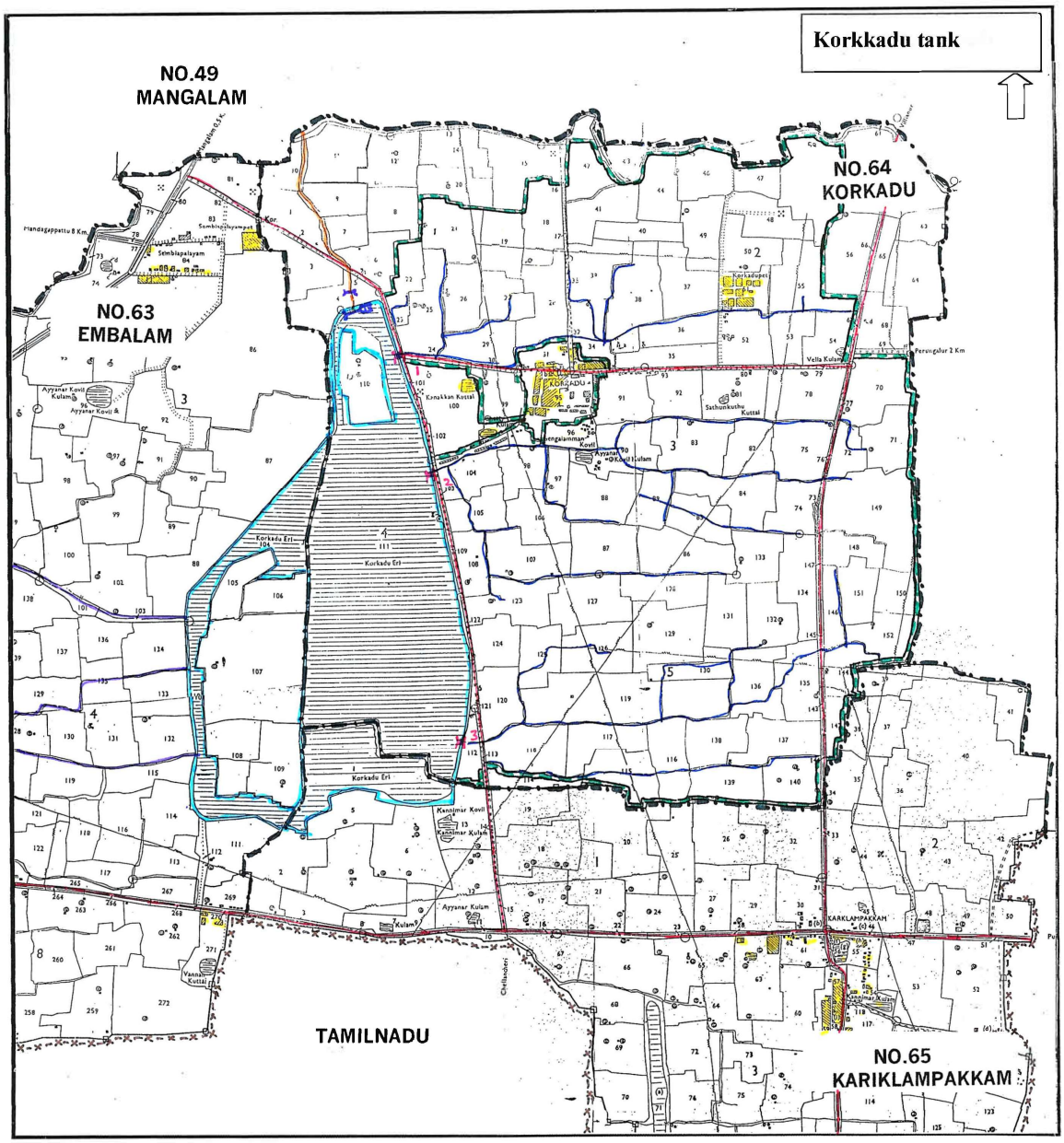
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Metalled road (partly) at toe; a cart track cuts across the bund at one location to transport the harvests from the foreshore lands; the side slope and thickness are not as per standards.
Tank bed		Average	Moderately silted; Infested with weeds (Ipomea and acacia); encroachment; evicted;
Sluices	1	Average	Head and wing wall – no shutters; leaky; minor damages; pipe blockages more than 50%
	2	Average	Head and wing wall – no shutters; minor damages; pipe blockages more than 25%
	3	Average	Head wall; shutters exists but damaged; pipe blockages more than 50%
Field channels	1	Average	Partly lined channel with more vegetation and obstructions; less encroachment; silted; drainage problem at middle and tail reaches
	2	Average	Partly lined channel with more vegetation and obstructions; less encroachment; silted; drainage problem at middle and tail reaches
	3	Average	Earthen channel with less vegetation and obstructions, heavy encroachment, silted drainage problem at middle and tail reaches; very close to the sluice industry exists
Weir	1	Good	Regulator cum weir (2 shutters) – located at the end of the right flank.
	2	Poor	BC calingulah - Below the regulator across the surplus course - dilapidated condition
Feeder canals	1	Average	From Kilur anicut; dense vegetation; silted
Surplus courses	1	Average	Directly flow into Kuduvaiyar odai - less than 500 m

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Removal of patta land (SRDL) from water spread area or construction of foreshore bunds around these patta lands
Sluices	Repairs and provision of shutters
Field channel	Clearing and lining; it would also reduce the drainage problem

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s) : **Korkkadu tank**

Geo-coordinates : 11° 53'43" N, 79° 42' 38" E

Village / Commune : Korkadu / Nettapakkam

Tank Type : System (Kilur)

Ayacut : 202.97 ha

WSA : 65.25 ha (GP) & 18.63 ha (SRDL)

No. of Sluices : 3

Weir(s) : Regulator cum weir, BC-calingulah

13. Embalam vakran eri

Tank type : System (Kilur)

Location of the tank

Village & Commune - Tank : Embalam / Nettapakkam

- Ayacut : Embalam / Nettapakkam (P&B)
  Thanikuppam (hamlet) (B)
  Pudukuppam (hamlet) (B)
  Nathamedu (hamlet) (B)

This tank receives supply from its free catchment located in Thamaraikulam through a *vari* in addition to the sluice supply from Vannan eri through the Pura kuttai.

Physical characteristics

Ayacut : 81.69 ha

Cultivable ayacut area : 81.69 ha

Tank poromboke area : 14.97 ha

Storage capacity : 0.456 Million m^3**

No. of sluices : 2

No. of weirs and type : 1, culvert

Bund length : 790

Maximum water depth : 1.00 m

** This capacity is obtained from PWD. Based on the conical formula the capacity is around 0.052 million m^3.

Water resources

Name of the immediate upper tank : Embalam vannan eri
Name of the immediate lower tank/ river : Embalam sitheri

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	Thamaraikulam channel	Sluice channel	No
From	Thamaraikulam	Embalam vannan eri sluice	----
Length (m)	1500 m	1000 m	----

Water source	Upper tanks	50%	Irrigation source	Tank water	25%
	Feeder canal	0%	(Main season)	Groundwater	75%
	Free catchment	50%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 285 %

Paddy percentage to gross cropped area : 98 %

Paddy average yields per ha (samba) : 3.7 tonnes

The cropping pattern in the cultivable area was

Paddy –I	93%	Paddy – II	93%	Paddy – III	93%
Sugarcane	03%				
Casuarina	01%				
Coconut	01%				
Fallow	02%				

Encroachment in the water spread area

No. of encroachers : No

Area of patta lands : No

Area of encroachment to WSA : No

Removal of encroachment : -

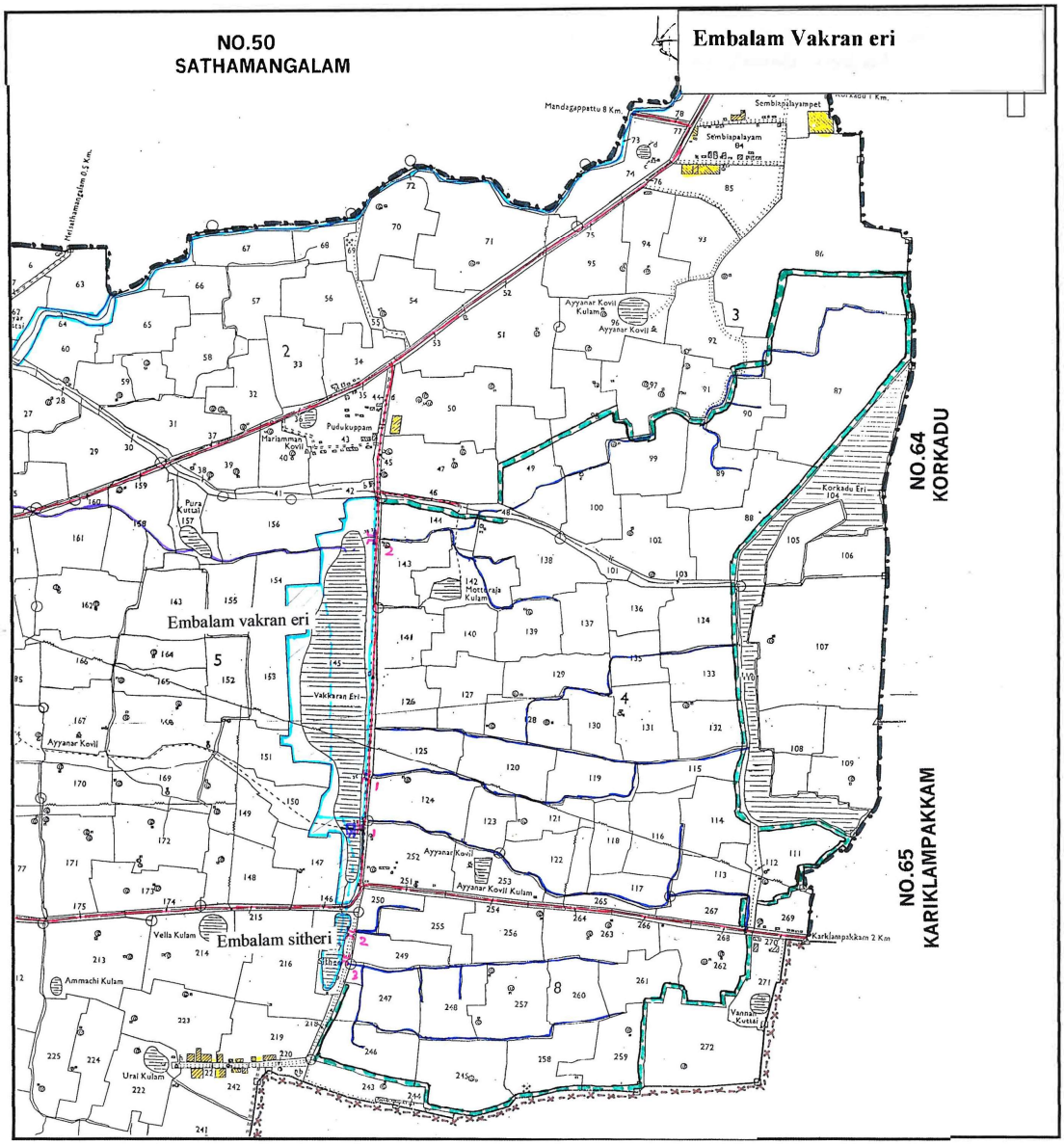
Condition of the tank components

Components		Condition	Remarks
Tank bund		Poor	Metalled road (fully) at toe; the sideslopes, height and thickness are not as per standards; During flood, it overtops the bund at Vakran eri and Sitheri junction.
Tank bed		Average	Moderately silted; Infested heavily with weeds (Ipomoea); moderately encroached
Sluices	1	Poor	Head wall – no shutters; temporarily closed; major damages; pipe blockages more than 50%
	2	Poor	Head wall – no shutters; temporarily closed; major damages; pipe blockages more than 50%
Field channels	1	Poor	Earthen channel with dense vegetation and obstructions; heavy encroachment; silted; drainage problem at middle and tail reaches
	2	Poor	Earthen channel with more vegetation and obstructions; heavy encroachment; silted; drainage problem at middle and tail reaches
Weir	1	Poor	Culvert, dilapidated condition.
Feeder canals	1	Poor	Vakran eri feeder channel from Vannan eri through Pura kuttai; encroached; silted; more vegetation
	2	Poor	From the Thamaraikulam and further free catchment; encroached, silted; more vegetation
Surplus courses	1	No	Directly falls into Sitheri

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bund	Standardisation
Tank bed	Removal of weeds, encroachment and desiltation
Sluices	Repairing and shutter provision
Field channel	Clearing and lining (shall overcome drainage problem as well)
Feeder canals	Both the channels – clearing and standardization

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Embalam vakran eri**	Ayacut	: 81.69 ha
Geo-coordinates	: 11° 52'14" N, 79° 43' 25" E	WSA	: 14.97 ha
Village / Commune	: Embalam / Nettapakkam	No. of Sluices	: 2
Tank Type	: System (Kilur)	Weir(s)	: Culvert

14. Embalam Sitheri

Tank type : System (Kilur)

Location of the tank

Village & Commune - Tank : Embalam / Nettapakkam

- Ayacut : Embalam / Nettapakkam
  Thanikuppam (hamlet)(B)
  Pudukuppam (hamlet) (B)
  Nathamedu (hamlet) (B)
  Manaveli (Tamil Nadu village)(B)

Sitheri and Vaktran eri are separated by a cart track with a culvert. A metal road with a balancing culvert divides Sitheri into two portions.

Physical characteristics

Ayacut : 48.09 ha

Cultivable ayacut area : 48.09 ha

Tank poromboke area : 1.51 ha

Storage capacity : 2.240 million m^3**

No. of sluices : 3

No. of weirs and type : No

Bund length : 450 m

Maximum water depth : 1.15 m

** This capacity is obtained from **PWD**. Based on the conical formula the capacity is around 0.006 million m^3.

Water resources

Name of the immediate upper tank : Embalam vannan eri

Name of the immediate lower tank/ river : Korkkadu

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	Directly falls into this tank	No
From	-------	-------	-------
Length (m)	-------	-------	-------

Water source	Upper tanks	60%	Irrigation source	Tank water	25%
	Feeder canal	0%	(Main season)	Groundwater	75%
	Free catchment	40%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 228%

Paddy percentage to gross cropped area : 96%

Paddy average yields per ha (samba) : 3.7 tonnes

The cropping pattern in the cultivable area was

Paddy –I	73%	Paddy – II	73%	Paddy – III	73%
Sugarcane	04%				
Casuarina	05%				
Fallow	18%				

Encroachment in the water spread area

No. of encroachers : 10

Area of patta lands : No

Area of encroachment to WSA : 60%

Removal of encroachment : Easy

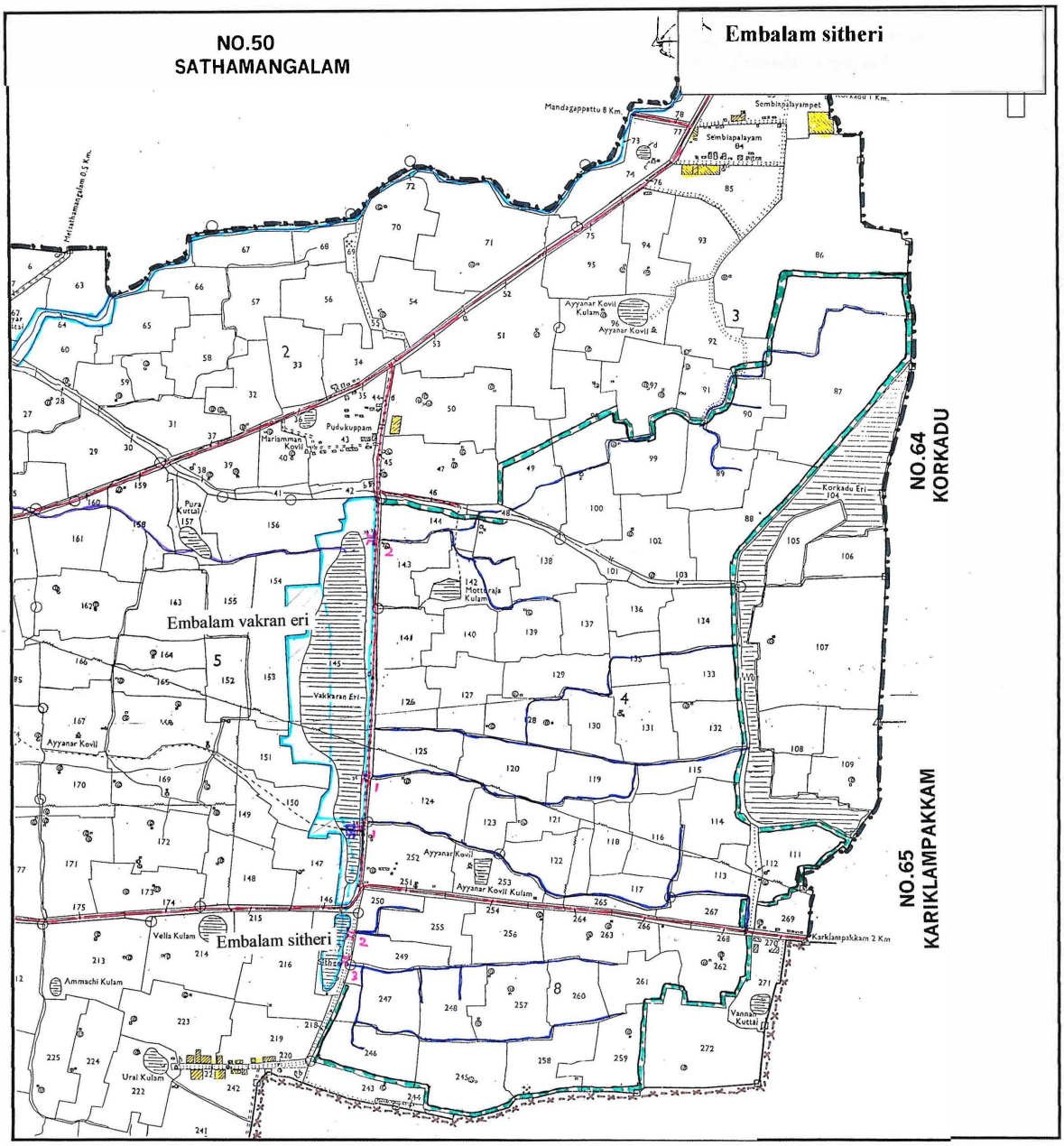
Condition of the tank components

Components		Condition	Remarks
Tank bund		Poor	Metalled (fully) road at toe; Thickness, height and side slopes are not as per standards; During flood time, it overtops the bund at Vakran eri and sitheri junction point
Tank bed		Average	Moderately silted; Infested heavily with weeds (Ipomea); moderately encroached
Sluices	1	Poor	Head wall – no shutters; temporarily closed; major damages; pipe blockages more than 80%
	2	Poor	Head wall – no shutters; temporarily closed; major damages; pipe blockages more than 80%
	3	Poor	Head wall – no shutters; temporarily closed; major damages; pipe blockages more than 80%
Field channels	1	Average	Earthen channel with less vegetation and obstructions; heavy encroachment; silted; drainage problem at middle and tail reaches
	2	Poor	Earthen channel with more vegetation and obstructions; heavy encroachment; silted; drainage problem at middle and tail reaches
	3	Poor	Earthen channel with more vegetation and obstructions; heavy encroachment; silted; drainage problem at middle and tail reaches
Weir	1	No	The sluice itself acts as surplus arrangement; due to the sluice blockage, during heavy flood it overtops the bund
Feeder canals	1	Poor	It gets direct supply from Vakran eri through a culvert between these two tanks
Surplus courses	1	No	Sluice channels

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Removal of weeds and encroachment; Desiltation
Sluices	Repairing and shutter provision
Field channel	Clearing and lining; it would also assist the drainage problem
Tank bund	Standatrdisation

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Embalam sitheri**	Ayacut	: 48.09 ha
Geo-coordinates	: 11° 52'14" N, 79° 43' 25" E	WSA	: 1.52 ha
Village / Commune	: Embalam / Nettapakkam	No. of Sluices	: 3
Tank Type	: System (Kilur)	Weir(s)	: No weir

15. Embalam vannan eri

Tank type : System (Kilur)

Location of the tank

Village & Commune - Tank : Embalam / Nettapakkam

Ayacut : Embalam / Nettapakkam (P&B)

It receives supply from Korkadu feeder channel. Its surplus falls into the same feeder channel through weir. The sluice cum regulator of this tank feeds the Vakkaran eri after filling the Pura kuttai. This kuttai has weir and sluice. Vakkaran eri feeds Sitheri through culvert. Though these two lower as tanks do not receive Kilur supply directly, they belong to Kilur system.

Physical characteristics

Ayacut : 43.59 ha

Cultivable ayacut area : 43.59 ha

Tank poromboke area : 13.89 ha

Storage capacity : 0.0250 million m^3**

No. of sluices : 2

No. of weirs and type : 1, BC- calingulah

Bund length : 1080 m

Maximum water depth : 1.50 m

** This capacity is obtained from **PWD**. Based on the conical formula the capacity is around 0.073 million m^3.

Water resources

Name of the immediate upper tank : No

Name of the immediate lower tank/ river : Korkkadu feeder canal

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	No	Embalam vannan eri branch channel
From	----	----	Offake point at Korkkadu feeder channel
Length (m)	----	----	350 m

Water source	Upper tanks	No	Irrigation source	Tank water	0%
	Feeder canal	80%	(Main season)	Groundwater	100%
	Free catchment	20%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 218%

Paddy percentage to gross cropped area : 85%

Paddy average yields per ha (samba) : 5.0 tonnes

The cropping pattern in the cultivable area was

Paddy –I	62%	Paddy – II	62%	Paddy – III	62%
Sugarcane	15%				
Casuarina	17%				
Fallow	06%				

Encroachment in the water spread area

No. of encroachers : 4 Nos.

Area of patta lands : No, 20.91 ha has been given as SRDL patta

Area of encroachment to WSA : 27% in the poromboke water spread

Removal of encroachment : Difficult

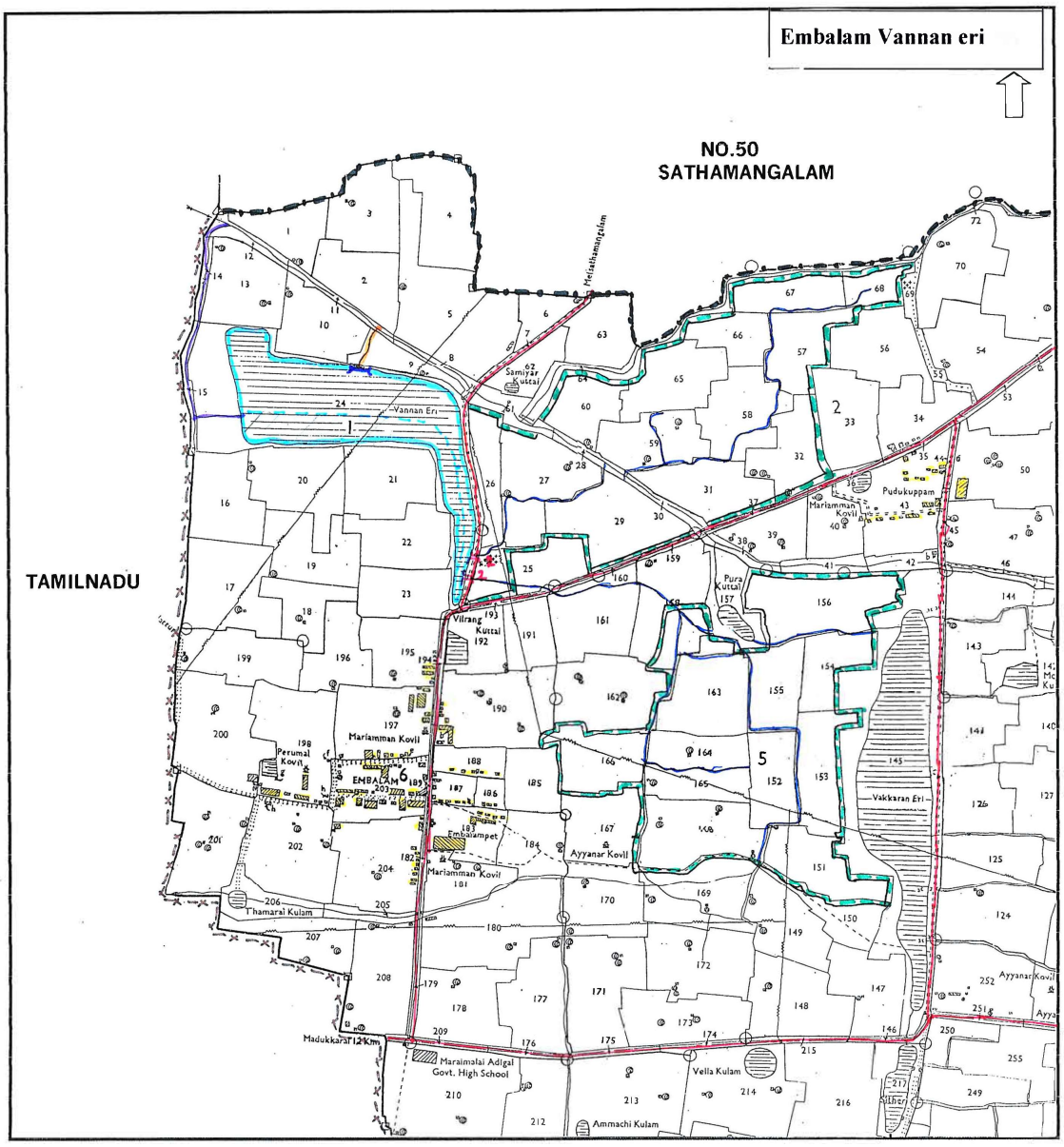
Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Cart track on toe (partly); not in good shape and size including the height;
Tank bed		Average	Moderately silted; Infested with sambu heavily; medium encroachment; Stagnated poor quality water throughout the year in arangani
Sluices	1	Poor	Head wall no shutter; temporarily closed; major damages; never used in the last five years
	2	Good	Regulator type- Screw gear shutter exists; constructed five years back; water flows continuously
Field channels	1	Poor	Earthen channel with more vegetation and obstructions; heavy encroachment; silted
	2	Average	Earthen channel with more vegetation and obstructions; less encroachment;
Weir	1	Poor	BC Calingulah; broken by encroachers and foreshore farmers; damaged condition
Feeder canals	1	Average	Branch channel from Kokkadu feeder canal from Kilur anicut across Kuduvaiyar odai – encroachment less; more vegetation
Surplus courses	1	Average	Goes to Korkkadu feeder canal (approximately 20m length) - silted, more vegetation

Requirements on priority (WSA assessment + Farmers' view)

Works (on priority)	What is required?
Tank bed	Removal of weeds and encroachment; Desiltation
Tank bund	Standardisation
Sluice	Reconstruction
Feeder canals	Clearing
Field channels	Clearing and lining
Weir	Reconstruction of weir

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Embalam Vannan eri**	Ayacut	: 43.59 ha
Geo-coordinates	: 11° 52'36" N, 79° 42' 53" E	WSA	: 13.89 ha
Village / Commune	: Embalam / Nettapakkam	No. of Sluices	: 2
Tank Type	: System (Kilur)	Weir(s)	: BC-calingulah

16. Karaiyambuthur vannan eri

Tank type : System (Village)

Location of the tank

Village & Commune - Tank : Karaiyambuthur / Bahour

Ayacut : Karaiyambuthur / Bahour (P&B)

Physical characteristics

Ayacut : 31.70 ha

Cultivable ayacut area : 31.70 ha

Tank poromboke area : 18.58 ha

Storage capacity : 0.184 million m^3

No. of sluices : 3

No. of weirs and type : 1, BC

Bund length : 1950 m

Maximum water depth : 1.00 m

Water resources

Name of the immediate upper tank : No

Name of the immediate lower tank/ river : Ponnaiyar river

	Collector drain from free catchment	Upper tank surplus course	Feeder canal
Name	No	No	Vannan eri feeder canal
From	-----	-----	Bangaru Vaykkal
Length (m)	-----	-----	250 m

Water source	Upper tanks	No	Irrigation source	Tank water	20%
	Feeder canal	100%	(Main season)	Groundwater	80%
	Free catchment	0%		Canal water	No

Cropping pattern and production

Cropping intensity in ayacut : 223%

Paddy percentage to gross cropped area : 89%

Paddy average yields per ha (samba) : 3.5 tonnes

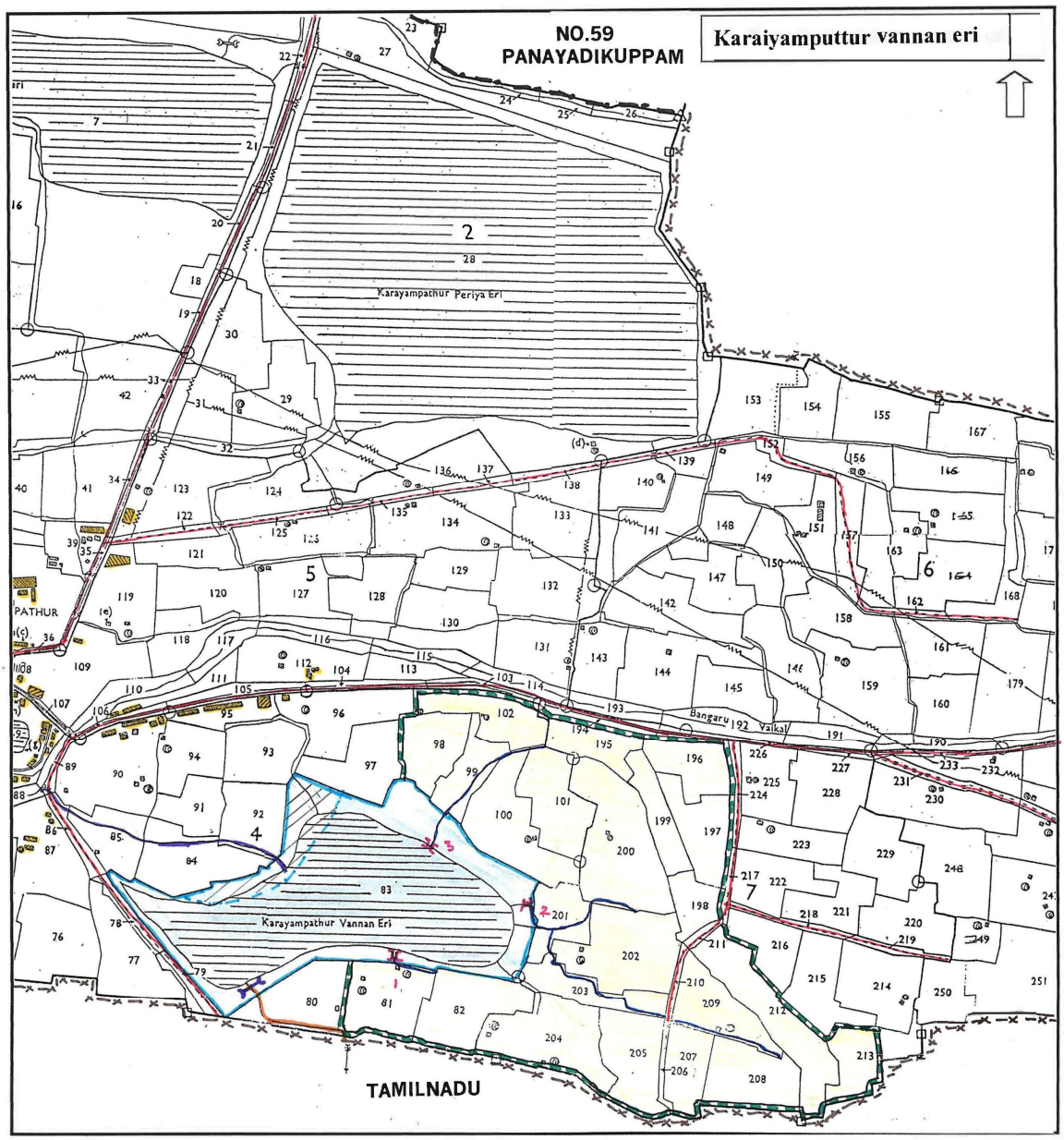
The cropping pattern in the cultivable area was

Paddy –I	75%	Paddy – II	75%	Paddy – III	47%
Sugarcane	25%				

Condition of the tank components

Components		Condition	Remarks
Tank bund		Good	Side slopes and thickness are good
Tank bed		Average	Moderately silted;
Sluices	1	Poor	Head wall – no shutters; piping problem exists; pipe blockage 100%
	2	Poor	Head wall – no shutters; piping problem exists; pipe blockage 100%
	3	Average	Head wall – shutters exists; pipe blockage 25% minor repairs
Field channels	1	Poor	More vegetation and obstruction, heavy encroachment
	2	Poor	More vegetation and obstruction, heavy encroachment
	3	Average	More vegetation and obstruction, heavy encroachment
Weir	1	Average	BC – covered by vegetation on all sides
Feeder canals	1	Average	From Bangaru vaykkal; less vegetated and encroached
Surplus courses	1	Poor	No defined channel, drains over the ayacut and falls into ponnaiyar

Tank photos before execution of the work



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s) : **Karaiyamputtur Vannan eri**

Geo-coordinates : 11° 48'54" N, 79° 39' 23" E

Village / Commune : Karayampathur / Bahur

Tank Type : System (Bangaru)

Ayacut : 31.70 ha

WSA : 18.58 ha (GP) + 2.03 ha (SRDL)

No. of Sluices : 3

Weir(s) : Broadcrested

17. Bahur tank

Tank type : System (Bangaru)

Location of the tank

Village & Commune - Tank : Bahur / Bahour
Ulleripattu / Tamil Nadu
Karaimedu / Tamil Nadu

Ayacut villages (P&B)

Pondicherry State

1. Aranganur
2. Seliamedu
3. Bahur
4. Irulansandhai
5. Kuruvinattam
6. Parikkalpattu
7. Uchchimedu
8. Manapattu
9. Pillayarkuppam
10. Kirumambakkam

Tamil Nadu State

1. Karaimedu
2. Nagappanur

Physical characteristics

Ayacut : 728.98 ha*

Tank poromboke area : 321.55 ha $(PY)^{+}$ 62.01 ha $(TN)^{-}$

Storage capacity : 5.480 million m^3**

No. of sluices : 8

No. of weirs and type : 2, BC-calingulah, Regulator

Bund length : 8290 m

Maximum water depth : 3.60 m

~ Pondicherry side + Tamil Nadu side water spread area.

***Ayacut by sluice**

Sluice No	Sluices	VAO Record (ha)				French Record (ha)
		Direct	Combined #	Tanks	Total	
1	Aranganur	70.735	61.940	16.325	149.000	148.475
2	Seliamedu	107.785	10.700	187.495	305.980	319.740
3	Palayam	199.500	17.630	80.800	297.930	323.265
4	Cherry	153.570	50.945	79.545	284.060	544.355
5	Kona	129.290	0.000	62.695	191.985	141.060
6	Karaimedu	68.095	0.000	0.000	68.095	195.975
7	Valla	In Tamil Nadu			87.250	77.730
8	Vettu	In Tamil Nadu				
	Total	728.975	132.215	424.160	1374.300	1750.600

Water resources

Name of the immediate upper tank / River : Thenpennaiyar river in Sornavur Anaicut
Name of the immediate lower tank/ river : supplies partly Aranganur and Kirumambakkam tanks

	Collector drain from free catchment	Upper tank surplus course	Branch Feeder canal
Name	No	No	Bangaru vaykkal
From	----	----	Somavur anicut
Length (m)	----	----	12,500 m

Water source	Upper tanks	0%
	Feeder canal	80%
	Free catchment	20%

Maintenance of structure

This tank is under the regular maintenance of PWD

Condition of the tank components

Components		Condition	Remarks
Tank bund		Good	Kutcha road on top (partly); retaining wall on d/s side (partly)
Tank bed		Average	Silted; no encroachment but 46 ha has been given as special rate dry land patta
Sluices	1	Average	Head and wing wall –plug and rod exists; minor repairs;leaky
	2	Good	Head and wing wall – plug and rod exists
	3	Good	Head and wing wall – plug and rod exists
	4	Good	Head and wing wall – plug and rod exists
	5	Good	Head and wing wall – plug and rod exists
	6	Good	Head and wing wall – plug and rod exists
	7	Average	Head and wing wall –plug and rod exists; minor repairs; leaky
	8	Average	Head and wing wall –plug and rod exists; minor repairs; leaky
Weir	1	Good	BC Calingulah;
	2	Average	Regulator, located at entrance of Bangaru channel
Feeder canals	1	Good	Bangaru vaykkal – in good condition, sparse vegetatiom and obnstruction alongside the channels
Surplus courses	1	Average	Average condition, it irrigates a part of the ayacut and after traversing a length of 6 km it flows into Tamil Nadu

Tank photos before execution of the work

18. Seliamedu tank

Tank type : System (Bangaru)

Location of the tank

Village & Commune - Tank : Seliamedu / Bahour

- Ayacut : Selliamedu / Bahour (P&B)

Physical characteristics

Ayacut : 27.56 ha

Cultivable ayacut area : 27.56 ha

Tank poromboke area : 4.59 ha

Storage capacity : 0.228 million m^3**

No. of sluices : 2

No. of weirs and type : 1, culvert

Bund length : 1140 m

Maximum water depth : 1.00 m

Water resources

Name of the immediate upper tank : Bahur tank

Name of the immediate lower tank / river : Falls into branch channel from Bahur surplus course

	Collector drain from free catchment	Upper tank surplus course	Branch feeder canal
Name	No	Kirumambakkam vaykkal of Selilamedu madagu	No
From	------	Bahur Selliamedu madagu	------
Length (m)	------	1750 m	------

Water source	Upper tanks	30%	Irrigation source	Tank water	10%
	Feeder canal	0%	(Main season)	Groundwater	90%
	Free catchment	70%		Canal water	0%

Cropping pattern and production

Cropping intensity in ayacut : 300%

Paddy percentage to gross cropped area : 100%

Paddy average yields per ha (samba) : 4.2 tonnes

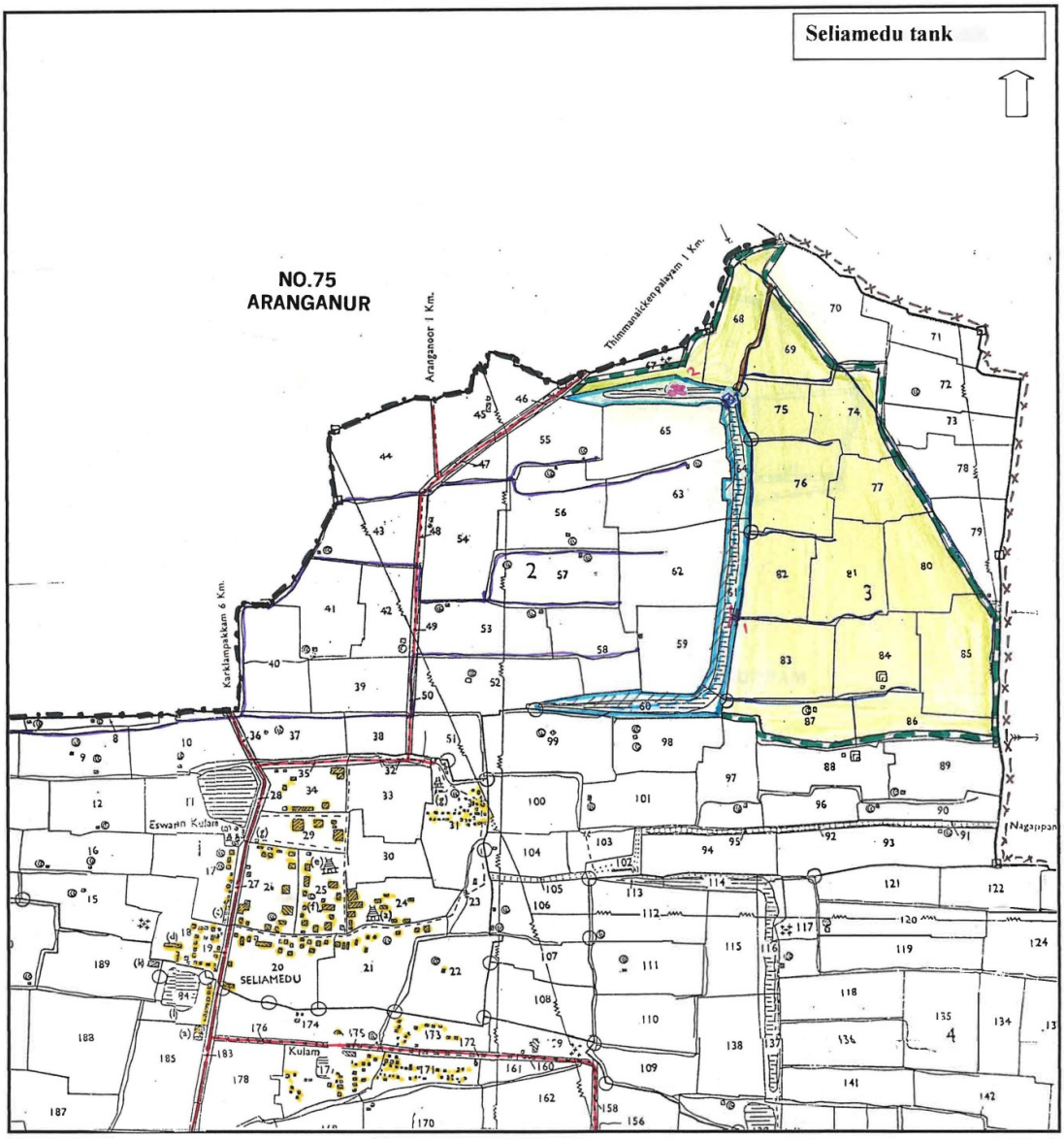
The cropping pattern in the cultivable area was

Paddy –I 100% Paddy – II 100% Paddy – III 100%

Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Cart track on toe (partly); two vulnerable points, the bund height are not to standards
Tank bed		Poor	Infested with water hyacinth;
Sluices	1	Poor	Head wall no shutter; major repairs; heavily silted pipe; leaky
	2	Poor	Head wall – No shutters; minor repairs; partly silted pipe; leaky
Field channels	1	Poor	More vegetation, more obstructions and more encroachment
	2	Average	More vegetation, less obstructions and less encroachment
Weir	1	Good	Culvert; minor repairs
Feeder canals	1	Poor	Kirumambakkam vaykkal from Seliamedu madagu of Bahur tank; more vegetated, silted and encroached
Surplus courses	1	Average	Only 10 m length; falls directly into Bahur surplus course – sparse vegetation and less encroachment

Tank photos before execution of the work



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s) : **Seliamedu tank**

Geo-coordinates : 11° 49'17" N, 79° 45'43" E

Village / Commune : Seliamedu / Bahur

Tank Type : System (Bangaru)

Ayacut : 27.56 ha

WSA : 4.59 ha

No. of Sluices : 2

Weir(s) : Culvert

19. Adingapattu tank

Tank type : System (Bangaru)

Location of the tank

Village & Commune - Tank : Seliamedu / Bahour

Ayacut : Selliamedu / Bahour (P&B)

Adingapattu (hamlet) (B)

Kudiyiruppupalayam pettai (hamlet) (B)

Pondicherry (town) (B)

Physical characteristics

Ayacut : 36.60 ha

Cultivable ayacut area : 35.06 ha

(1.54 ha has been converted as housing plots)

Tank poromboke area : 2.00 ha

Storage capacity : 0.740 million m^3

No. of sluices : 1

No. of weirs and type : 1, culvert

Bund length : 450 m

Maximum water depth : 1.50 m

Water resources

Name of the immediate upper tank : Bahur

Name of the immediate lower tank/ river : Kirumambakkam tank

	Collector drain from free catchment	Upper tank surplus course	Branch feeder canal
Name	No	Adingapattu vaykkal of palatathu madagu	No
From	-----	Bahur palayathu madagu	-----
Length (m)	-----	1580 m	-----

Water source	Upper tanks	50%	Irrigation source	Tank water	10%
	Feeder canal	0%	(Main season)	Groundwater	90%
	Free catchment	50%		Canal water	0%

Cropping pattern and production

Cropping intensity in ayacut : 300 %

Paddy percentage to gross cropped area : 100 %

Paddy average yields per ha (samba) : 4.2 tonnes

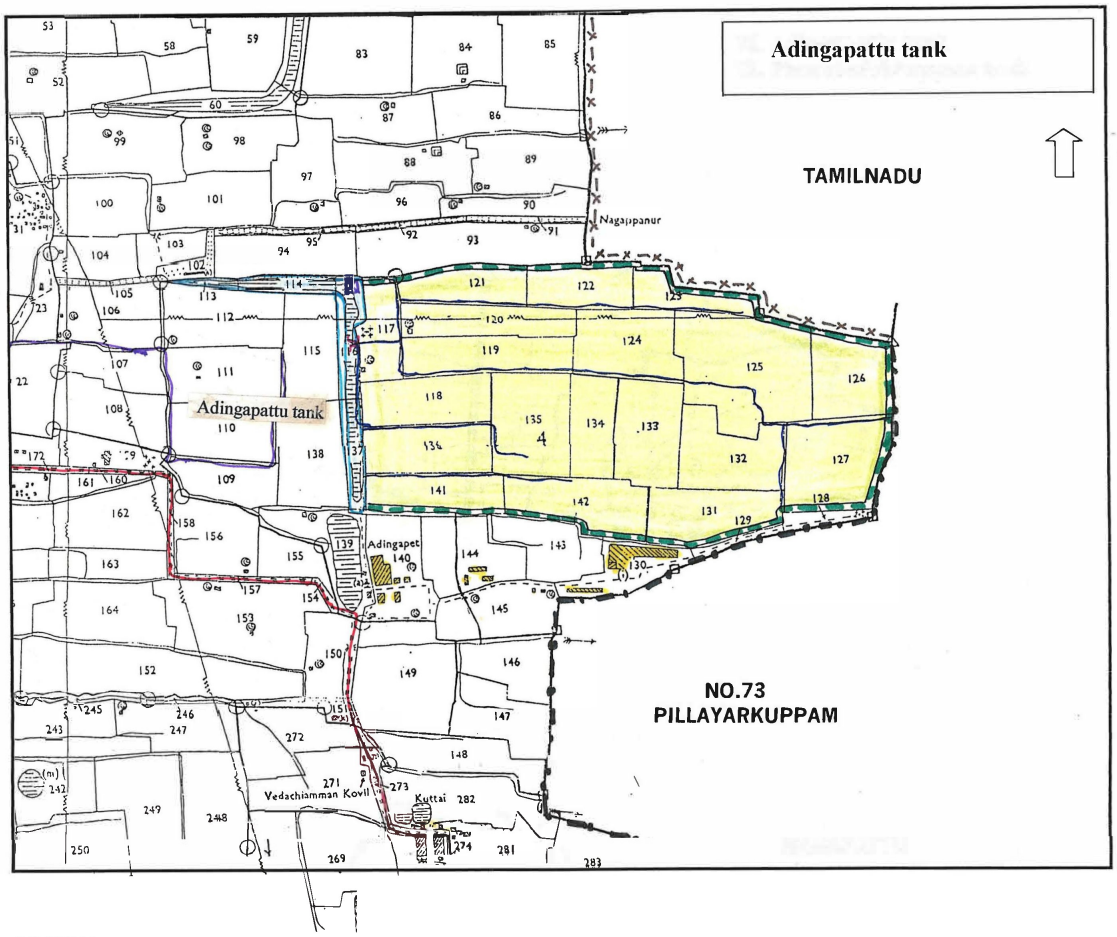
The cropping pattern in the cultivable area was

Paddy –I 100% Paddy – II 100% Paddy – III 100%

Condition of the tank components

Components	Condition	Remarks
Tank bund	Average	Cart track on top (partly); no vulnerable points, the height seems to be insufficient
Tank bed	Average	Moderate siltation; Infested with Ipomea and water hyacinth; insignificant encroachment
Sluices 1	Average	Head and wing wall - no shutters; major repairs; less siltation
Field channels 1	Average	Dense vegetation, less obstructions and less encroachment
Weir 1	Average	Repairs required
Feeder canals 1	Poor	Adingapattu vaikkal from palayathu madagu of Bahur tank; dense vegetation, silted and encroached
Surplus courses 1	Poor	More vegetation, more obstruction and more encroachment

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Adingapattu tank**	Ayacut	: 36.60 ha
Geo-coordinates	: 11° 49'12" N, 79° 45'42" E	WSA	: 2.00 ha
Village / Commune	: Seliamedu	No. of Sluices	: 1
Tank Type	: System (Bangaru)	Weir(s)	: Culvert

20. Kirumambakkam tank

Tank type		: System (Sitheri)
Location of the tank		
Village & Commune	- Tank	: Pilayarkuppam / Bahur
	- Ayacut	: Pilayarkuppam / Bahur (P&B)
		Kirumambakkam / Bahur (P&B)
		Kirumambakkam Pet (hamlet) (B)
		Pannitittu (hamlet) (B)

This ayacut is irrigated by two tanks namely Kirumambakkamperiaeri and chinnaeri. Periaeri is located on the upstream side (foreshore) of chinnaeri. Thecapacity and water spread area of periaeri is less than china eri. Periaeri and chinnaeri is separated by a common bund and linked by a balancing regulator at the left flank and one way sluice at right flank.

In addition periaeri has three sluices; one at left flank and two at right flank ends. Chinnaeri has three sluices; one of them is located in the weir. This weir has got four bays and regulators and the one in the right end has the sill level lower than the others, which acts as sluice. Both the tank's water spread area was under cultivation under the control of village temple some three hundred years ago, later it was converted as tanks.

The PWD ayacut is around 315.79 ha, which includes the foreshore ayacut irrigated directly by the Kirumambakkam vaykkal of Seliamedumadagu and Kirumambakkam vaykkal of Palayathumadagu in the Kirumambakkam village. The ayacut under this tank is only 203.39 ha.

Physical characteristics

Ayacut	: 203.39 ha
Cultivable ayacut area	: 153.48 ha
Tank poromboke area	: 65.25 ha
Storage capacity	: 1.220 million m^3
No. of sluices	: 6
No. of weirs and type	: 1, regulator
Bund length	: 4330 m
Maximum water depth	: 1.75 m

Water resources

Name of the immediate upper tank	: Kudiyiruppupalayam tank, Adingapattu tank and Bahur tank

Name of the immediate lower tank / river : Falls into Bahur surplus course and then to sea

	Collector drain from free catchment	Upper tank surplus course	Branch feeder canal
Name	No	See below	See below
From	-----	-----	-----
Length (m)	-----	-----	-----

Feeder canals

No.	Name	From	Length (m)	Dependency ranking (current)*
1	Kirumambakkam vaykkal from Seliamedu madagu	Bahur	3160	4
2	Kirumambakkam vaykkal from Palayathu madagu	Bahur	2850	3
3	Sitheri vaykkal	Bahur regulator	3400	2
4	Murattupattu anaicut vaykkal across Bahur surplus course	Murattupattu anicut	1975	1

* - based on villagers' view

Water source	Upper tanks	30%	Irrigation source	Tank water	60%
	Feeder canal	30%	(Main season)	Groundwater	40%
	Free catchment	40%		Canal water	0%

Cropping pattern and production

Cropping intensity in ayacut : 295 %

Paddy percentage to gross cropped area : 72 %

Paddy average yields per ha (samba) : 4.2 tonnes

The cropping pattern in the cultivable area was

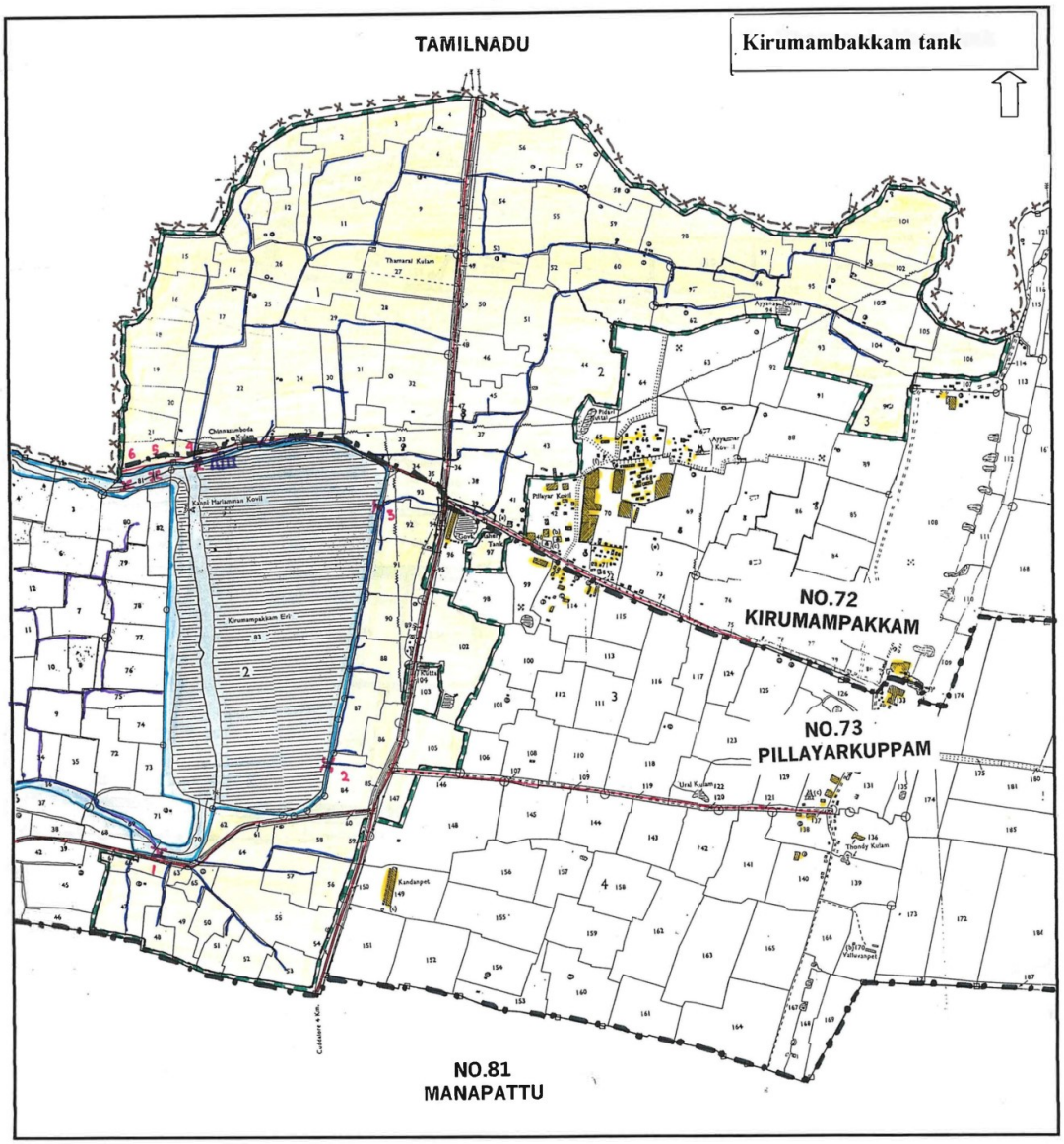
Paddy –I	78%	Paddy – II	78%	Paddy – III	57%
Sugarcane	13%				
Coconut	04%				
Groundnut	02%				
Fallow	03%				

Condition of the tank components

Components	**Condition**	**Remarks**
Tank bund	Good	Bunds of both the tanks are in good condition
Tank bed	Average	Peria eri - heavily silted; infected by ipomea Chinna eri - moderately silted; looks like grazing land

Sluices	1	Poor	Peria eri – head wall sluice; major damages; no shutters ; leaky; piping problem
	2	Average	Chinna eri – head and wing wall sluice; looks good with regulators
	3	Average	Chinna eri – head wall sluice; looks good with regulators
	4	Average	Chinna eri – regulator cum sluice; looks with regulators
	5	Poor	Peria eri – regulator; piping problem, major damages
	6	Good	Peria eri – head wall sluice; shutters in good condition
Field channels	1	Average	Less vegetation, less obstructions and less encroachment
	2	Average	Less vegetation, more obstructions and less encroachment
	3	Average	Less vegetation, less obstructions and less encroachment
	4	Average	More vegetation, less obstructions and less encroachment
	5	Average	Less vegetation, more obstructions and less encroachment
	6	Good	More vegetation, high obstructions and more encroachment
Balancing regulator		Average	Repairs Required
Common bund sluice		Average	Looks with shutters and structure condition
Surplus Regulators		Average	Leaky; Repairs Required
Feeder canals	1	Poor	Kirumambakkam vaykkal from selilamedu madagu of Bahur tank - more encroached, illegal diversions; silted; more vegetation
	2	Poor	Kirumambakkam vaykkal from Palayathu madagu of Bahur tank - more encroached, illegal diversions; silted; more vegetation
	3	Poor	Sitheri vaykkal - more encroached, illegal diversions; silted; more vegetation
	4	Poor	Murattupattun anai vaykkal from Bahur surplus course – more encroached, illegal diversions; silted; more vegetation
Surplus courses	1	Poor	Falls into sea after irrigation few areas in Tamil Nadu side also – More vegetation, more obstructions and more encroachment

Tank photos before execution of the work



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s) : **Kirumambakkam tank**

Geo-coordinates : 11° 49' 00" N, 79° 46' 39" E

Village / Commune : Pillayarkuppam, Kirumampakkam /

Bahur Tank Type : System (Sitheri)

Ayacut : 203.39 ha

WSA : 65.25 ha

No. of Sluices : 6

Weir(s) : Regulator

21. Kudiyiruppupalayam tank

Tank type : System Tank (Bangaru)
Location of the tank
Village & Commune - Tank : Selilamedu / Bahur
Ayacut : Seliamedu / Bahur(P)
Kudiyiruppapalayam (hamlet)
Adingapattu (hamlet)

Physical characteristics

Ayacut : 17.63 ha
Cultivable ayacut area : 17.63 ha
Tank poromboke area : 2.41 ha
Storage capacity : 0.225 million m^3**
No. of sluices : 2
No. of weirs and type : 1, pipe culvert
Bund length : 950 m
Maximum water depth : 1.00 m

Water resources

Name of the immediate upper tank : Bahur tank
Name of the immediate lower tank/river : Selilamedu madagu vaykkal which feeds Kirumambakkam tank

	Collector drain from free catchment	Upper tank surplus course	Branch Feeder canal
Name	No	No	Kidiyiruppupalayam branch
From	-----	-----	Palayathu madagu of Bahur tank
Length (m)	-----	-----	1200 m

Water source	Upper tanks	90%	Irrigation source	Tank water	0%
	Feeder canal	0%	(Main season)	Groundwater	90%
	Free catchment	10%		Canal water	10%

Cropping pattern and production

Cropping intensity in ayacut : 126%
Paddy percentage to gross cropped area : 39%
Paddy average yields per ha (samba) : 3.5 tonnes

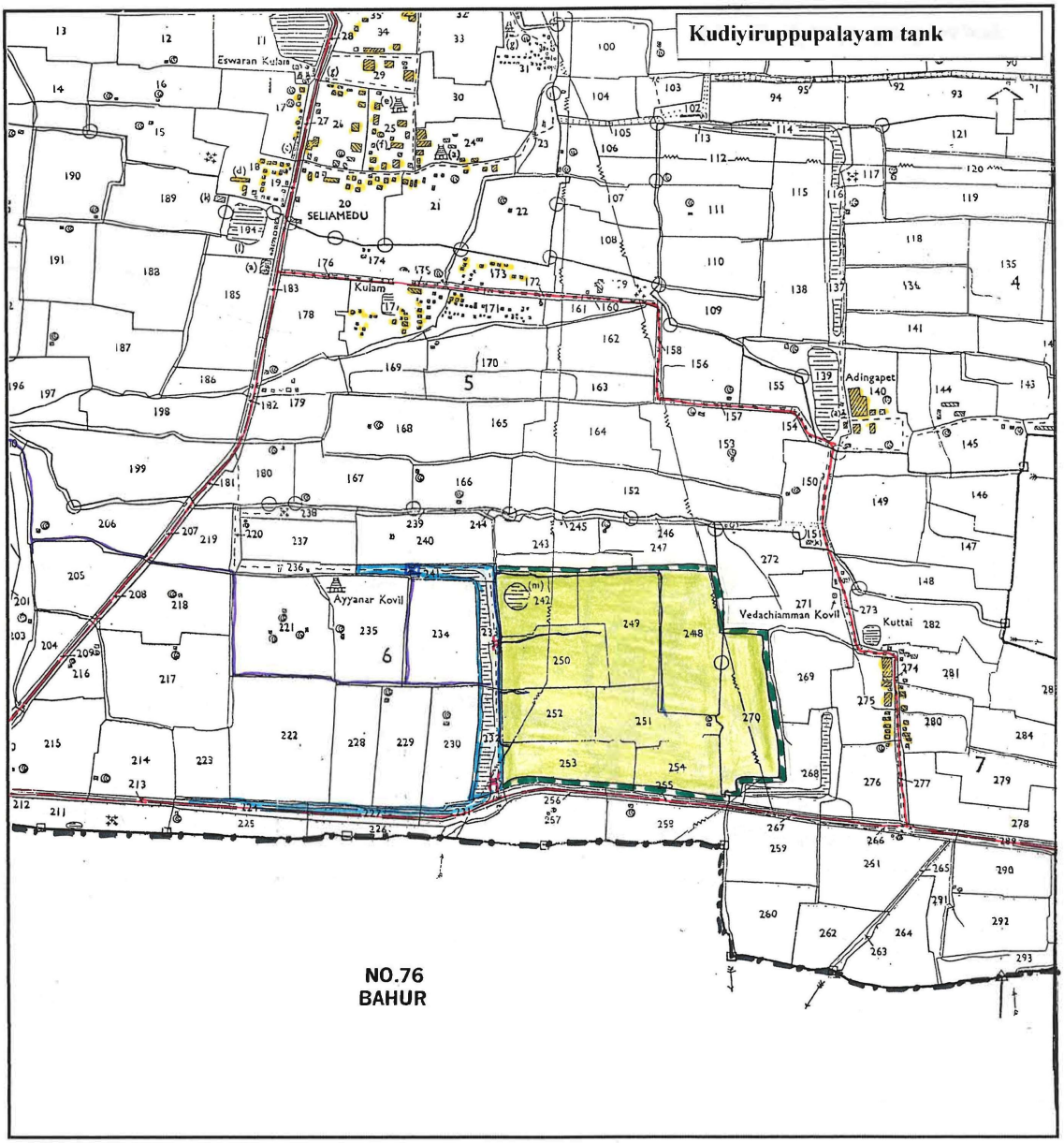
The cropping pattern in the cultivable area was

Paddy –I	23%	Paddy – II	23%	Paddy – III	3%
Coconut	76%				
Fallow	01%				

Condition of the tank components

Components		Condition	Remarks
Tank bund		Good	Cart track on top
Tank bed		Average	Moderate siltation; Ipomea weeds; Insignificant
Sluices	1	Poor	Culvert type – no shutter, major damages; piping problem; leaky
	2	Average	Head wall – no shutter; leaky; structure looks good
Field channels	1	Poor	More vegetation, less obstructions and more encroachment
	2	Poor	More encroachment, vegetation and obstructions
Weir	1	Average	Pipe culvert, minor damages
Feeder canals	1	Poor	Palayathu madagu vaykkal; reduced width; encroached; more vegetation and obstruction
Surplus courses	1	Average	Falls directly into Kirumambakkam vaykkal, which comes from Bahur tank.

Tank photos before execution of the work



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Kudiyiruppupalayam tank & Pirivupalaiyam tank**	Ayacut	: 17.63 ha
Geo-coordinates	: 11° 48'51" N, 79° 45'22" E	WSA	: 2.41 ha
Village / Commune	: Seliamedu / Bahur	No. of Sluices	: 2
Tank Type	: System (Bangaru)	Weir(s)	: Pipe Culvert

22. Kuruvinattam tank

Tank type : System (Sitheri)

Location of the tank

Village & Commune - Tank : Kuruvinattam / Bahur

Ayacut : Kuruvinattam / Bahur (P&B)
Soriankuppam (hamlet) (B)

Physical characteristics

Ayacut : 13.69 ha

Cultivable ayacut area : 13.69 ha

Tank poromboke area : 9.58 ha

Storage capacity : 0.425 million m^3**

No. of sluices : 1

No. of weirs and type : 1, BC

Bund length : 735 m

Maximum water depth : 1.25 m

Water resources

Name of the immediate upper tank : No

Name of the immediate lower tank / river : Ponnaiyar

	Collector drain from free catchment	Upper tank surplus course	Branch feeder canal
Name	No	No	Kuruvinattam feeder
From	-------	-------	Sitheri vaykkal
Length (m)	-------	-------	400m

Water source	Upper tanks	No	Irrigation source	Tank water	50%
	Feeder canal	80%	(main season)	Groundwater	50%
	Free catchment	20%		Canal water	0%

Cropping pattern and production

Cropping intensity in ayacut : 270%

Paddy percentage to gross cropped area : 97%

Paddy average yields per ha (samba) : 4.2 tonnes

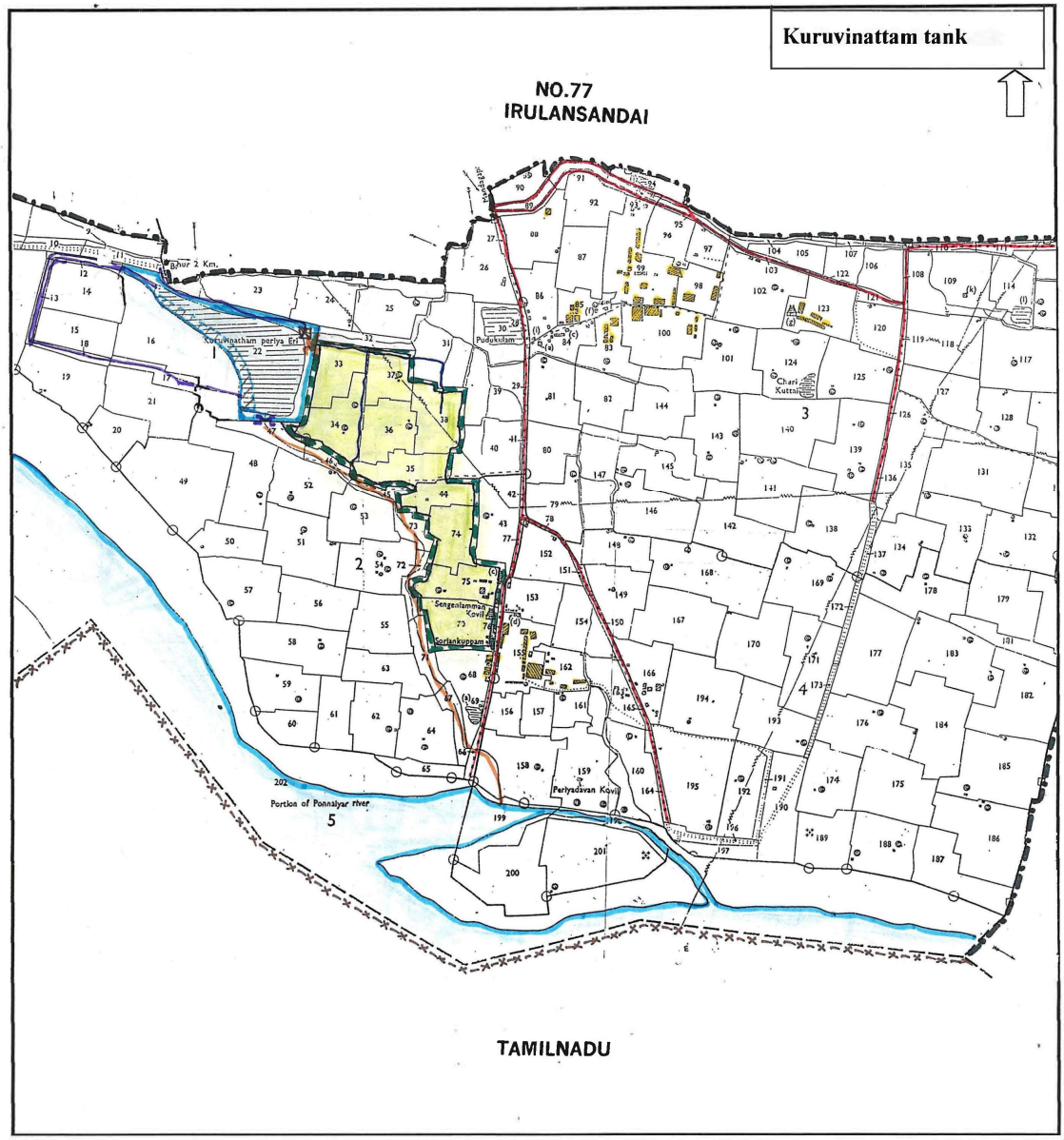
The cropping pattern in the cultivable area was

Paddy –I	87%	Paddy – II	87%	Paddy – III	87%
Casuarina	02%				
Banana	02%				
Coconut	03%				
Fallow	06%				

Condition of the tank components

Components		Condition	Remarks
Tank bund		Average	Low bund height with few vulnerable points; less tree coverage.
Tank bed		Average	Moderately silted; Infested by Ipomea and acacia dead storage throughout the year; no encroachment
Sluices	1	Average	Head wall – no shutter; minor damages; 50% pipe silted
Field channels	1	Poor	More vegetation, obstructions and encroachment
Weir	1	Average	BC Weir; minor damages
Feeder canals	1	Poor	Sitheri vaykkal diversion; the channel from Sitheri vaykkal is in poor condition with more encroachment, vegetation and obstructions
Surplus courses	1	Poor	Silted; more vegetation; moderate encroachment

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s) : **Kuruvinattam tank**

Geo-coordinates : 11° 47'31" N, 79° 43'33" E

Village / Commune : Kuruvinatham / Bahur

Tank Type : System (Sitheri)

Ayacut : 13.69 ha

WSA : 9.58 ha

No. of Sluices : 1

Weir(s) : Broadcrested

23. Kil parikalpattu tank

Tank type : System (Sitheri)

Location of the tank

Village & Commune - Tank : Parikkalpattu / Bahur

- Ayacut : Parikkalpattu / Bahur(P&B) Peria Archikuppam, Chinna Arachikuppam, Kilparrikalpattu and Chinnakangankuppam, (hamlets),Bahur and Pondicherry town (B)

Physical characteristics

Ayacut : 69.49 ha

Cultivable ayacut area : 69.49 ha

Tank poromboke area : 8.05 ha

Storage capacity : 0.158 million m^3**

No. of sluices : 2

No. of weirs and type : 1, BC-Calingulah

Bund length : 1150 m

Maximum water depth : 1.15 m

** Based on the conical formula the capacity is 0.032 million m^3.

Water resources

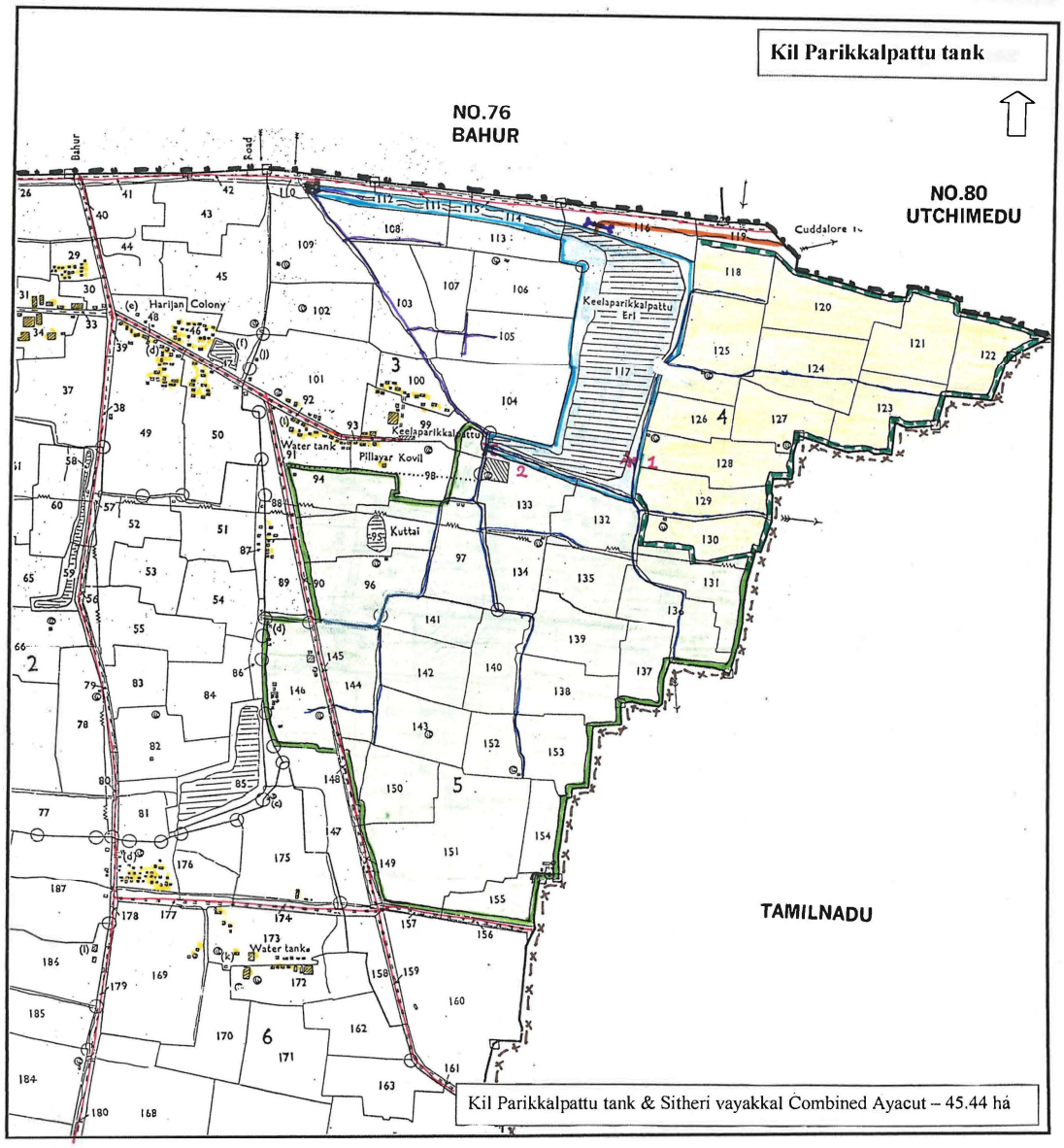
Name of the immediate upper tank : Mel Parikkalpattu tank

Name of the immediate lower tank / river : Mullodai

	Collector drain from free catchment	Upper tank surplus course	Branch feeder canal
Name	No	Surplus course	Kil Parikkalpattu branch canal
From	-------	Mel parikkalpattu weir	Sitheri vaykkal
Length (m)	-------	690	1300

Water source	Upper tanks	05%	Irrigation source	Tank water	30%
	Feeder canal	80%	(Main season)	Groundwater	40%
	Free catchment	15%		Canal water	30%

Tank photos before execution of the work



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	Combined Ayacut Boundary
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank	: **Kil Parikkalpattu tank**	Ayacut	: 69.49 ha
Geo-coordinates	11° 47' 27" N, 79° 45'35" E	WSA	: 8.05 ha
Village / Commune	: Parikkalpattu / Bahur	No. of Sluices	: 2
Tank Type	: System (Sitheri)	Weir Type(s)	: BC-calingulah

24. Manappattu tank

Tank type : System (Sitheri)

Location of the tank

Village & Commune - Tank : Manappattu / Bahur

- Ayacut : Manappattu / Bahur (P&B)
  Uchchimedu / Bahur (P)
  Kattukuppam (hamlet) (B)
  Kannikoil (hamlet) (B)
  Pondicherry town (B)

Physical Characteristics

		Pudu thangal	Pazhaya thangal
Ayacut	:	79.54 ha (combined ayacut)	
Cultivable ayacut area	:	74.44 ha	
(5.11 ha has been converted as housing plots)			
Tank poromboke area	:	14.89 ha	7.78 ha
Storage capacity	:	0.078 million m^3**	0.040 million m^3
No. of sluices	:	3	2
No. of weirs and type	:	1, BC-calingulah	No weir
Bund length	:	1150 m	825 m
Maximum water depth	:	1.50 m	1.50 m

** Capacity is calculated based on the conical formula.

Water Resources

Name of the immediate upper tank : Bahur sitheri and Bahur

Name of the immediate lower tank / river : Falls into Mullodai Channel

	Collector drain from free catchment	Upper tank surplus course	Branch feeder canal
Name	No	Bahur cherry madagu	Manappattu feeder canal
From	----	Bahur	Bahur regulation
Length (m)	----	3160 m + 3000 m	1900 m

Water source	Upper tanks	10%	Irrigation source	Tank water	20%
	Feeder canal	80%	(Main season)	Groundwater	80%
	Free catchment	10%		Canal water	0%

Cropping Pattern and production

Cropping intensity in a ayacut : 225%

Paddy percentage to gross cropped area : 98%

Paddy average yield per ha (samba) : 4.2 tonnes

The cropping pattern under cultivable area is

Paddy – I 74% Paddy – II 74% Paddy – III 74%

Coconut 03%

Fallow 23%

Condition of the Tank Components – Pudu thangal

Components		Condition	Remarks
Tank Bund		Average	Reduced width
Tank		Average	Heavy weeds; medium encroachment; dead storage throughout the year
Sluices	1	Poor	Head wall – no shutters; leaky; damaged condition
	2	Average	Head wall – no shutters; low siltation ; leaky
	3	Average	Head wall – no shutters; 50% silted; leaky
Field channels	1	Poor	Earthen channel with reduced width with obstructions; encroached
	2	Poor	Earthen channel with reduced width with obstructions; encroached
	3	Poor	Earthen channel with reduced width with obstructions; encroached
Weir	1	Good	BC- calingulah, damaged
Field canals	1	Good	Sitheri vykkal main channels on both sides recently cleared
	2	Good	Bahur cherry madagu vaykkal – recently cleared
Surpluls courses	1	Poor	heavily silted*

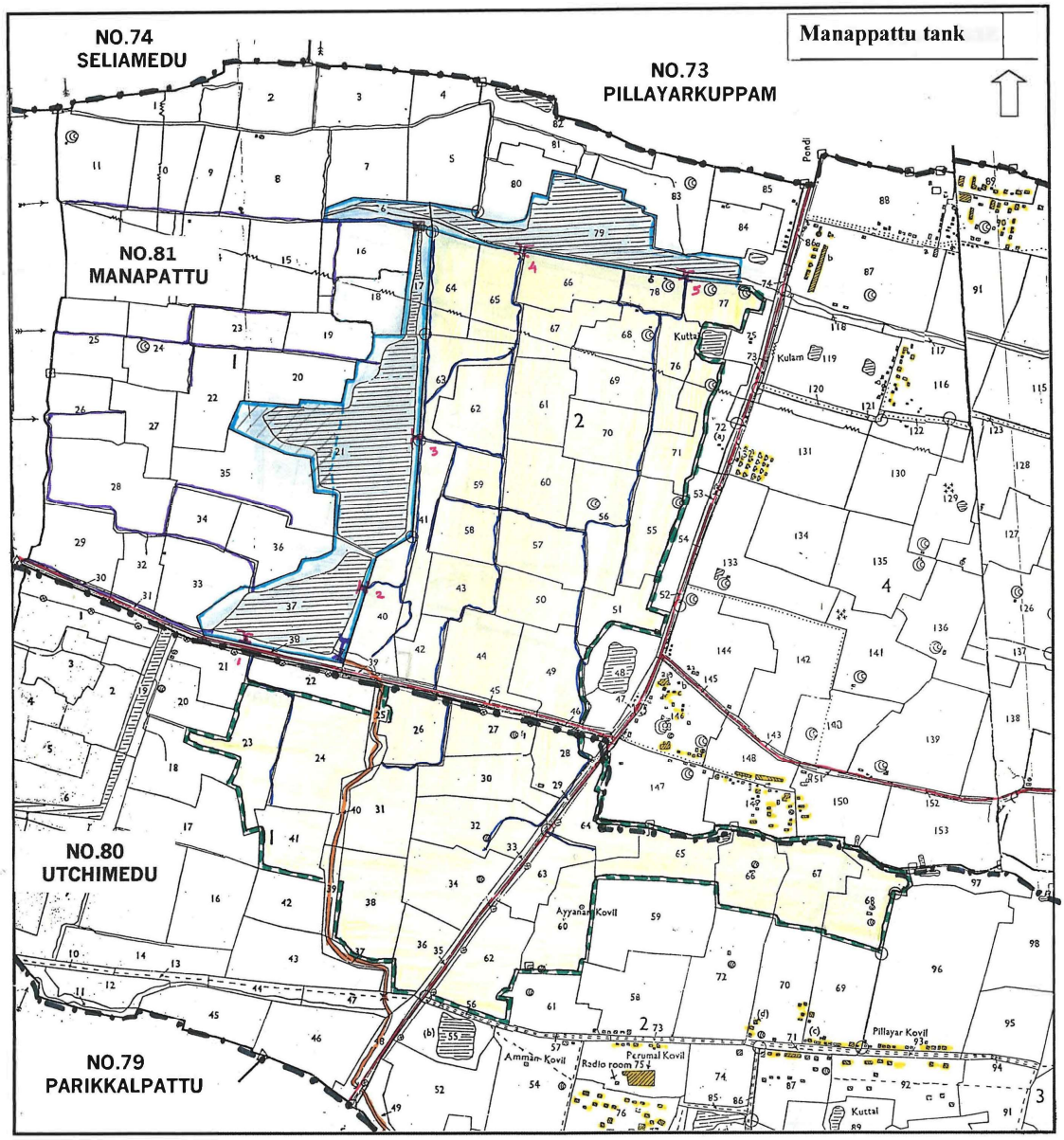
- This surplus course after its joining with Mullodai, being used to irrigate the dry lands by lift irrigation

Condition of the Tank Components – Pazhaya thangal

Components		Condition	Remarks
Tank Bund		Good	Metal road top
Tank Bed		Poor	Moderate siltation; Infected by Ipomea; less encroachment
Sluices	1	Poor	Head wall – no shutters; leaky; damaged condition
	2	Good	Head wall – shutters provided, less leakage, also acts as surplus arrangement
Field channels	1	Average	Partly lined; infected by vegetation
	2	Poor	Obstructions and vegetation

Weir	1	No	Sluice 2 acts as a weir
Feeder canals	1	Poor	Bahur Cherry madagu vaykkal- encroached, reduced width; silted
Surplus courses	1	No	As in field channels 2, It joins with Manapattu pudu thangal surplus course

Tank photos before execution of the work:



LEGEND

Tank Boundary	Sluice	Surplus Channel
Ayacut Boundary	Weir / Regulator	River
Village Boundary	Inflow Regulator	Road
State Boundary	Feeder Channel	Settlements
Encroached Area	Field Channel	Not to scale

TANK INFORMATION

Name of the Tank(s)	: **Manapattu tank (pudu thangal and pazhanthangal)**	Ayacut	: 79.54 ha
Geo-coordinates	: 11° 48'07" N, 79° 46'08" E	WSA	: 14.89 ha & 7.78 ha
Village / Commune	: Manapet / Bahur	No. of Sluices	: 3 & 2
Tank Type	: System (Sitheri)	Weir(s)	: BC-calingulah & No weir

Baseline Survey of Village Ponds

1. Oral Kulam, Kirumampakkam, Pillayarkuppam Revenue village

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 48` 44.94" N 79º 47` 19.69" E

3. Dimension: Side 1: 200 ft.
   Side 2: 200 ft.
   Side 3: 200 ft.
   Side 4: 200 ft.

4. Total Area: 26,200 sq. ft.

5. Depth of pond: Depth 1: 14 ft.,
   Depth 2: 14 ft.,
   Depth 3: 14 ft.

6. Is water available: Yes, if yes, water level from top: 12 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: No

10. Source of water: a. Rain,
    b. Natural spring

11. Status of bund? Fully Covered
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond Yes a. bathing/washing of cloths,
    b. for cattle,
    c. fishing

13. Is waste water discharged inside the pond? No.

14. Is it given for lease? No.

15. Whether desilted earlier? Yes
    If yes, i. When was it desilted?: Before five years.
    ii. by whom?: By Private agency through DRDA.

16. No of trees around the bund: 15 Trees alive

17. Pond photos before execution of the work:

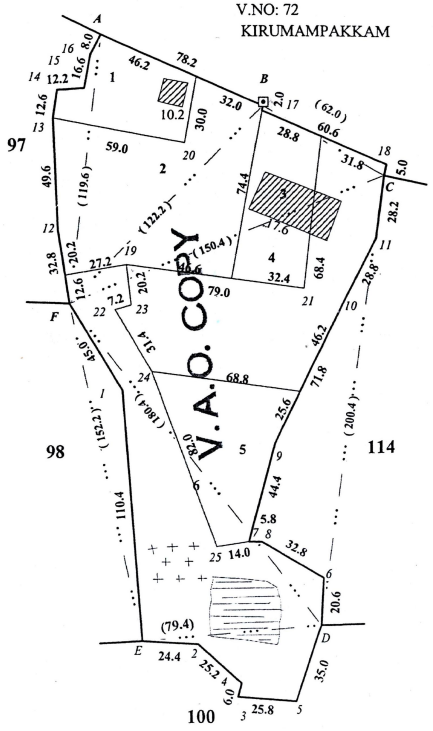
18. FMB Diagram of the pond:

District:Pondicherry
Sub-Taluk:Bahur

ORAI KULAM AT KIRUMAMPAKKAM

Village { No:73
Name:Pillayarkuppam
Area: 2.53.0 Hectares

Field No : 99



		98.8	33.2	21
		F		
		B		
		(122.2)		
A	72.8	95.2		
20	13.2	86.4		
		30.0	6.2	19
		F		
		C		
		(62.0)		
18	4.8	60.4		
		49.6	19.8	
		11.0	25.6	
		0.8	2.0	17
		B		
		A		
		(78.2)		
	4.6	44.6		
	0.8	32.8		
		B		
		A		
		(119.6)		
16	1.6	111.8		
15	4.6	95.4		
14	16.6	93.2		
13	17.0	80.6		
12	9.0	31.6		
		F		
		C		
		(200.4)		
		172.2	0.6	11
10	8.8	144.8		
9	31.6	76.2		
8	31.4	32.6		
7	37.0	31.8		
6	1.8	20.6		
		D		
		(79.4)		
		65.2	32.0	5
	18.2	61.2		
		59.2	2.4	
		41.6	22.0	4
		39.4	27.8	3
	24.4	33.2		
		23.2	Line	
		24.2	3.4	2
		E		
		(152.2)		
1	15.0	42.4		
		F		

		D		
		(180.4)		
		124.6	15.2	25
24	10.2	46.4		
23	21.2	17.6		
22	14.4	14.8		
		F		
		C		
		(150.4)		
B	48.8	112.4		

Scale 1:2000

2. Ural kulam, Pillaiyarkuppam village

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 49` 04.10" N 79º 47` 01.95" E

3. Dimension: Side 1: 200 ft.
   Side 2: 200 ft.
   Side 3: 200 ft.
   Side 4: 200 ft.

4. Total Area: 20,000 sq. ft.

5. Depth of pond: Depth 1: 11 ft.,
   Depth 2: 11 ft.,
   Depth 3: 11 ft.

6. Is water available: Yes, if yes, water level from top: 10 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes. Outlet oral vaikal

10. Source of water: a. Rain,
    b. Natural spring

11. Status of bund? Already revetment available
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. for cattle,
    b. fishing,
    c. for religious activities

13. Is waste water discharged inside the pond? No

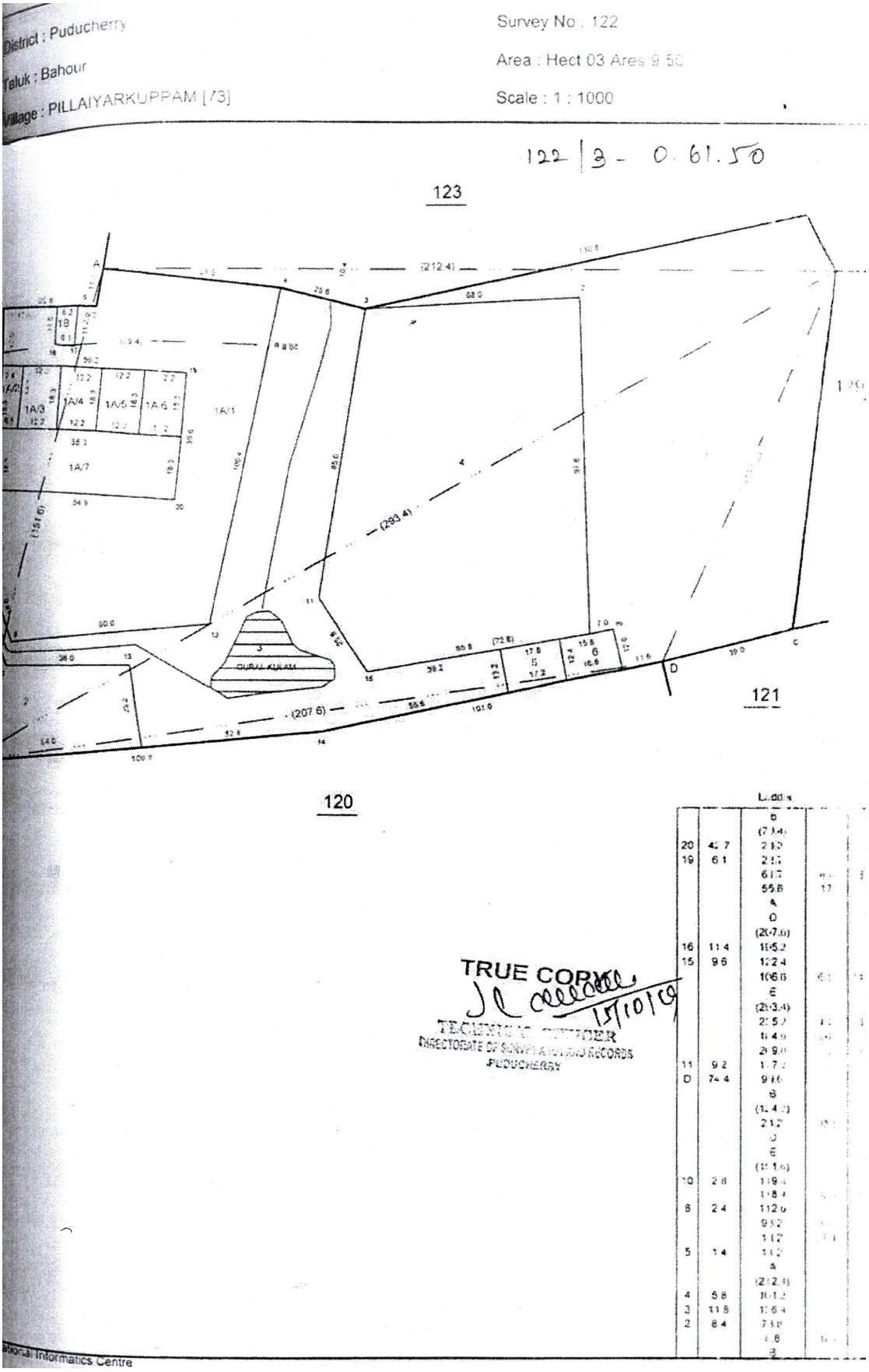
14. Is it given for lease? Yes, for fishing.

15. Whether desilted earlier? 5 years back.

16. No of trees around the bund: 8 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



3. Thamaraikulam (Muthal Kulam) Pond

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 48` 26.76" N 79º 44` 29.77" E

3. Dimension: Side 1: 298 ft.
   Side 2: 433 ft.
   Side 3: 298 ft.
   Side 4: 433 ft.

4. Total Area: 1,29,230 sq. ft.

5. Depth of pond: Depth 1: 8 ft.,
   Depth 2: 8.05 ft.,
   Depth 3: 8 ft.

6. Is water available: Yes, if yes, water level from top: 5 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes

10. Source of water: a. Rain,
    b. Inlet channel

11. Status of bund? Covered with bushes & Trees
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond: Nil

13. Is waste water discharged inside the pond? Yes. If Yes, Source : Domestic waste water

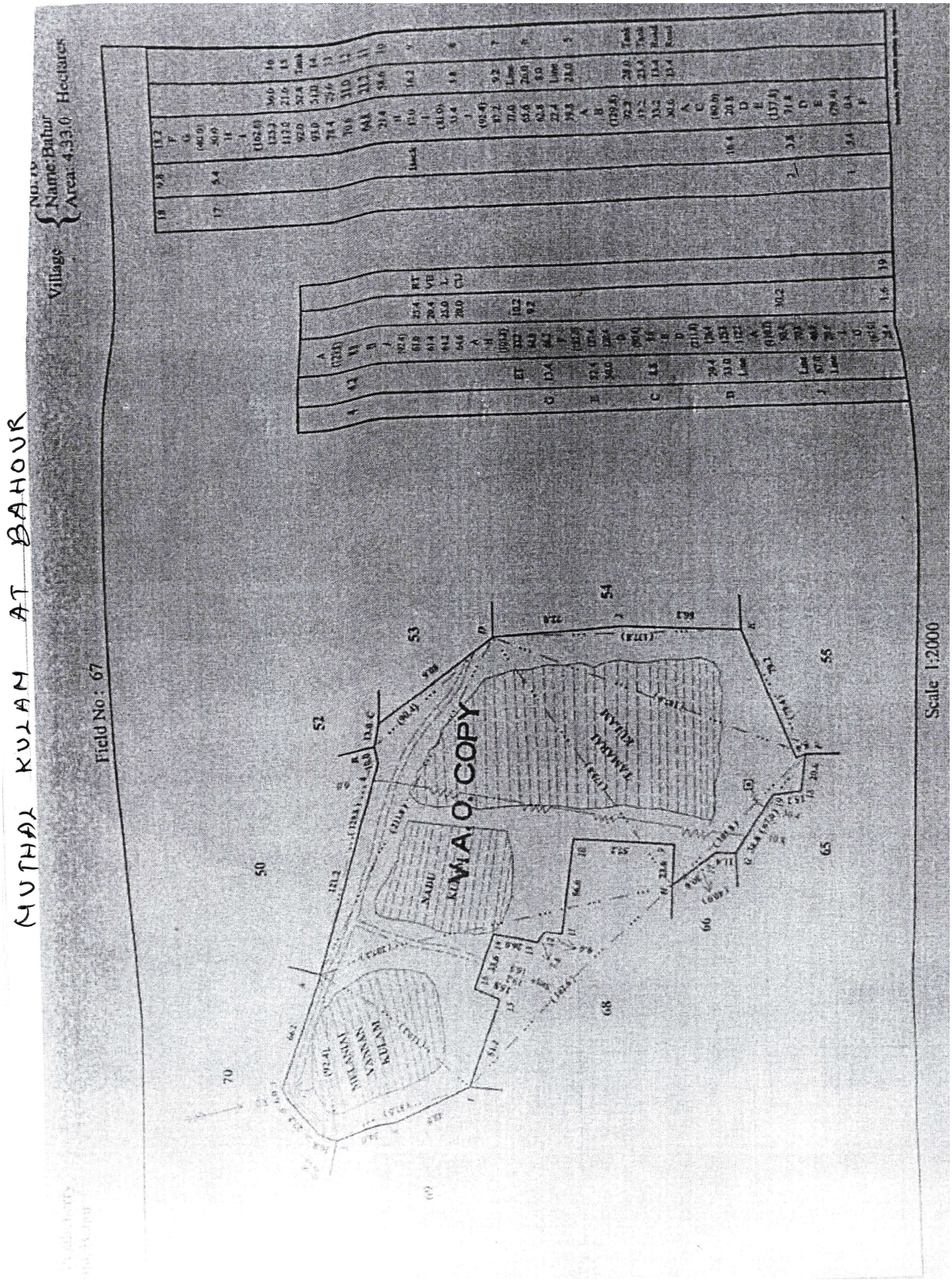
14. Is it given for lease? No

15. Whether desilted earlier? No

16. No of trees around the bund: 15 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



4. Vinayagar Koil Kulam, Pinnatchikuppam

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 49` 17.86" N 79º 45` 12.05" E

3. Dimension: Side 1: 167.75 ft.,
   Side 2: 127.75 ft.,
   Side 3: 137 ft.,
   Side 4: 118 ft.

4. Total Area: 18,723 sq. ft.

5. Depth of pond: Depth 1: 9 ft.,
   Depth 2: 8½ ft.,
   Depth 3: 7 ft.

6. Is water available: No

7. Status of Eutrophication: Not present

8. Is water available throughout the year: No

9. Are inlet and outlet available: No

10. Source of water: Rain

11. Status of bund? No bunds only. Concrete wall is present
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond: for cattle

13. Is waste water discharged inside the pond? No.

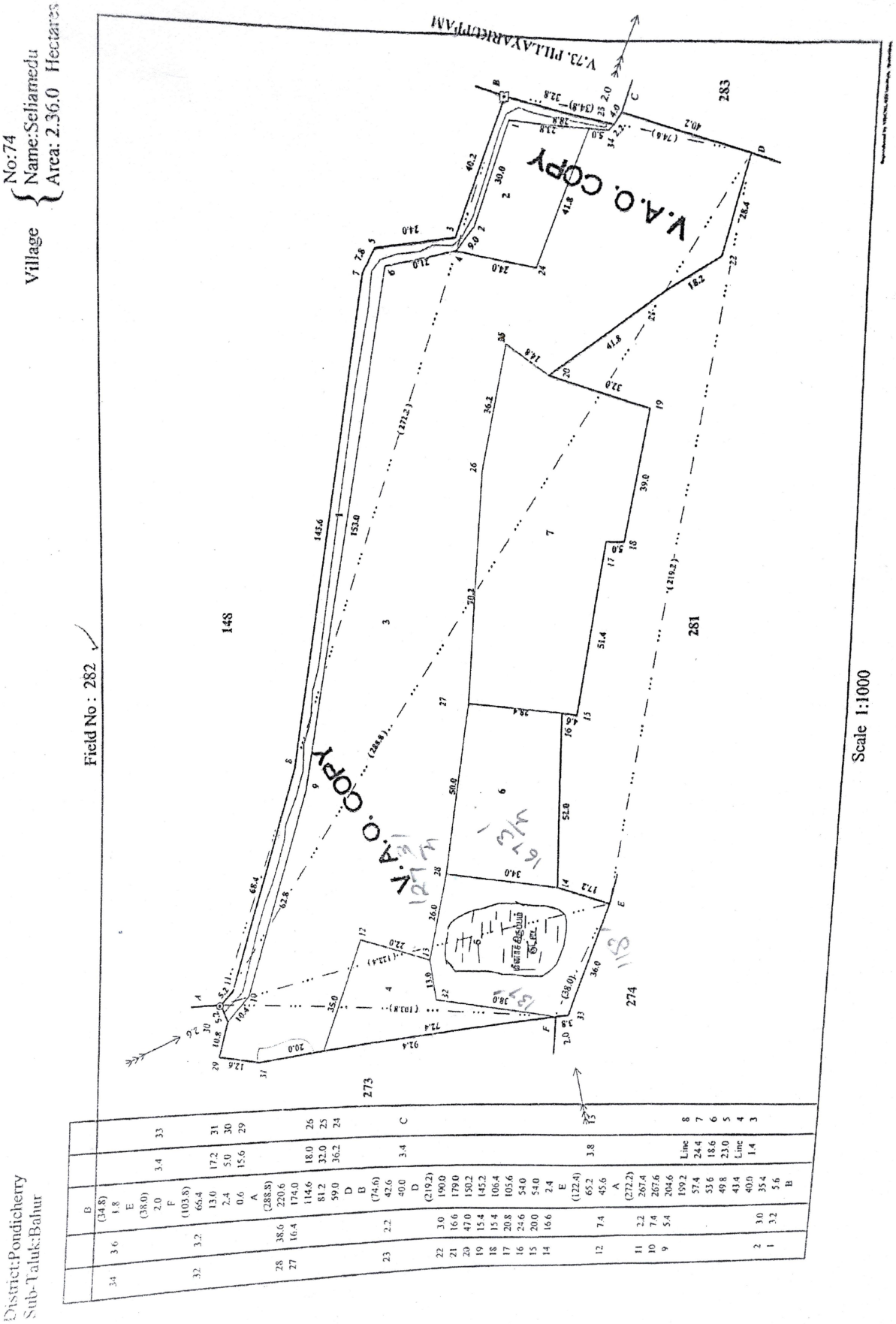
14. Is it given for lease? No

15. Whether desilted earlier? Yes in 2017.

16. No of trees around the bund: 8 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



5. Attaikulam, Kuruvinatham

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 47` 35.20" N 79º 44` 15.61" E

3. Dimension: Side 1: 200 ft.,
   Side 2: 230.75 ft.,
   Side 3: 112 ft.,
   Side 4: 230.75 ft.

4. Total Area: 36,926 sq. ft.

5. Depth of pond: Depth 1: 9 ft.,
   Depth 2: 8 ft.,
   Depth 3: 7.5 ft.

6. Is water available: No

7. Status of Eutrophication: Not present

8. Is water available throughout the year: No

9. Are inlet and outlet available: No

10. Source of water: Rain

11. Status of bund? Covered with bushes
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing

13. Is waste water discharged inside the pond? No.

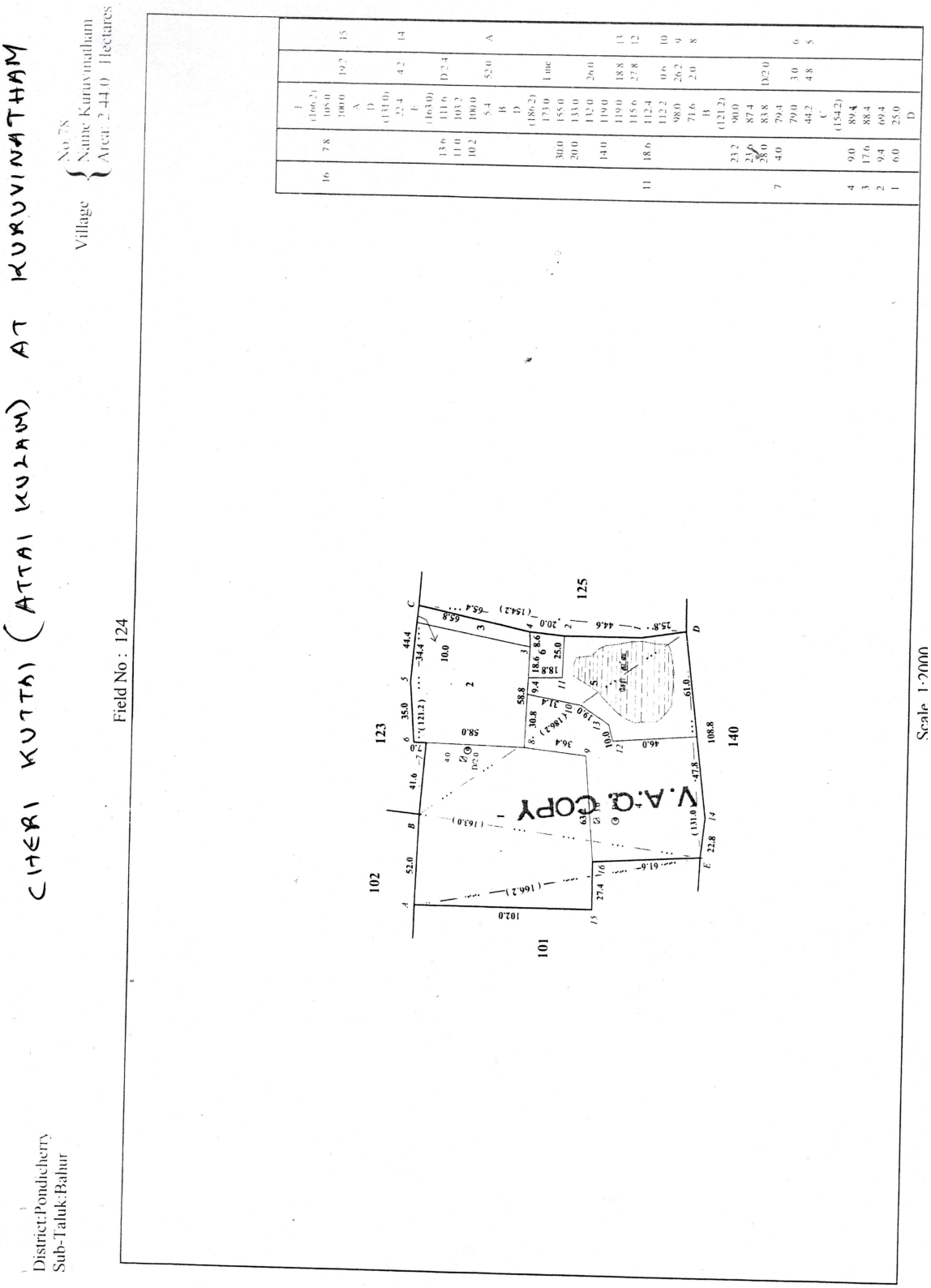
14. Is it given for lease? No.

15. Whether desilted earlier? Yes in 2017.

16. No of trees around the bund: NIL

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



6. Eswaran Kulam, Selimadu

1. Commune: Bahour commune Panchayat

2. GPS coordinates: 11º 49` 34.52" N 79º 45` 05.67" E

3. Dimension: Side 1: 383 ft.
   Side 2: 256.25 ft.
   Side 3: 255 ft.
   Side 4: 382 ft.

4. Total Area: 97,729 sq. ft.

5. Depth of pond: Depth 1: 9 ft.,
   Depth 2: 8 ft.,
   Depth 3: 7½ ft.

6. Is water available: Yes, if yes, water level from: 5 ft.

7. Status of Eutrophication: Not present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes

10. Source of water: Rain

11. Status of bund? Bunds were built with stones and found to be in damaged condition
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond
    a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. for religious purpose

13. Is waste water discharged inside the pond? No

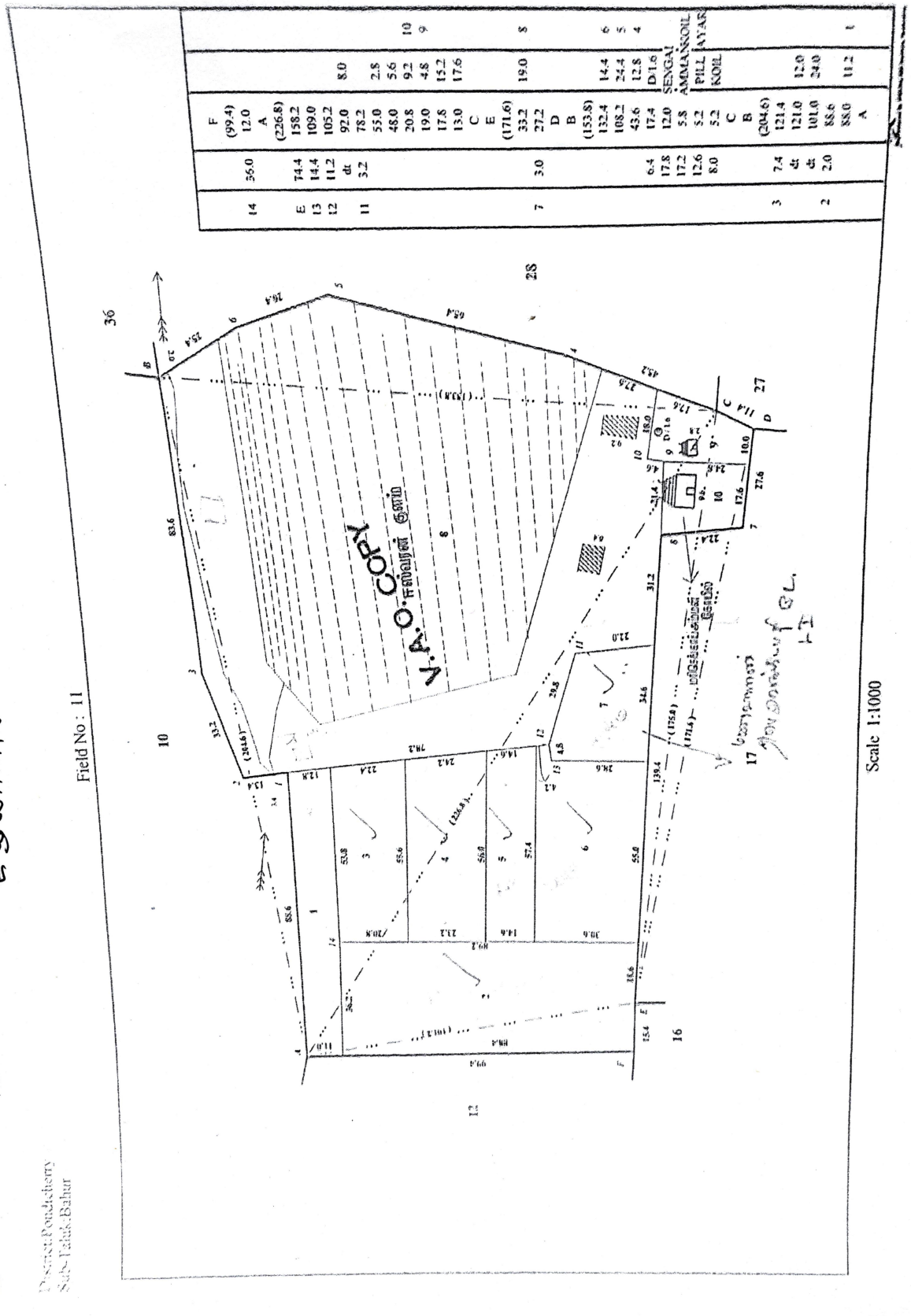
14. Is it given for lease? No

15. Whether desilted earlier? Yes, 20 years back.

16. No of trees around the bund: 25 and its status: alive

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



7. Pandrikuttai Kulam, Manamedu

1. Commune: Bahour commune Panchayat

2. GPS coordinates: 11º 48` 38.09" N 79º 41` 10.58"E

3. Dimension: Side 1: 628.25 ft.
   Side 2: 170.50 ft.
   Side 3: 627.75 ft.
   Side 4: 183.50 ft.

4. Total Area: 1,11,156 sq. ft.

5. Depth of pond: Depth 1: 8 ft.,
   Depth 2: 8.50 ft.,
   Depth 3: 9 ft.

6. Is water available: Yes, if yes, water level from top: 4 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes

10. Source of water: Rain

11. Status of bund? Fully covered with bushes
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. for cattle,
    b. fishing

13. Is waste water discharged inside the pond? Yes. If Yes, Source: Domestic waste water

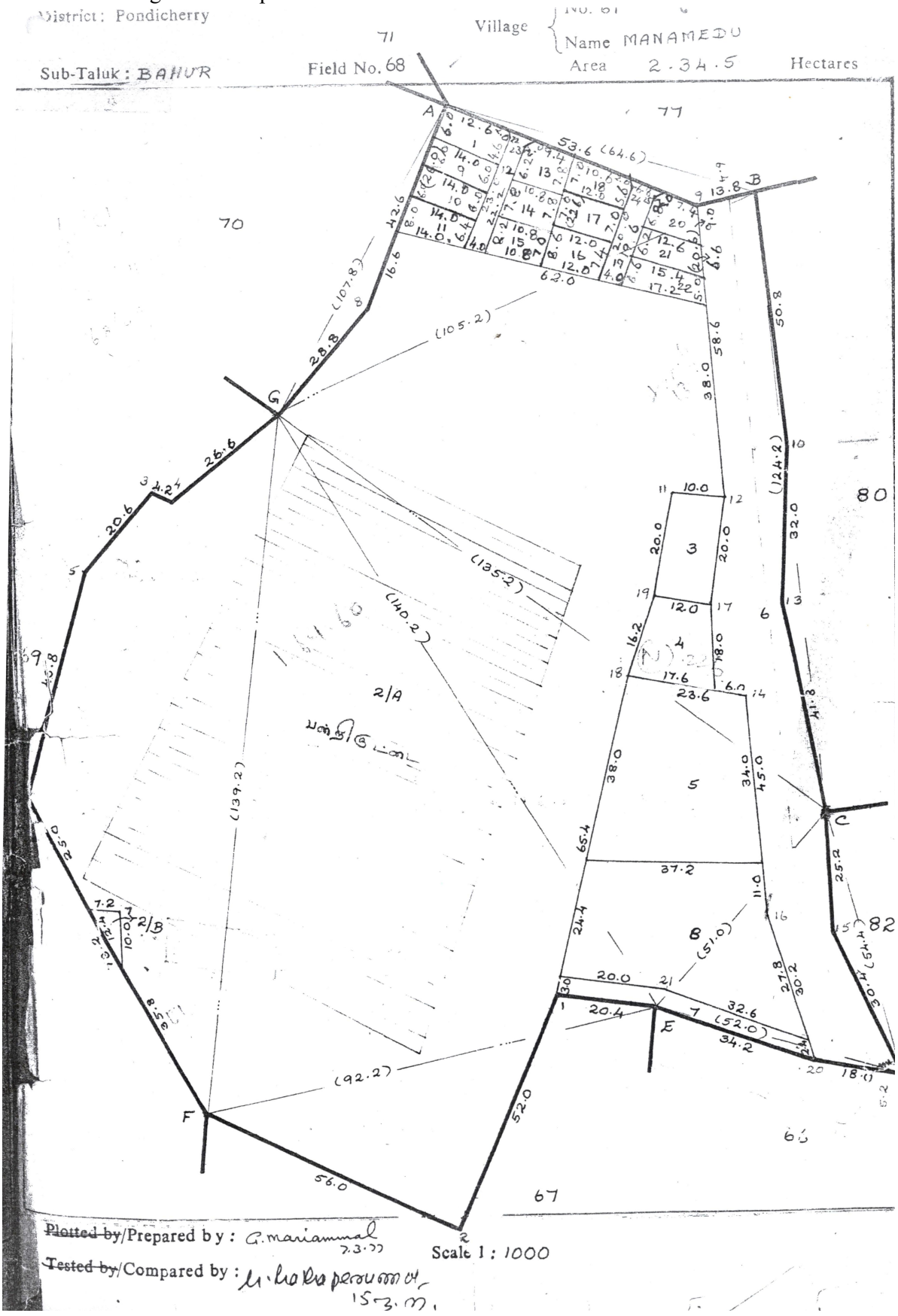
14. Is it given for lease? No

15. Whether desilted earlier? Yes 20 years back.

16. No of trees around the bund: 40 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



8. Thangal Kulam, Kudiyiruppupalayam

1. Commune: Bahour commune Panchayat

2. GPS coordinates: 11º 48` 59.74" N 79º 45` 18.56" E

3. Dimension: Side 1: 173.25 ft.
   Side 2: 263.50 ft.
   Side 3: 148.75 ft.
   Side 4: 234 ft.

4. Total Area: 40,048.75 sq. ft.

5. Depth of pond: Depth 1: 4½ ft.,
   Depth 2: 3½ ft.,
   Depth 3: 3 ft.

6. Is water available: Yes, if yes, water level from top: 1 ft.

7. Status of Eutrophication: Partially covered

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: No

10. Source of water: a. Rain,
    b. Inlet channel (Channel from Kudiyiruppupalayam tank)

11. Status of bund? No proper bunds were found
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing

13. Is waste water discharged inside the pond? No

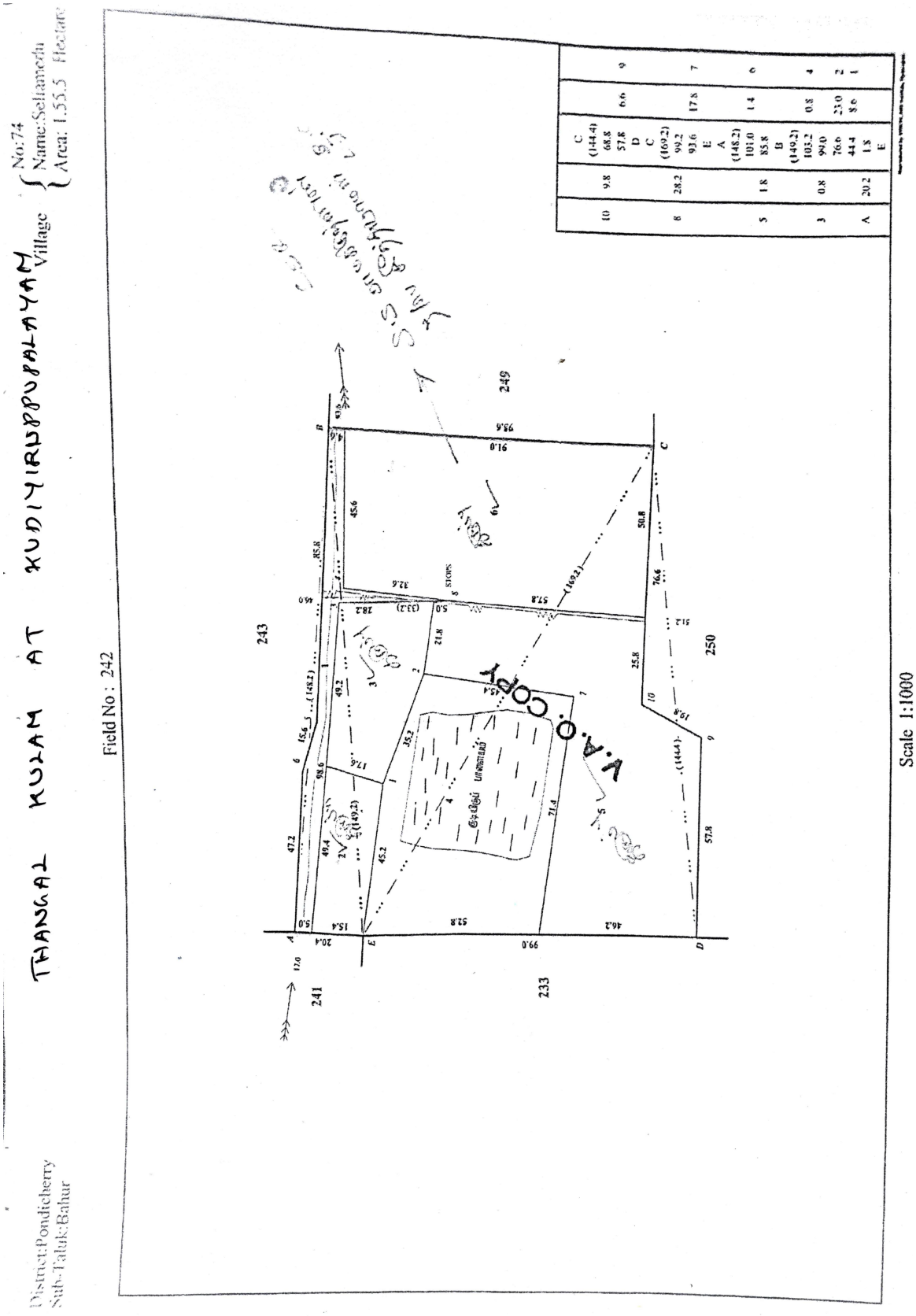
14. Is it given for lease? No

15. Whether desilted earlier? Yes. 20 years back.

16. No of trees around the bund: 43 trees and its status: alive

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



9. Andhamozhi Iyyanarappan Kulam, Nirnayapet

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 49` 47.56" N 79º 44` 45.86" E

3. Dimension: Side 1: 476.75 ft.,
   Side 2: 183 ft.,
   Side 3: 394.75 ft.,
   Side 4: 211.25 ft.

4. Total Area: 85,951 sq. ft.

5. Depth of pond: Depth 1: 4 ft.,
   Depth 2: 5 ft.,
   Depth 3: 6 ft.

6. Is water available: Yes, if yes, water level from top: 3 ft.

7. Status of Eutrophication: Not present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes

10. Source of water: a. Rain,
    b. Inlet channel (channel from bahour tank),

11. Status of bund? Bunds are in good condition except for few bushes
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. for cattle,
    b. fishing

13. Is waste water discharged inside the pond? No.

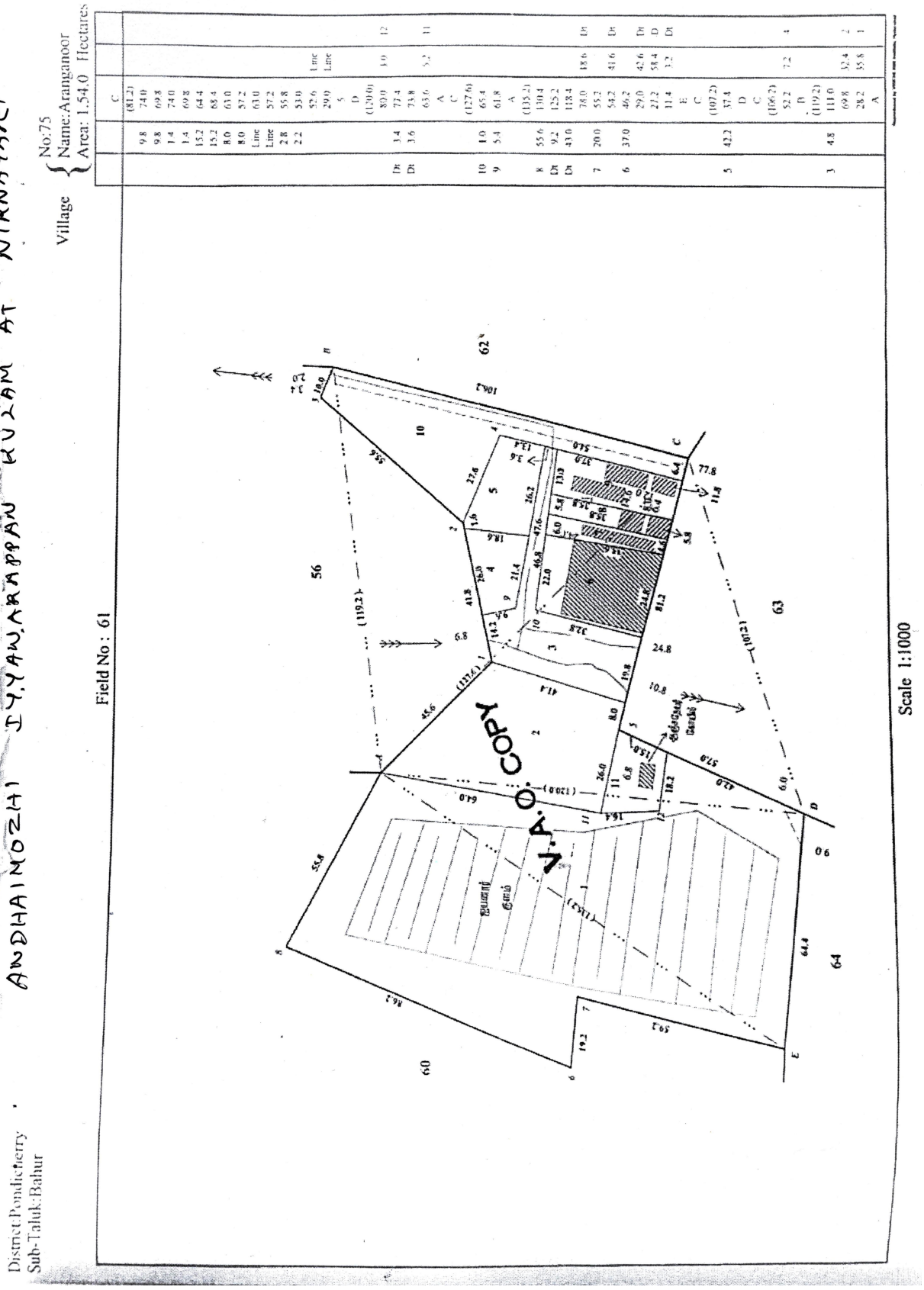
14. Is it given for lease? No.

15. Whether desilted earlier? In 2018 partially.

16. No of trees around the bund: 40 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



10. Thamaraikulam, Adhingapet

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 49` 14.42" N 79º 45` 39.73" E

3. Dimension: Side 1: 700 ft.,
   Side 2: 115.25 ft.,
   Side 3: 514.75 ft.,
   Side 4: 264.75 ft.

4. Total Area: 1,15,330 sq. ft.

5. Depth of pond: Depth 1: 9 ft.,
   Depth 2: 8 ft.,
   Depth 3: 7.5 ft.

6. Is water available: Yes, if yes, water level from top: 5 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes, they are alive

10. Source of water: Rain

11. Status of bund? No proper bunds were found
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond Yes

13. Is waste water discharged inside the pond? No.

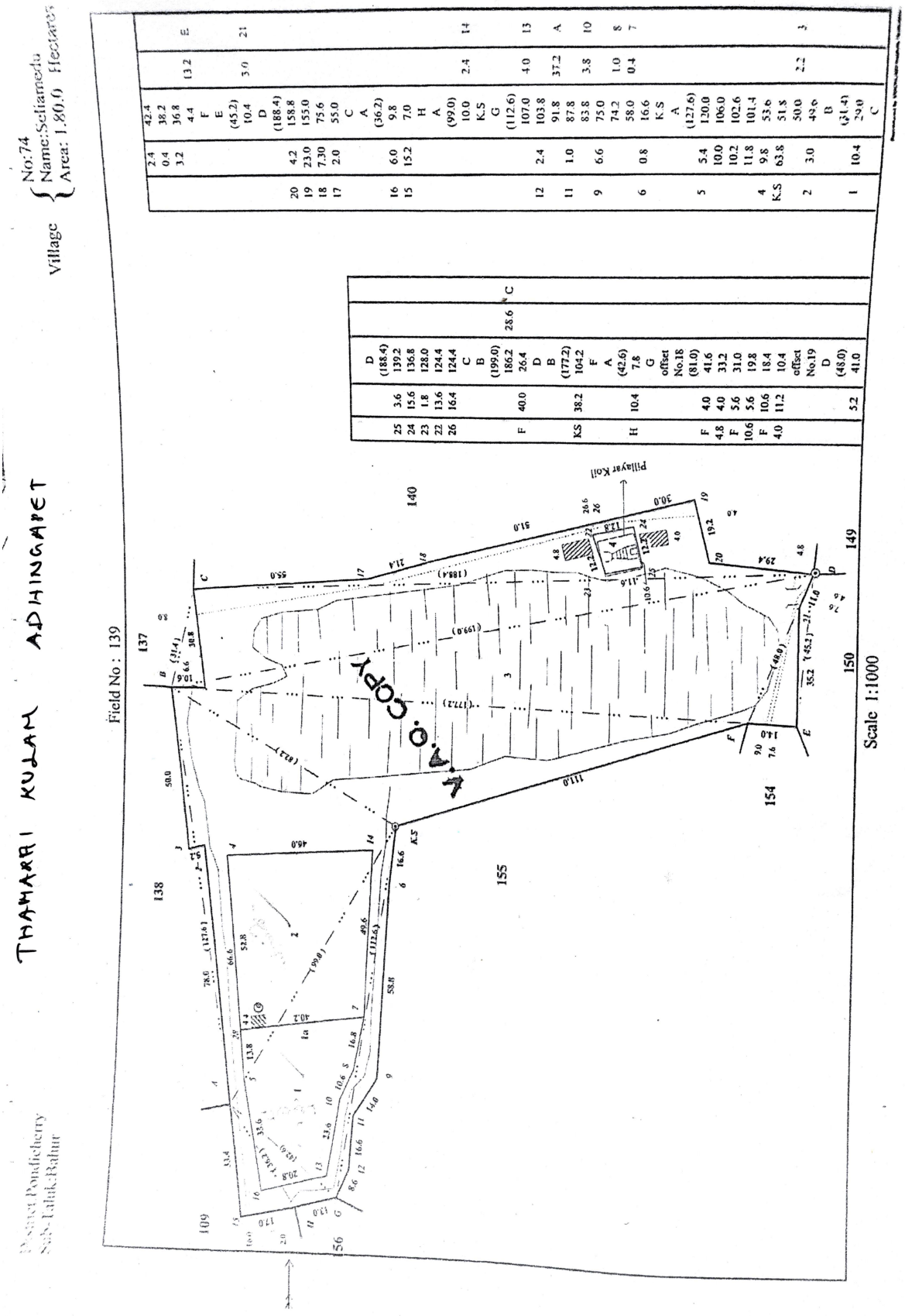
14. Is it given for lease? No.

15. Whether desilted earlier? Yes in 2010.

16. No of trees around the bund: 50 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



11. Thamaraikulam, Aranganur

1. Commune: Bahour Commune Panchayat

2. GPS coordinates: 11º 49` 57.53" N 79º 45` 04.13" E

3. Dimension: Side 1: 419 ft.,
   Side 2: 172.75 ft.,
   Side 3: 171 ft.,
   Side 4: 418 ft.

4. Total Area: 71,932 sq. ft.

5. Depth of pond: Depth 1: 7 ft.,
   Depth 2: 8 ft.,
   Depth 3: 6 ft.

6. Is water available: Yes, if yes, water level from top: 3 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: Yes

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes

10. Source of water: Rain

11. Status of bund? No proper bunds were found, fully covered with bushes
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond: Yes

13. Is waste water discharged inside the pond? No

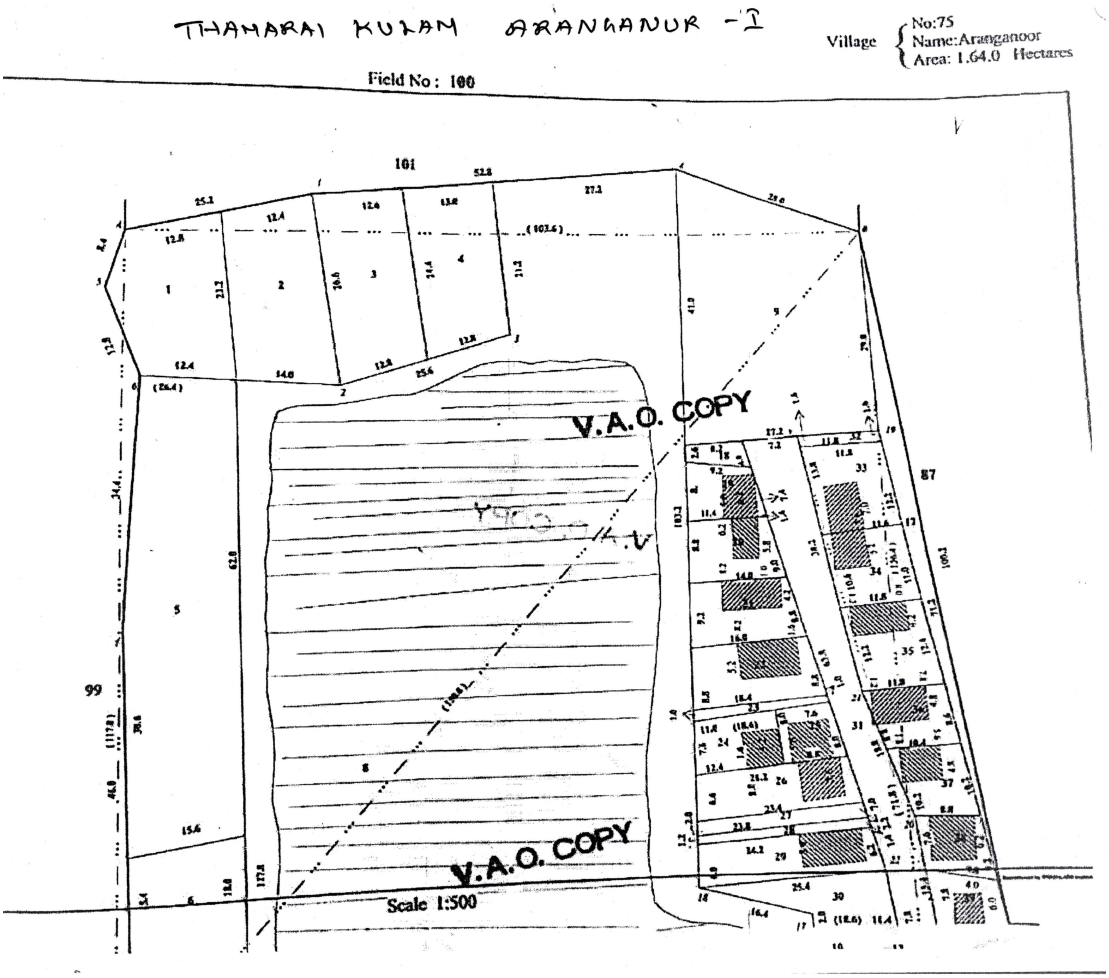
14. Is it given for lease? No.

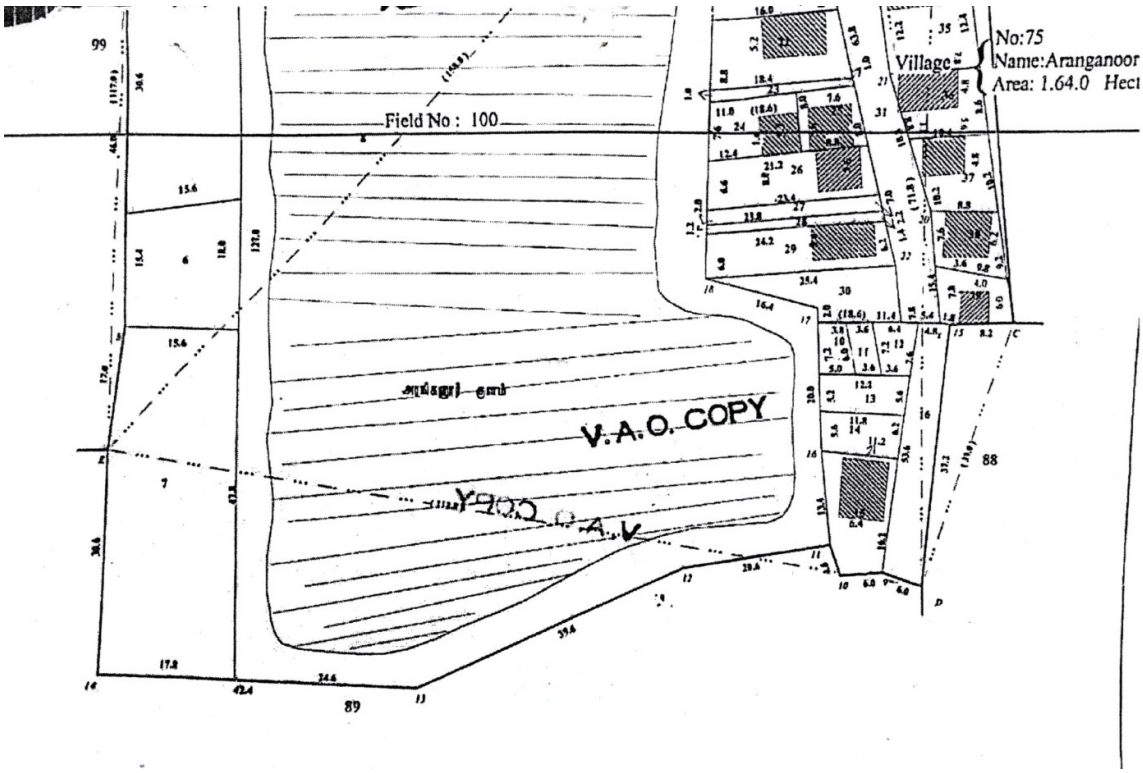
15. Whether desilted earlier? Yes. 20 years back.

16. No of trees around the bund: 30 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:





12. Uthukulam at Kunichempet village

1. Commune: Manadipet Commune Panchayat

2. GPS coordinates: 12º 00`23.09" N 79º `38`26.50" E

3. Dimension: Side 1: 293 ft.,
   Side 2: 217 ft.,
   Side 3: 137 ft.,
   Side 4: 283 ft.

4. Total area: 16,361 sq. ft.

5. Is water available: Yes, if yes, water level from top: 0.30 ft.

6. Status of Eutrophication: Partially present

7. Is water available throughout the year: No

8. Are inlet and outlet available: Yes, if yes, are they alive? Yes, Inlet available adjacent land.

9. Source of water: a. Rain,
   b. Inlet channel (channel from koonichempet tank)
   c. Pumping

10. Status of bund? good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond a. for cattle,
    b. irrigation
    c. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? Yes. If Yes, for what? Fishing

14. Whether desilted earlier? No

15. No of trees around the pond: Nil

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

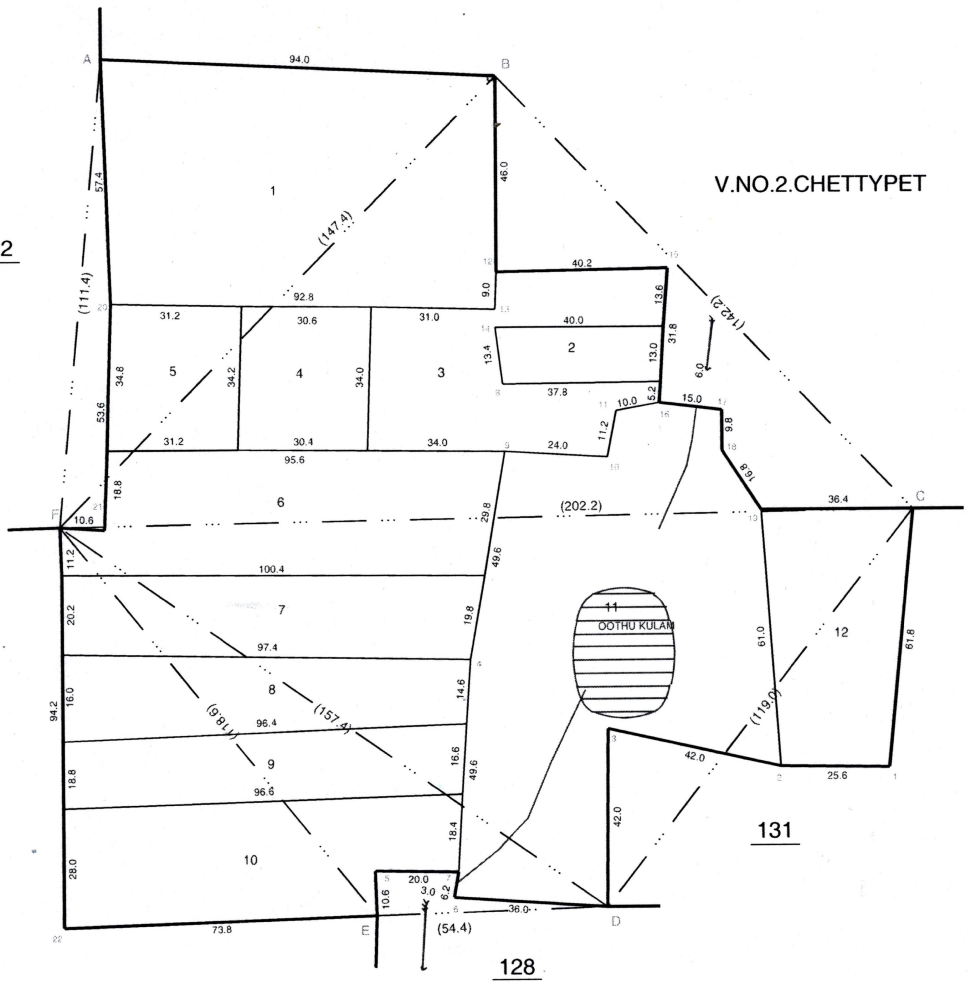
Taluk : Villianur

Village : KUNICHEMPET [3]

Survey No : 130

Area : Hect 02 Ares 82.00

Scale : 1 : 1000



Ladder													
		B					100.8	23.2	18			F	
		(147.4)					93.8	16.4	17			D	
A	70.0	86.0					82.4	26.0	16	7	9.8	(54.4)	
		F					60.8	2.4	15	6	3.8	19.8	
		E					42.6	41.4	14	5	10.6	18.4	
		(118.6)					39.4	38.6	13			0.2	
		73.6	59.0	22			33.4	32.0	12			E	
		F					B					F	
		(111.4)					C					(157.4)	
21	10.6	110.4			11	24.6	(202.2)			E	32.8	60.0	29.8
20	7.2	57.2			10	13.8	132.4					43.8	
		A					130.0					D	
		C			9	15.6	127.2	93.0	D			(119.0)	
		(142.2)			B	104.2	105.6			2	12.4	85.6	25.4
		117.2	26.2	19	8	31.6	105.4			1	33.0	67.6	
							105.4					52.0	
												C	

CollabLand : National Informatics Centre

13. Velankulam at Kunichempet village

1. Commune: Manadipet commune Panchayat

2. GPS coordinates: 12º 00`14.35" N  79º `37`45.65" E

3. Dimension: Side 1: 217 ft.,
   Side 2: 183 ft.,
   Side 3: 217 ft.,
   Side 4: 183 ft.

4. Total Area: 18514 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Not present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: Rain

10. Status of bund? No proper bunds
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

11. Do people use the pond: Recharging

12. Is waste water discharged inside the pond? Yes.
    If Yes, Source: domestic waste water

13. Is it given for lease? No.

14. When was it desilted? Nil

15. No of trees around the bund : 6 and its status: Alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

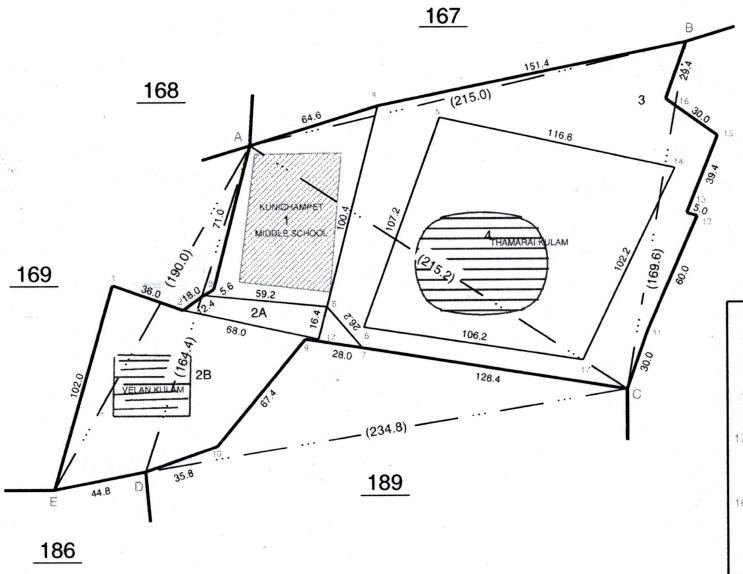
Taluk : Villianur

Village : KUNICHEMPET [3]

Survey No : 166

Area : Hect 03 Ares 41.00

Scale : 1 : 2000



Ladder

		A		
		(164.4)		
		84.8	11.2	
		D		
		A		
		(215.2)		
	24.0	111.2		
		38.4	7.0	
17	0.2	25.4		
		C		
		B		
		(169.6)		
16	4.6	140.6		
		127.0	22.4	15
		108.6	5.4	14
		88.4	14.6	13
		87.2	19.4	12
	16.2	82.2		
		29.4	5.2	11
		C		
		D		
		(234.8)		
		198.8	5.6	10
		148.4	49.6	9
		142.0	48.4	17
		135.4	63.2	8
		122.2	40.6	7
		119.8	50.4	6
		C		
		B		
		(215.0)		
		135.0	4.0	
	0.6	135.0		
		130.4	28.8	
		91.2	8.0	5
4	4.8	63.8		
		52.2	6.8	
		3.6	0.0	
		A		
		(190.0)		
		121.4	19.0	3
		105.2	11.2	2
		29.2	33.8	D
1	24.2	99.0		
		E		

Collabl and : National Informatics Centre

14. Thamaraikulam at Kunichempet village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 12º 00`15.84" N 79º `37`47.49" E

3. Dimension: Side 1: 367 ft.,
   Side 2: 300 ft.,
   Side 3: 367 ft.,
   Side 4: 300 ft.

4. Total Area: 54250 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Not Present

7. Is water available throughout the year: No

8. Are inlet and outlet available: Yes,
   if yes, are they alive?: Yes. Inlet nearby Tank

9. Source of water: a. Rain,
   b. Inlet channel (channel from Koonichempet tank)

10. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond: a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? No.

14. Whether desilted earlier? Yes
    If yes, i. When was it desilted?: 2016
    ii. by whom?: DHAN Foundation

15. No of trees around the bund: 20 and its status: Alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

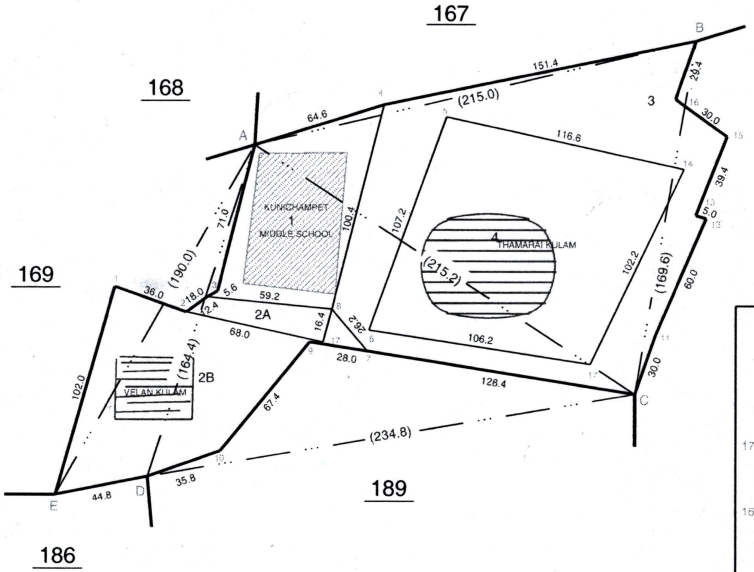
Survey No : 166

Taluk : Villianur

Area : Hect 03 Ares 41.00

Village : KUNICHEMPET [3]

Scale : 1 : 2000



		Ladder		
		A		
		(164.4)		
		84.8	11.2	
		D		
		A		
		(215.2)		
	24.0	111.2		
		38.4	7.0	
17	0.2	25.4		
		C		
		B		
		(169.6)		
16	4.6	140.6		
		127.0	22.4	15
		108.6	5.4	14
		88.4	14.6	13
		87.2	19.4	12
	16.2	82.2		
		29.4	5.2	11
		C		
		D		
		(234.8)		
		198.8	5.6	10
		148.4	49.6	9
		142.0	48.4	17
		135.4	63.2	8
		122.2	40.6	7
		119.8	50.4	6
		C		
		B		
		(215.0)		
		135.0	4.0	
	0.6	135.0		
		130.4	28.8	
		91.2	8.0	5
4	4.8	63.8		
		52.2	6.8	
		3.6	0.0	
		A		
		(190.0)		
		121.4	19.0	3
		105.2	11.2	2
		29.2	33.8	D
1	24.2	99.0		
		E		

15. Ayyanarkoilkulam at Kunichempet village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 12º 00`15.84" N 79º `37`47.49" E

3. Dimension: Side 1: 167 ft.,
   Side 2: 200 ft.,
   Side 3: 167 ft.,
   Side 4: 200 ft.

4. Total Area: 16791.70 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Partially present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: a. Rain,
   b. Inlet channel (channel from Koonichempet tank)

10. Status of bund? No proper bunds
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

11. Do people use the pond: a. for cattle,
    b. fishing,
    c. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? No.

14. Whether desilted earlier? Yes Nil.

15. No of trees around the bund: 5 and its status: Alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

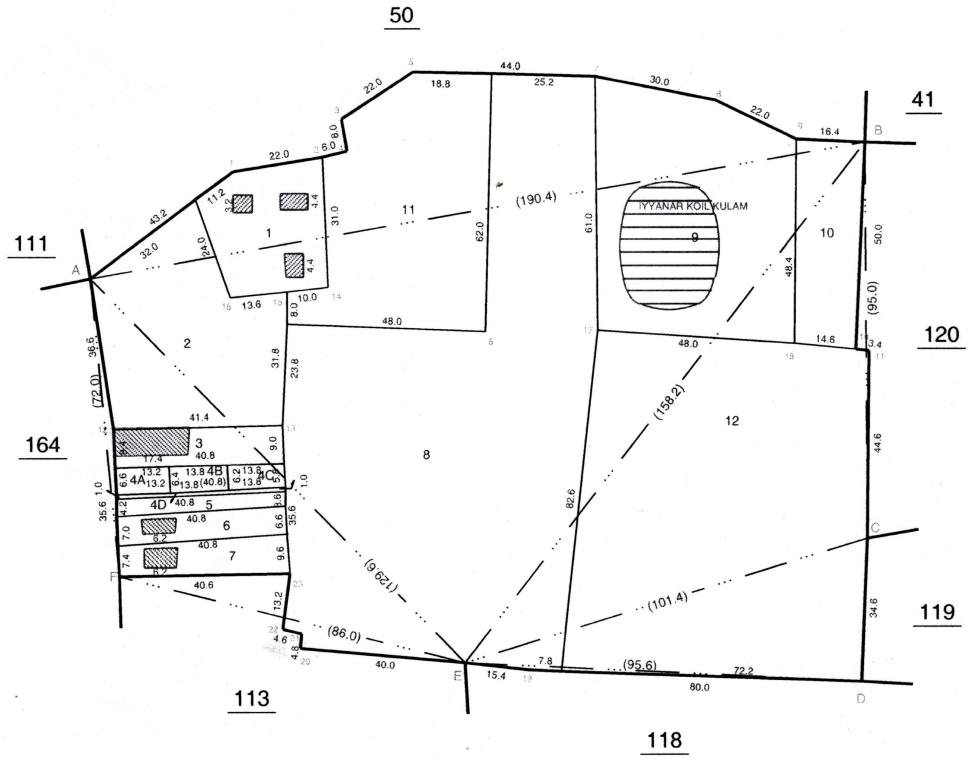
Taluk : Villianur

Village : KUNICHEMPET [3]

Survey No : 112

Area : Hect 02 Ares 29.50

Scale : 1 : 1000



Ladder

		F					93.8	32.0	15
		(86.0)					87.6	39.8	14
		46.4	10.4	23	F	45.0	73.6		
22	2.8	44.6					71.6	8.6	13
21	2.6	40.0					E		
20	6.2	39.4					F		
		E					(72.0)		
		D			12	2.4	36.6		
		(95.6)					A		
		15.6	1.2	19			E		
		E					(101.4)		
		B			D	32.6	11.6		
		(158.2)					C		
		109.4	16.4	18			(95.0)		
		83.0	59.0	C	11	0.8	50.4		
17	23.6	83.0					49.8	2.4	10
		E					B		
		A					(190.4)		
		(129.6)			9	3.4	174.4		
		102.4	21.0	16	8	16.0	156.6		
					7	26.6	129.0		
							92.4	29.2	6
					5	35.6	85.6		
					4	19.6	66.8		
					3	27.4	65.6		
					2	19.2	60.8		
					1	19.4	38.8		
							A		

CollabLand : National Informatics Centre

16. Sethikuttai at Thirubuvanai village

1. Commune: Manadipet Commune Panchayat

2. GPS coordinates: 11º 55`30.50" N 79º `38`59.48" E

3. Dimension: Side 1: 230 ft.,
   Side 2: 203 ft.,
   Side 3: 230 ft.,
   Side 4: 203ft.

4. Total Area: 48437.6 sq. ft.

5. Is water available: Yes,
   If yes, water level from top: 5 ft.

6. Status of Eutrophication: Not present

7. Is water available throughout the year: Yes

8. Are inlet and outlet available: No

9. Source of water: a. Rain,
   b. Pumping

10. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. Recharging

12. Is waste water discharged inside the pond? No.

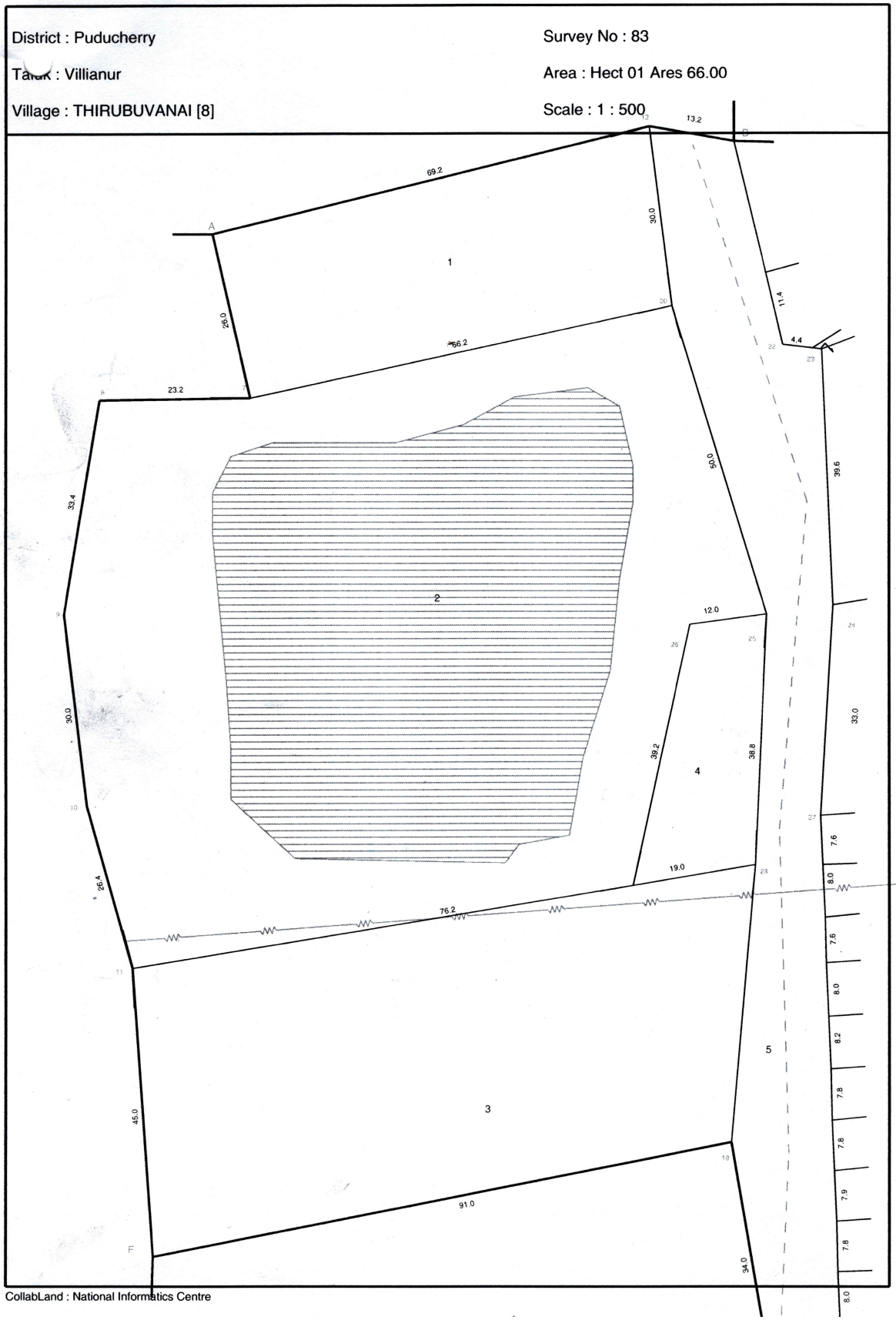
13. Is it given for lease? No.

14. Whether desilted earlier? Yes
    If yes, i. When was it desilted? 2016
    ii. by whom? DHAN Foundation

15. No of trees around the bund: 6 and its status: alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:



17. Sudukadukuttai at Thiruvandarkoil

1. Commune: Manadipet Commune Panchayat

2. GPS coordinates: 11º 54`54.46" N 79º `39`35.14" E

3. Dimension: Side 1: 125 ft.,
   Side 2: 115 ft.,
   Side 3: 125 ft.,
   Side 4: 115 ft.

4. Total Area: 64906.38 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Not present

7. Is water available throughout the year: No

8. Are inlet and outlet available: Yes,
   If yes, are they alive? : Yes. Inlet alive

9. Source of water: a. Rain,
   b. Inlet channel (Azhiyar channel)

10. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond: a. bathing/washing of cloths,
    b. for cattle,
    c. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? No.

14. Whether desilted earlier? No

15. No of trees around the bund: 6 and its status: alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

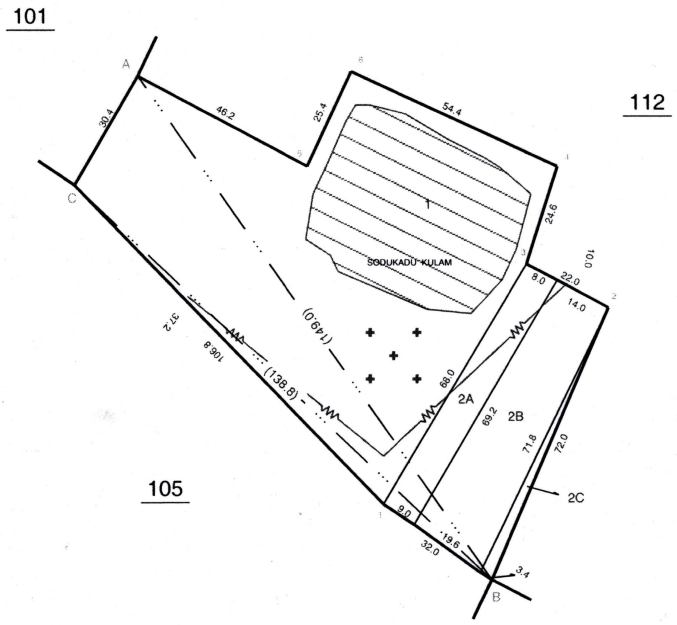
Taluk : Villianur

Village : THIRUVANDARKOIL [10]

Survey No : 106

Area : Hect 00 Ares 82.00

Scale : 1 : 1000



		Ladder		
		A		
		(149.0)		
C	27.4	136.0		
		120.4	43.0	6
		107.6	21.0	5
		73.0	70.4	4
		58.0	51.0	3
		38.0	61.2	2
		B		
		C		
		(138.8)		
1	4.6	31.8		
		B		

CollabLand : National Informatics Centre

18. Arippankulam at Sorapet

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 57`37.17" N  79º `40`11.61" E

3. Dimension: Side 1:200 ft.
   Side 2: 1500 ft.
   Side 3: 200 ft.
   Side 4: 1400 ft.

4. Total Area: 296438 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Not present

7. Is water available throughout the year: No

8. Are inlet and outlet available: Yes,
   If yes, are they alive?: Yes. Inlet alive

9. Source of water:
   a. Rain,
   b. Inlet channel (from periaeri of sorapet)
   c. Pumping

10. Status of bund? Need strengthening
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

11. Do people use the pond
    a. for cattle,
    b. irrigation,
    c. Recharging

12. Is waste water discharged inside the pond? No.

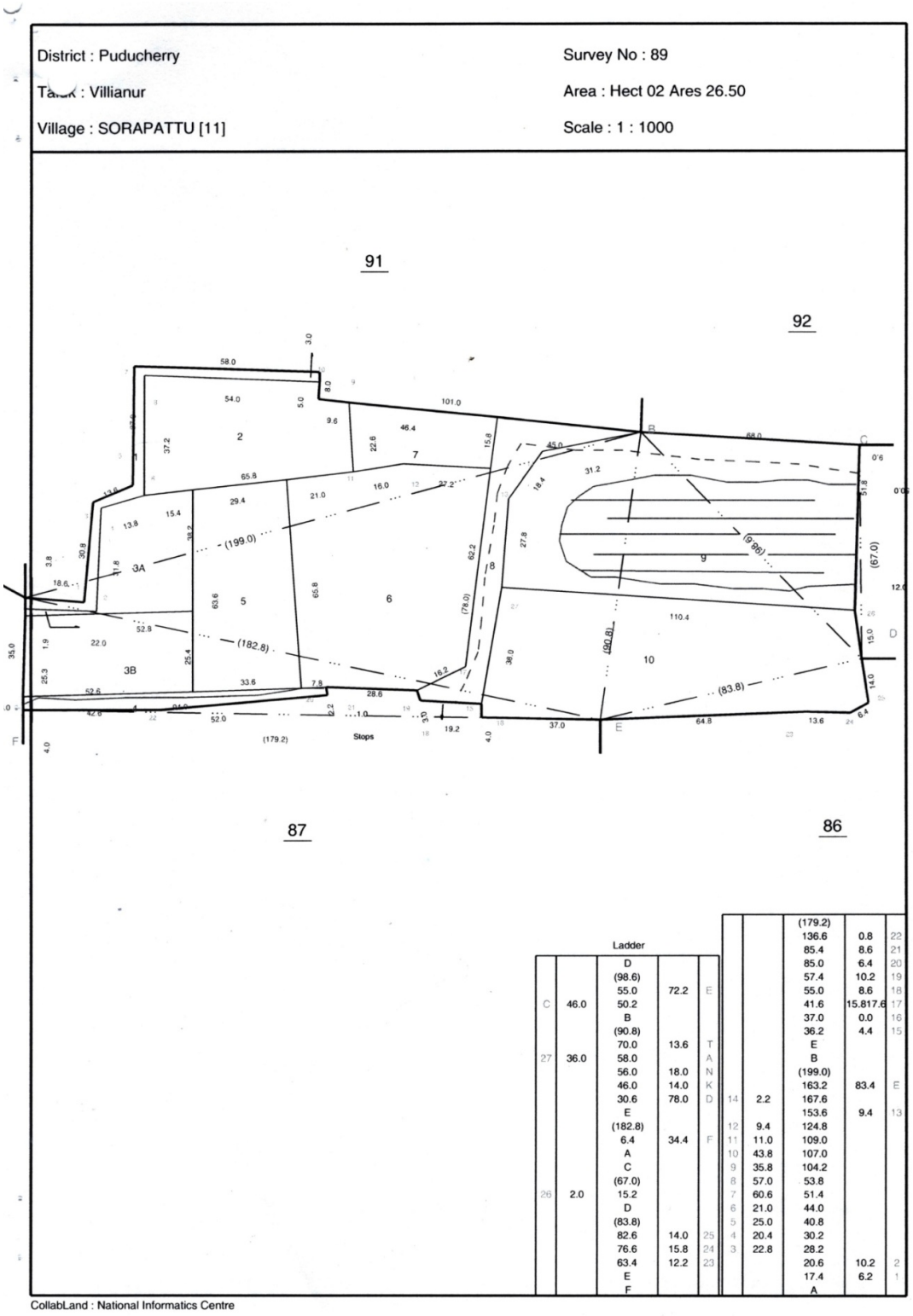
13. Is it given for lease? No.

14. Whether desilted earlier? Yes
    If yes, i. When was it desilted? 2016
    ii. by whom? DHAN Foundation

15. No of trees around the bund: 330 and its status: alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:



District : Puducherry

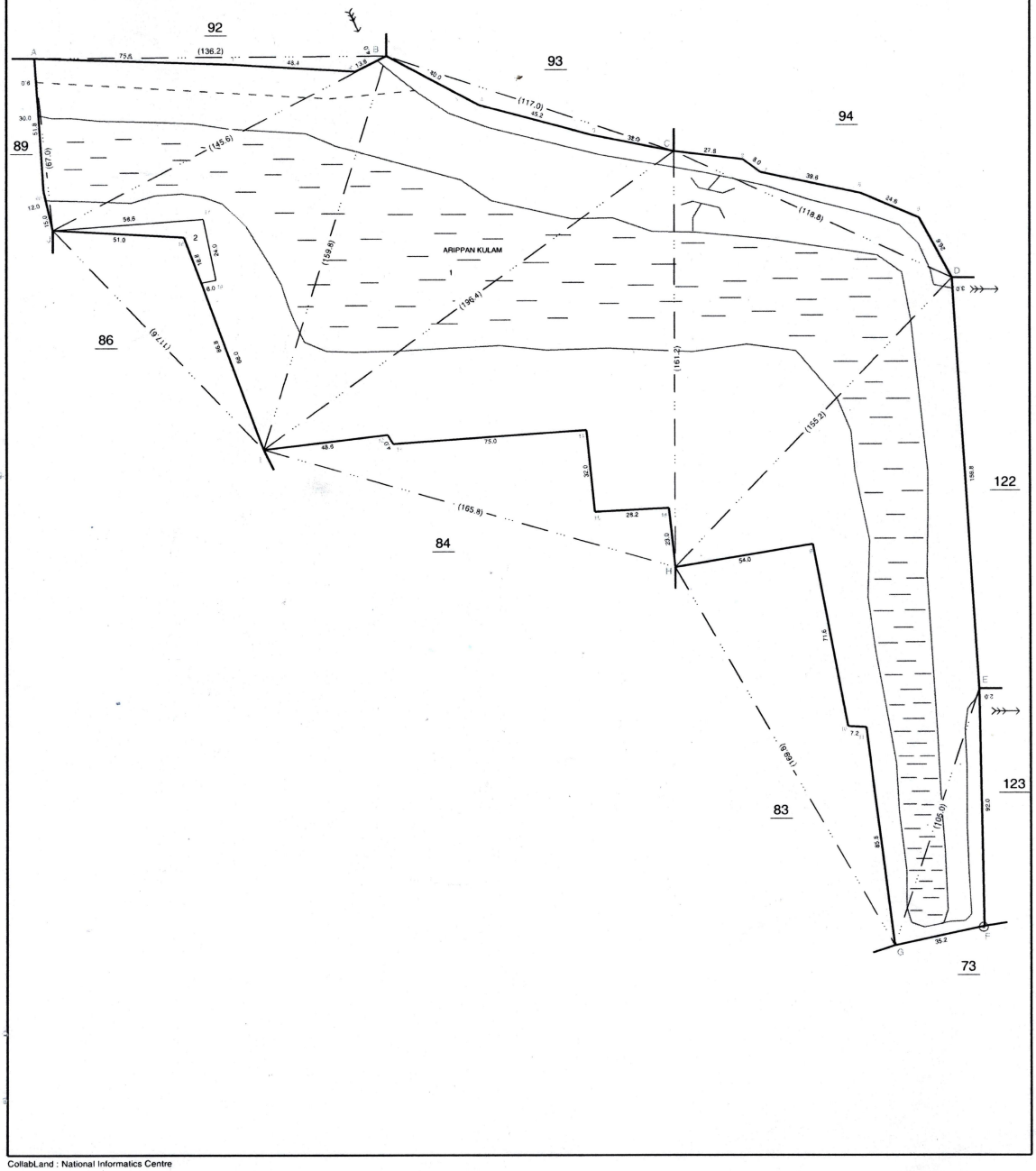
Taluk : Villianur

Village : ORAPATTU [11]

Survey No : 85

Area : Hect 05 Ares 16.00

Scale : 1 : 1000



CollabLand : National Informatics Centre

19. Kaliyathakuttai at Sanniyasikuppam village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 55`56.80" N 79º `38`53.77" E

3. Dimension: Side 1: 124 ft.
   Side 2: 105 ft.
   Side 3: 124 ft.
   Side 4: 105 ft.

4. Total Area: 12701 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Not Present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: a. Rain,
   b. Pumping

10. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? No.

14. Whether desilted earlier? Yes (Partially)
    If yes, i. When was it desilted? 2017
    ii. by whom? DHAN Foundation

15. No of trees around the bund: 87 and its status: alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

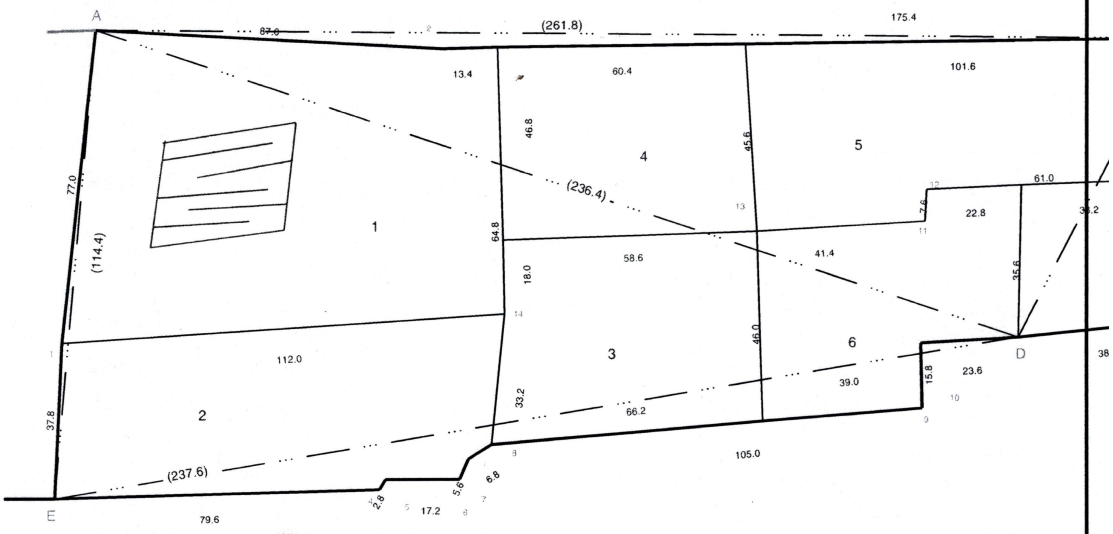
Survey No : 99

Tal Villianur

Area 98 Hect 02 Ares 53.50

Village : SANNIYASIKUPPAM [9]

Scale : 1 : 1000



V.NO.8 THIRUBUVANAI

		Ladder		
		A		
		(236.4)		
	40.0	210.0		
	8.2	210.0		
	30.0	149.4		
	Line	149.4		
		D		
		B		
		(81.6)		
		20.8	32.0	C
		D		
		A		
		(236.4)		
14	34.0	120.0		
		68.4	4.4	13
		32.2	27.2	12
		30.2	19.6	11
		D		
		(237.6)		
10	2.4	214.0		
		211.8	13.4	9
		107.0	4.6	8
		101.0	7.2	7
		98.0	11.6	6
		80.4	8.6	5
		78.6	11.0	4
		E		
		B		
		(68.4)		
		34.4	1.0	3
		C		
		B		
		(261.8)		
		225.0	72.8	D
		84.4	3.8	2
		A		
		(114.4)		
1	1.8	37.8		
		E		

20. Iyyanarkoilkulam at Sanniyasikuppam village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 56`07.96" N  79º `39`22.34" E

3. Dimension: Side 1: 197 ft.
   Side 2: 128 ft.
   Side 3: 197 ft.
   Side 4: 128 ft.

4. Total Area: 23465.32 sq. ft.

5. Is water available: No

6. Status of Eutrophication: Not Present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: a. Rain,
   b. Pumping

10. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. Recharging purpose

12. Is waste water discharged inside the pond? No.

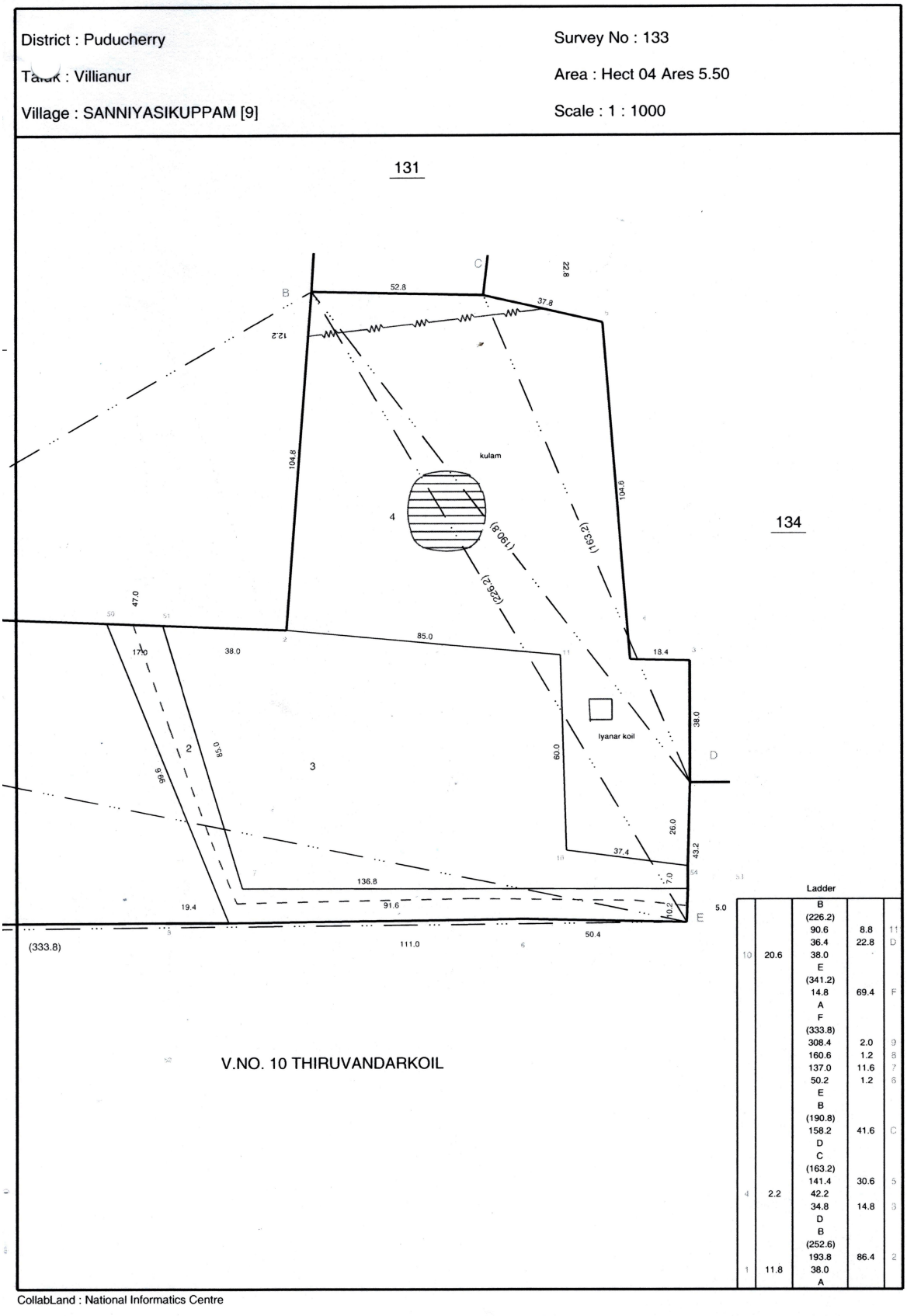
13. Is it given for lease? No.

14. Whether desilted earlier? No

15. No of trees around the bund: 39 and its status: alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:



21. Kalkattikulam at Sompet village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 58`44.20" N  79º `39`45.05" E

3. Dimension: Side 1: 233 ft.
   Side 2: 183 ft.
   Side 3: 233 ft.
   Side 4: 183 ft.

4. Total Area: 46607.73 Ha

5. Is water available: No

6. Status of Eutrophication: Not Present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: a. Rain,
   b. Inlet channel (channel from sompet tank)
   c. Recharging purpose

10. Status of bund? covered with bushes
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

11. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? No.

14. Whether desilted earlier? No

15. No of trees around the bund: Nil

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

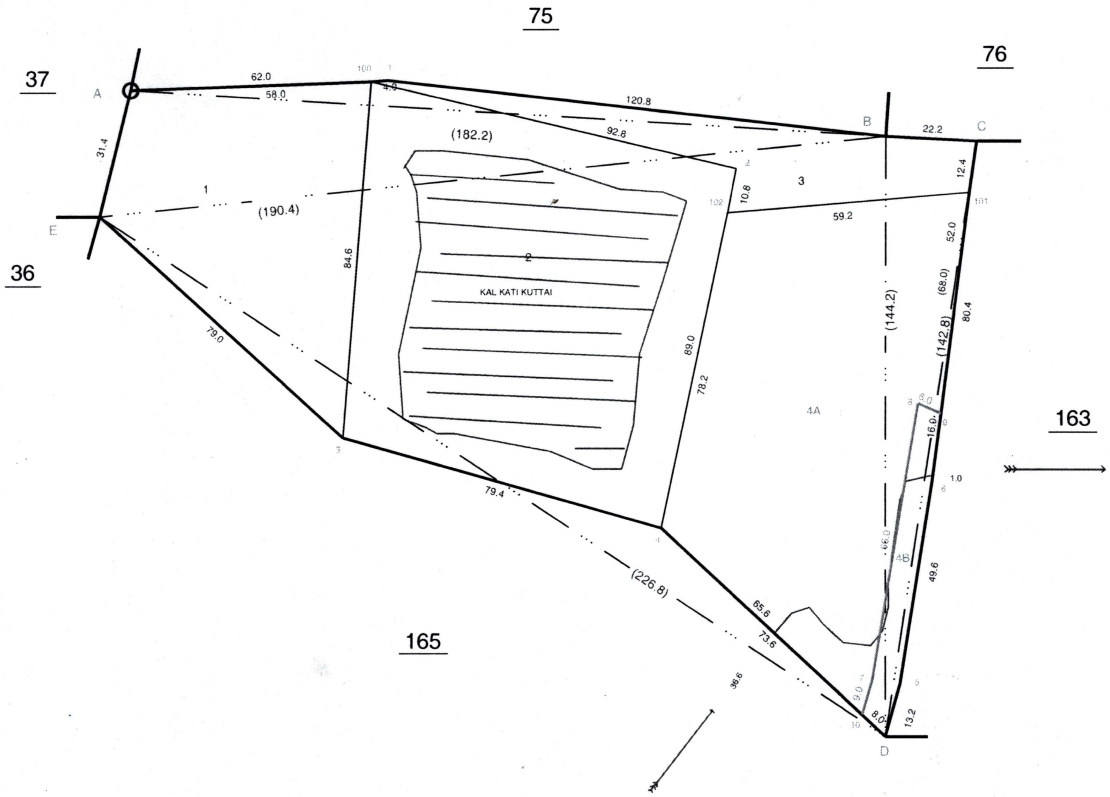
Survey No : 164

Taluk : Villianur

Area : Hect 01 Ares 92.00

Village : MANNADIPET [4]

Scale : 1 : 1000



Ladder

		C		
		(142.8)		
		62.6	1.8	6
		20.0	3.6	
		13.2	1.6	5
	LINE	9.8		
	0.4	7.2		
7	5.6	13.2		
8	4.2	80.6		
		D		
		(226.8)		
	3.0	215.0		
4	12.0	154.0		
	16.0	153.8		
		78.4	9.0	
		78.0	12.0	3
		E		
		(190.4)		
		179.8	29.2	A
		116.0	2.0	
	5.6	43.4		
2	4.2	36.8		
		B		
		D		
		(144.2)		
C	22.0	1.2		
		B		
		(182.2)		
1	6.0	61.6		
		A		

CollabLand : National Informatics Centre

22. Iyyanarkoilkulam at Sompet village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 58`29.16" N  79º `37`51.03" E

3. Dimension: Side 1: 233 ft.
   Side 2: 167 ft.
   Side 3: 233 ft.
   Side 4: 167 ft.

4. Total Area: 30892.42 sq. ft

5. Is water available: No

6. Status of Eutrophication: Fully present

7. Is water available throughout the year: No

8. Are inlet and outlet available: Yes,
   If yes, are they alive?: Yes. Inlet available adjacent to Agriculture land

9. Source of water: a. Rain,
   b. Inlet channel (channel from vadhanur tank)

10. Status of bund? Covered with bushes
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

11. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. Recharging

12. Is waste water discharged inside the pond? Yes.
    If Yes, Source: Domestic waste water

13. Is it given for lease? No.

14. Whether desilted earlier? Nil

15. No of trees around the bund: 8 and its status: Alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

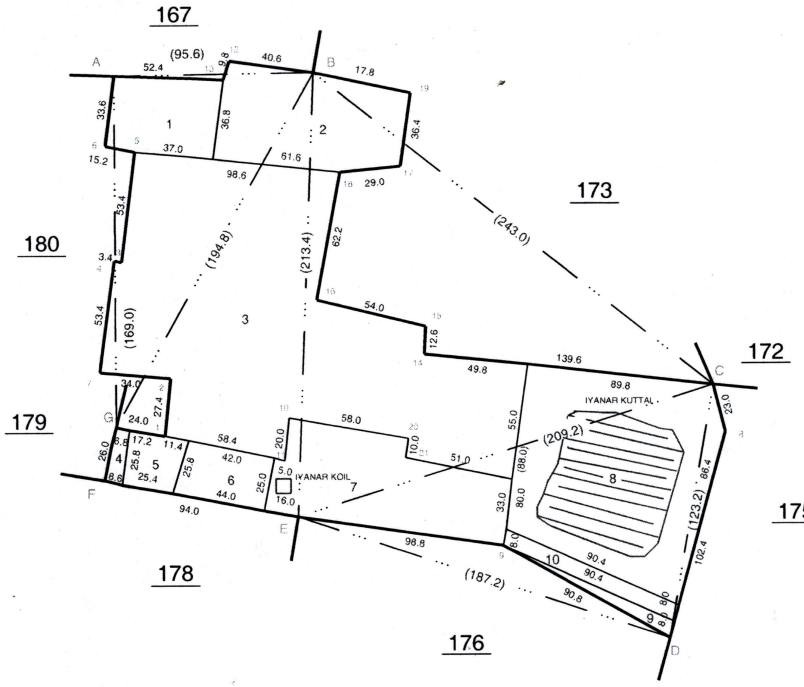
Taluk : Villianur

Village : MANNADIPET [4]

Survey No : 174

Area : Hect 04 Ares 3.50

Scale : 1 : 2000



Ladder

		G		
		(194.8)		
		47.6	82.8	A
		B		
		E		
		(209.2)		
		151.4	11.4	21
		147.2	20.0	20
		76.0	5.2	
		C		
		B		
		(243.0)		
		200.4	21.4	19
18	30.2	203.4		
17	9.8	182.2		
16	85.2	174.6		
15	63.0	125.4		
14	74.0	118.2		
		C		
		A		

		(95.6)		
13	2.8	43.2		
		40.0	6.6	12
		B		
		E		
		(213.4)		
		195.6	2.8	
		192.0	2.4	
		186.4	7.0	11
		173.6	88.2	G
		166.2	5.4	10
		B		
		D		
		(187.2)		
	26.0	114.2		
9	17.2	98.0		
		E		
		C		
		(123.2)		
		102.0	9.2	8
	7.2	38.0		
	1.8	100.0		
	5.2	74.0		
		D		
		A		
		(169.0)		
6	4.4	135.2		
		132.2	10.2	5
4	0.2	79.6		
		79.2	3.0	3
7	7.6	26.4		
		23.4	26.4	2
		G		
	BACK	3.8	23.4	1
		G		
		(26.0)		
		18.0	LINE	
		LINE	0.2	
		F		

CollabLand : National Informatics Centre

23. Gingeekulam at Manalipet village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 12º 01`41.21" N 79º `37`37.34" E

3. Dimension: Side 1: 200 ft.
   Side 2: 200 ft.
   Side 3: 200 ft.
   Side 4: 200 ft.

4. Total Area: 40149.39 sq. ft

5. Is water available: No.

6. Status of Eutrophication: Fully present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: Rain

10. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

11. Do people use the pond
    a. bathing/washing of cloths,
    b. for cattle,
    c. Recharging,
    d. for religious activities

12. Is waste water discharged inside the pond? No.

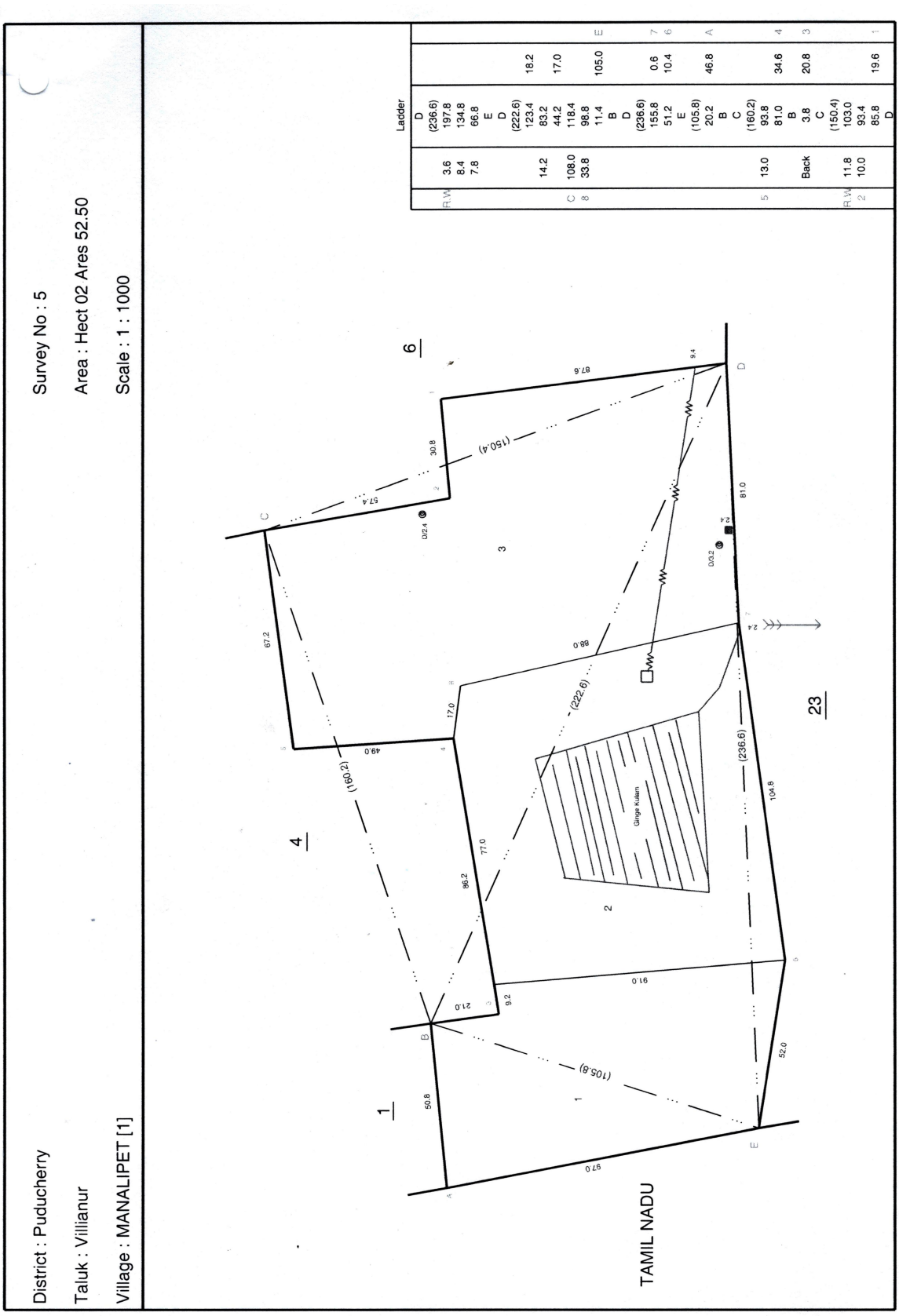
13. Is it given for lease? No.

14. Whether desilted earlier? Nil

15. No of trees around the bund: 03 and its status: Alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:



24. Mangkulam, K. Andiyarpalayam

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 55` 42.95" N 79º 37` 15.95" E

3. Dimension: Side 1: 218 ft.
   Side 2: 164 ft.
   Side 3: 218 ft.
   Side 4: 164 ft.

4. Total Area: 35,752 sq.ft

5. Is water available: No

6. Status of Eutrophication: Not present

7. Is water available throughout the year: No

8. Are inlet and outlet available: No

9. Source of water: a. Rain,
   b. Pumping

10. Status of bund: Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? No

11. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. Recharging

12. Is waste water discharged inside the pond? No.

13. Is it given for lease? No.

14. Whether desilted earlier? No

15. No of trees around the bund: 29 and its status: Alive

16. Pond photos before execution of the work:

17. FMB Diagram of the pond:

District : Puducherry

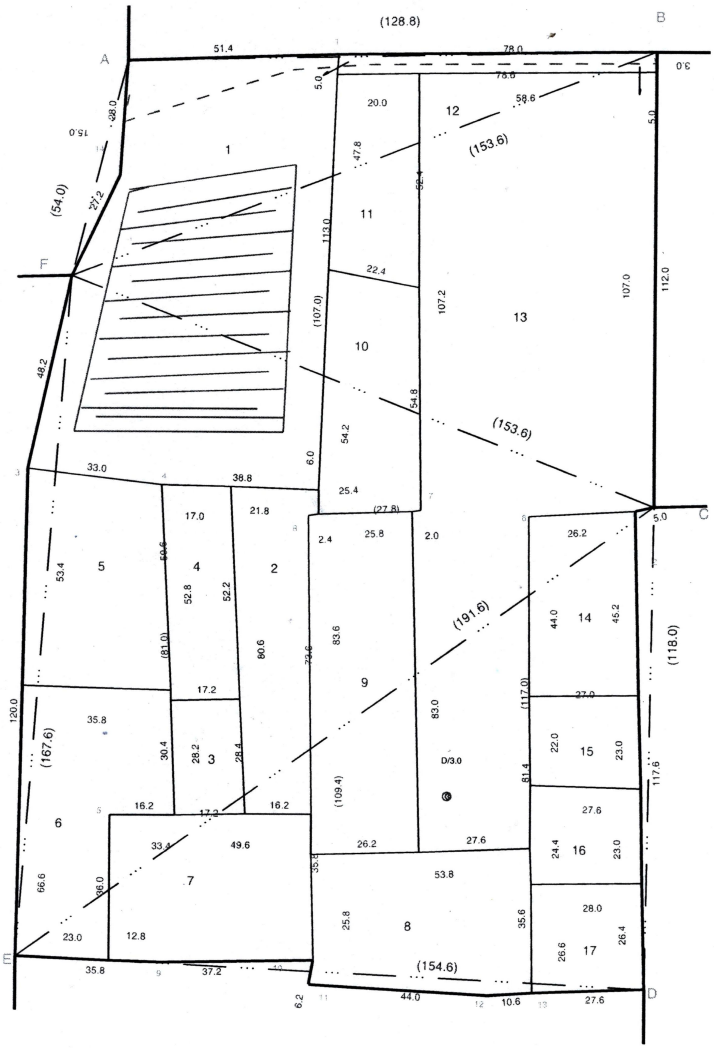
Taluk : Villianur

Village : KALITHEERTHAL KUPPAM [6]

Survey No : 148

Area : Hect 03 Ares 27.50

Scale : 1 : 1000



Ladder

		F		
		(54.0)		
11	5.8	27.4		
		A		
		D		
		(154.6)		
		126.8	2.2	13
		116.4	3.4	12
		72.6	3.2	11
10	3.0	72.2		
9	0.2	35.8		
		E		
		F		
		(153.6)		
8	32.6	78.8		
6	12.8	28.6		
7	21.6	52.6		
		C		
		(191.6)		
		121.2	95.0	D
		E		
		(167.6)		
5	18.2	130.6		
4	26.2	48.6		
		47.8	7.4	3
		F		
		C		
		(118.0)		
2	5.0	117.0		
		D		
		F		
		(153.6)		
		122.0	44.4	A
		B		
		(128.8)		
		51.2	2.0	1
		A		
		C		
		(112.0)		
		B		

CollabLand : National Informatics Centre

25. Uralkulam (near burial ground) at Madukarai village

1. Commune: Nettapakkam Commune Panchayat

2. GPS coordinates: 11º 52` 47.52" N 79º 36` 04.61" E

3. Dimension: Side 1: 200 ft.
   Side 2: 56 ft.
   Side 3: 200 ft.
   Side 4: 56 ft.

4. Total Area: 64476 sq. ft.

5. Depth of pond: Depth 1: 13.50 ft,
   Depth 2: 13 ft,
   Depth 3: 14 ft.

6. Is water available: No

7. Status of Eutrophication: Not Present

8. Is water available throughout the year: No

9. Are inlet and outlet available: Yes,
   If yes, are they alive?: Yes, in good condition

10. Source of water: a. Rain,
    b. Pumping

11. Status of bund? Good condition but covered with bushes
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle

13. Is waste water discharged inside the pond? No.

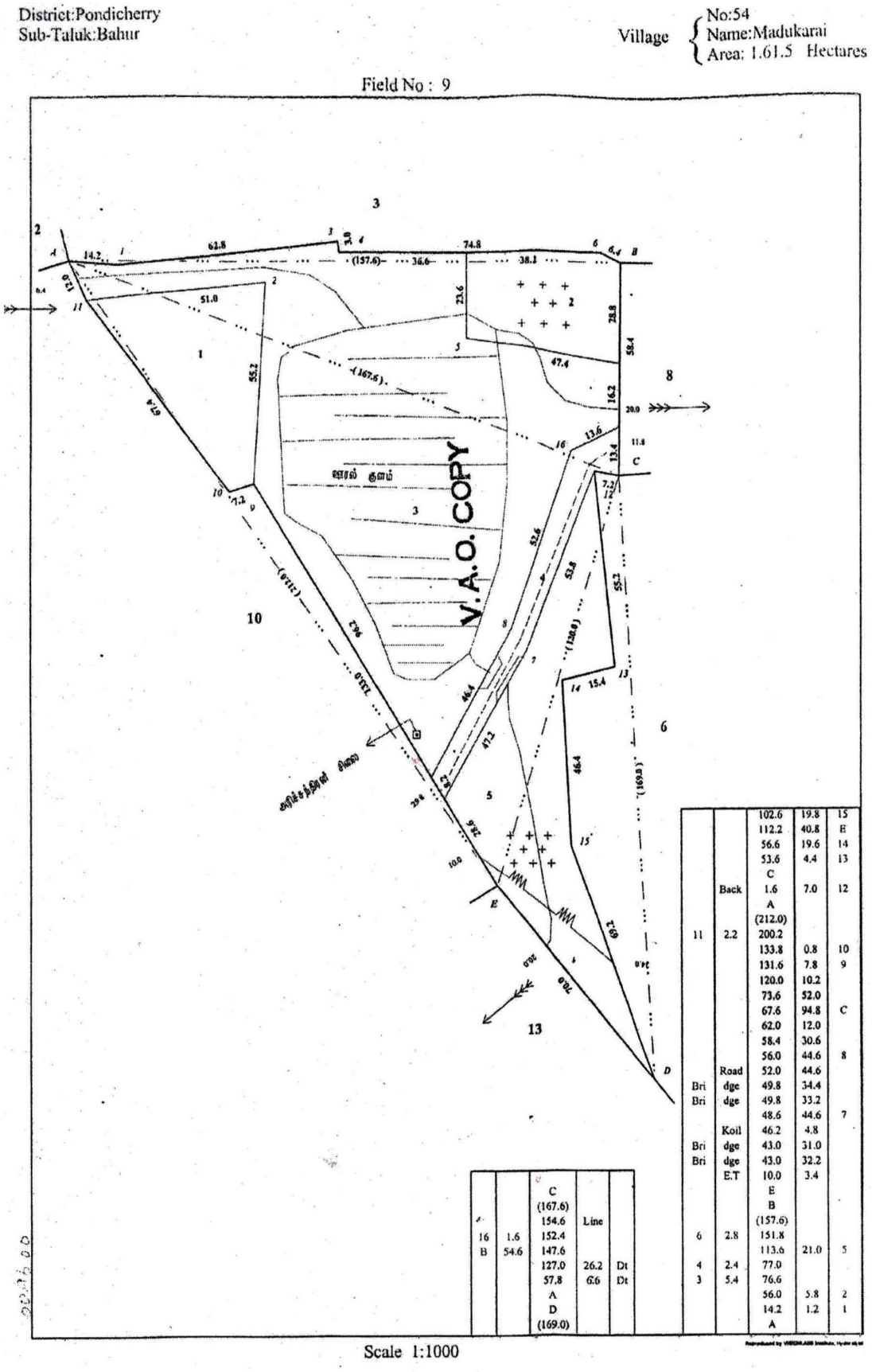
14. Is it given for lease? No.

15. Whether desilted earlier? No

16. No of trees around the bund: 20 and its status : Alive

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



			102.6	19.8	15
			112.2	40.8	E
			56.6	19.6	14
			53.6	4.4	13
			C		
		Back	1.6	7.0	12
			A		
			(212.0)		
11	2.2		200.2		
			133.8	0.8	10
			131.6	7.8	9
			120.0	10.2	
			73.6	52.0	
			67.6	94.8	C
			62.0	12.0	
			58.4	30.6	
			56.0	44.6	8
		Road	52.0	44.6	
Bri		dge	49.8	34.4	
Bri		dge	49.8	33.2	
			48.6	44.6	7
		Koil	46.2	4.8	
Bri		dge	43.0	31.0	
Bri		dge	43.0	32.2	
		E.T	10.0	3.4	
			E		
			B		
			(157.6)		
6	2.8		151.8		
			113.6	21.0	5
4	2.4		77.0		
3	5.4		76.6		
			56.0	5.8	2
			14.2	1.2	1
			A		

		C			
		(167.6)			
		154.6	Line		
16	1.6	152.4			
B	54.6	147.6			
		127.0	26.2	Dt	
		57.8	6.6	Dt	
		A			
		D			
		(169.0)			

26. Pidarikulam at Madukarai village

1. Commune: Nettapakkam Commune Panchayat

2. GPS coordinates: 11º 52` 03.76" N 79º 36` 22.68" E

3. Dimension: Side 1: 140 ft.
   Side 2: 260 ft.
   Side 3: 160 ft.
   Side 4: 260 ft.

4. Total Area: 52958 sq. ft.

5. Depth of pond: Depth 1: 15 ft,
   Depth 2: 14 ft,
   Depth 3: 15 ft.

6. Is water available: No

7. Status of Eutrophication: Partially present

8. Is water available throughout the year: No

9. Are inlet and outlet available: Yes,
   If yes, are they alive? Yes. Inlet available

10. Source of water: a. Rain,
    b. Pumping

11. Status of bund? No bunds
    i. Is strengthening required? Yes ii. Are planting trees possible? Yes

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. for religious activities

13. Is waste water discharged inside the pond? Yes.
    If Yes, Source : domestic waste water

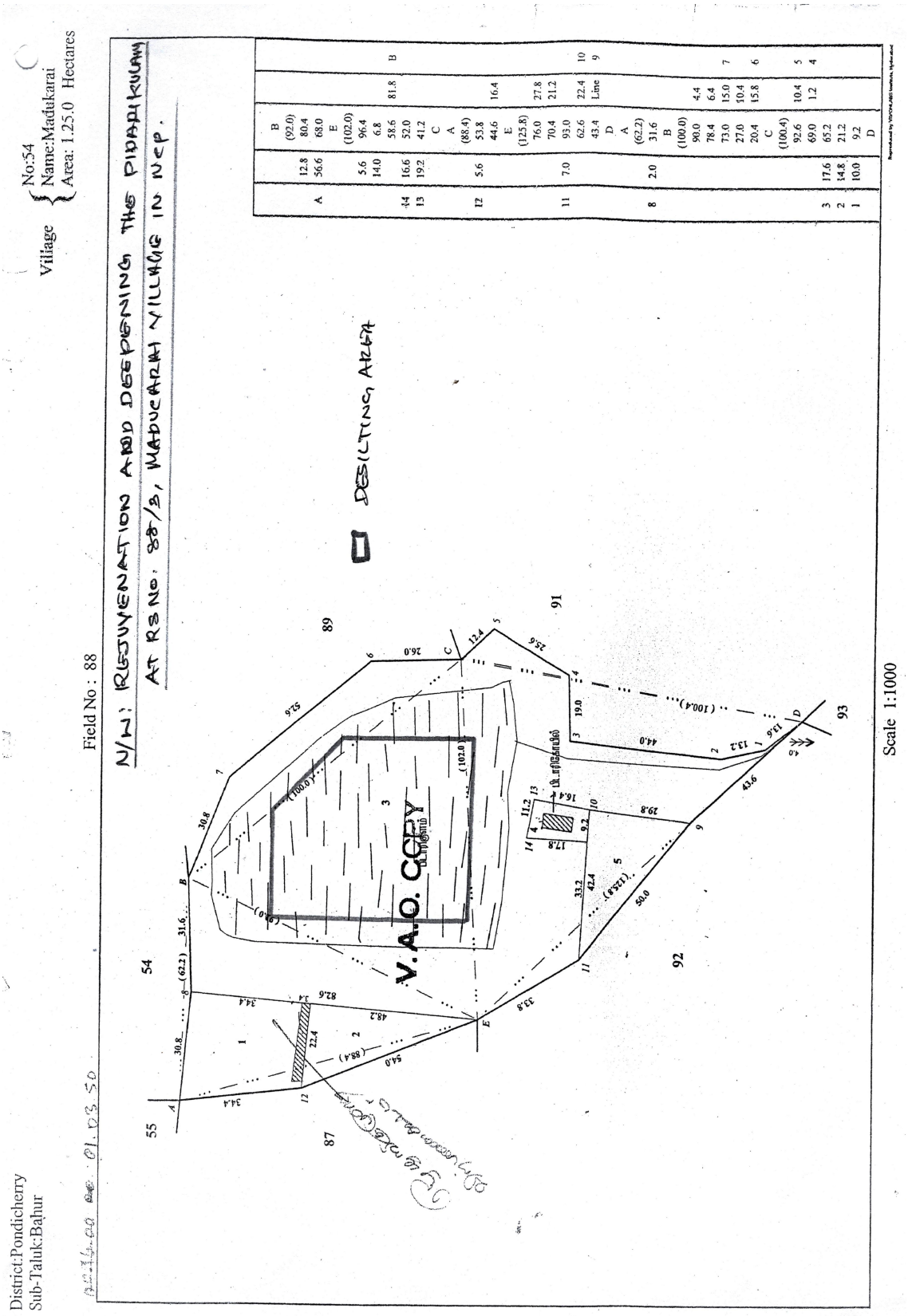
14. Is it given for lease? No

15. Whether desilted earlier? No

16. No of trees around the bund: 2 and its status: Alive

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



27. Ayyanar koil kulam at Embalam Revenue village

1. Commune: Nettapakkamm Commune Panchayat

2. GPS coordinates: 11º 52` 02.20" N 79º 43` 30.86" E

3. Dimension: Side 1: 175 ft.
   Side 2: 240 ft,
   Side 3: 240 ft.
   Side 4: 200 ft.

4. Total Area: 0-23-50

5. Depth of pond: Depth 1: 8 ft,
   Depth 2: 8 ft,
   Depth 3: 8 ft.

6. Is water available: Yes, if yes, water level from top: 5 ft.

7. Status of Eutrophication: Not present

8. Is water available throughout the year: No

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes. Alive

10. Source of water: a. Rain,
    b. Inlet channel (channel from embalam sitheri tank)

11. Status of bund? Good condition
    i. Is strengthening required? No
    ii. Are planting trees possible? Yes

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. for religious activities

13. Is waste water discharged inside the pond? No.

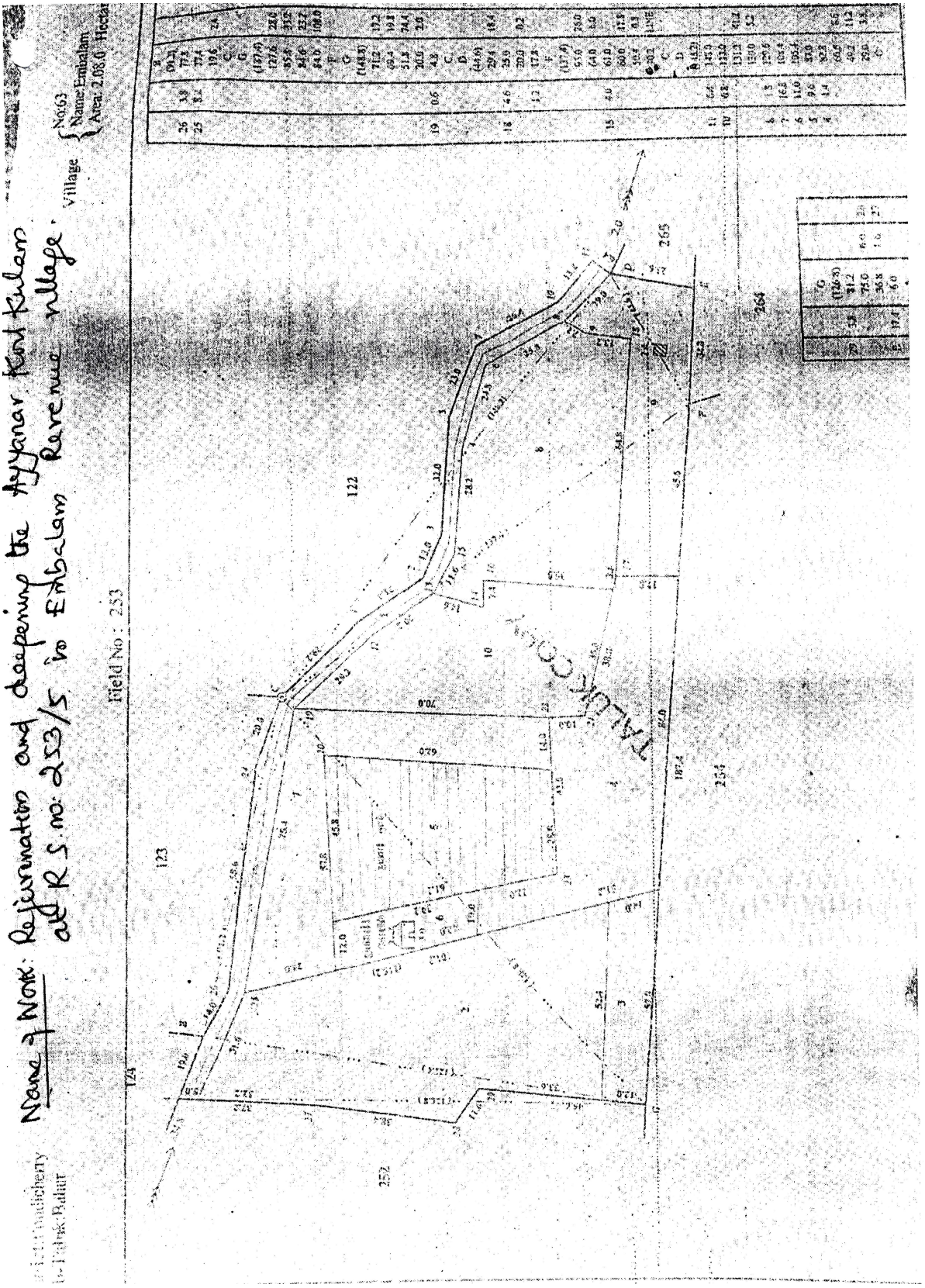
14. Is it given for lease? No.

15. Whether desilted earlier? No

16. No of trees around the bund: Nil

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



28. Kulam, Sembiapalayam, Embalam Revenue village

1. Commune: Nettapakkam Commune Panchayat

2. GPS coordinates: 11º 52` 59.32" N 79º 43` 46.65" E

3. Dimension: Side 1: 140 ft.
   Side 2: 147 ft.
   Side 3: 100 ft.
   Side 4: 110 ft.

4. Total Area: 0-49-50

5. Depth of pond: Depth 1: 7 ft.
   Depth 2: 6 ft.
   Depth 3: 7 ft.
   Depth 4: 7 ft.

6. Is water available: Yes, if yes, water level from top: 4 ft.

7. Status of Eutrophication: Partially present

8. Is water available throughout the year: No

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes. Alive

10. Source of water: Rain

11. Status of bund? Fully covered with bushes, need strengthening
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. for cattle,
    b. fishing

13. Is waste water discharged inside the pond? No.

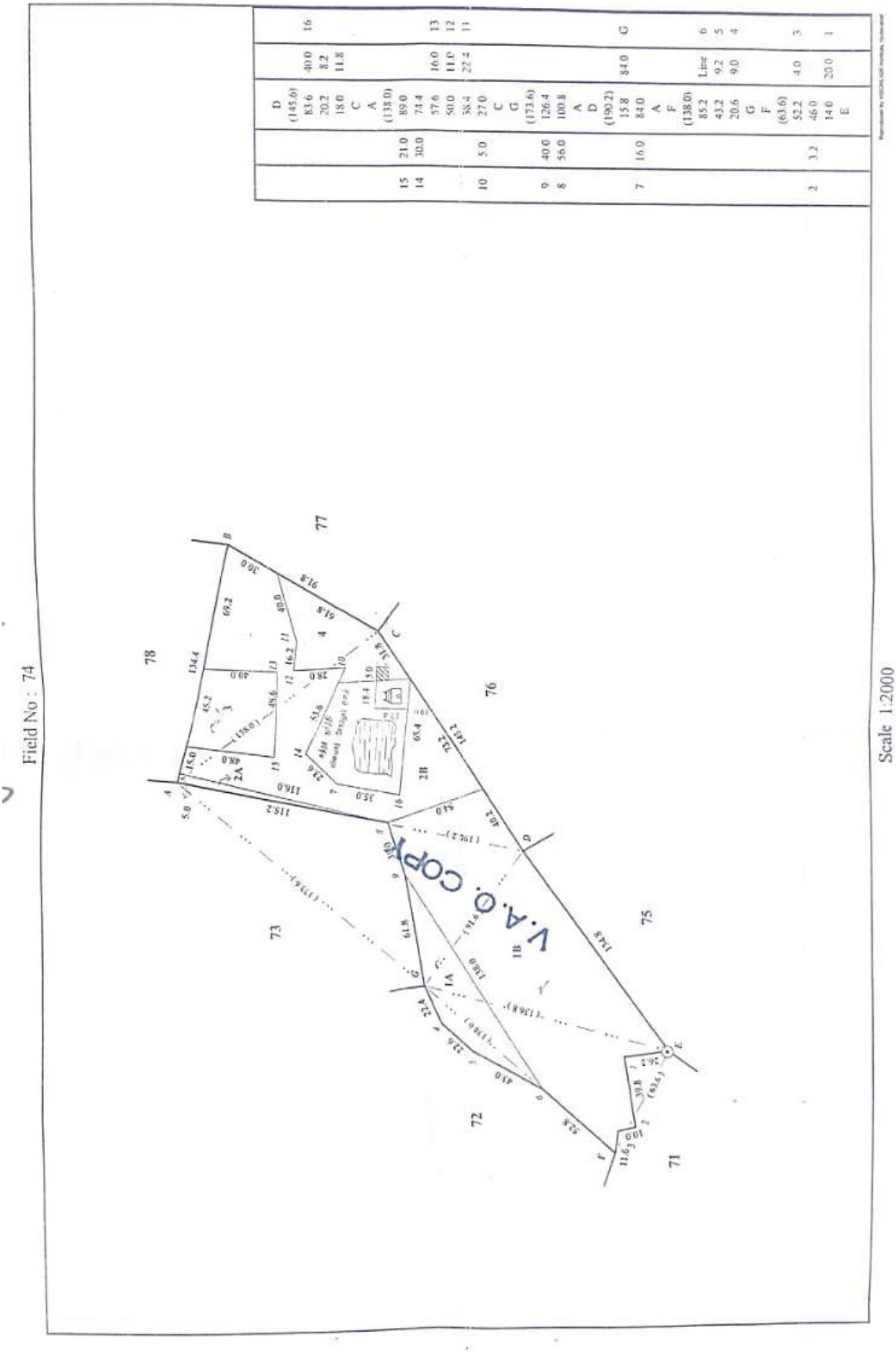
14. Is it given for lease? No.

15. Whether desilted earlier? No

16. No of trees around the bund: 7 and its status: Alive

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



29. KannimarKulam, Karikalampakkam Revenue village

1. Commune: Nettapakkam Commune Panchayat

2. GPS coordinates: 11º 52` 05.74" N 79º 44` 18.30" E

3. Dimension: Side 1: 200 ft.
   Side 2: 42 ft.
   Side 3: 210 ft.
   Side 4: 130 ft.

4. Total Area: 0-83-00

5. Depth of pond: Depth 1: 9 ft.
   Depth 2: 9 ft.
   Depth 3: 9 ft.
   Depth 4: 9 ft.

6. Is water available: No

7. Status of Eutrophication: Not present

8. Is water available throughout the year: No

9. Are inlet and outlet available: No

10. Source of water: a. Rain,
    b. Pumping

11. Status of bund? Partially good, need strengthening
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle,
    c. fishing,
    d. for religious activities

13. Is waste water discharged inside the pond? No.

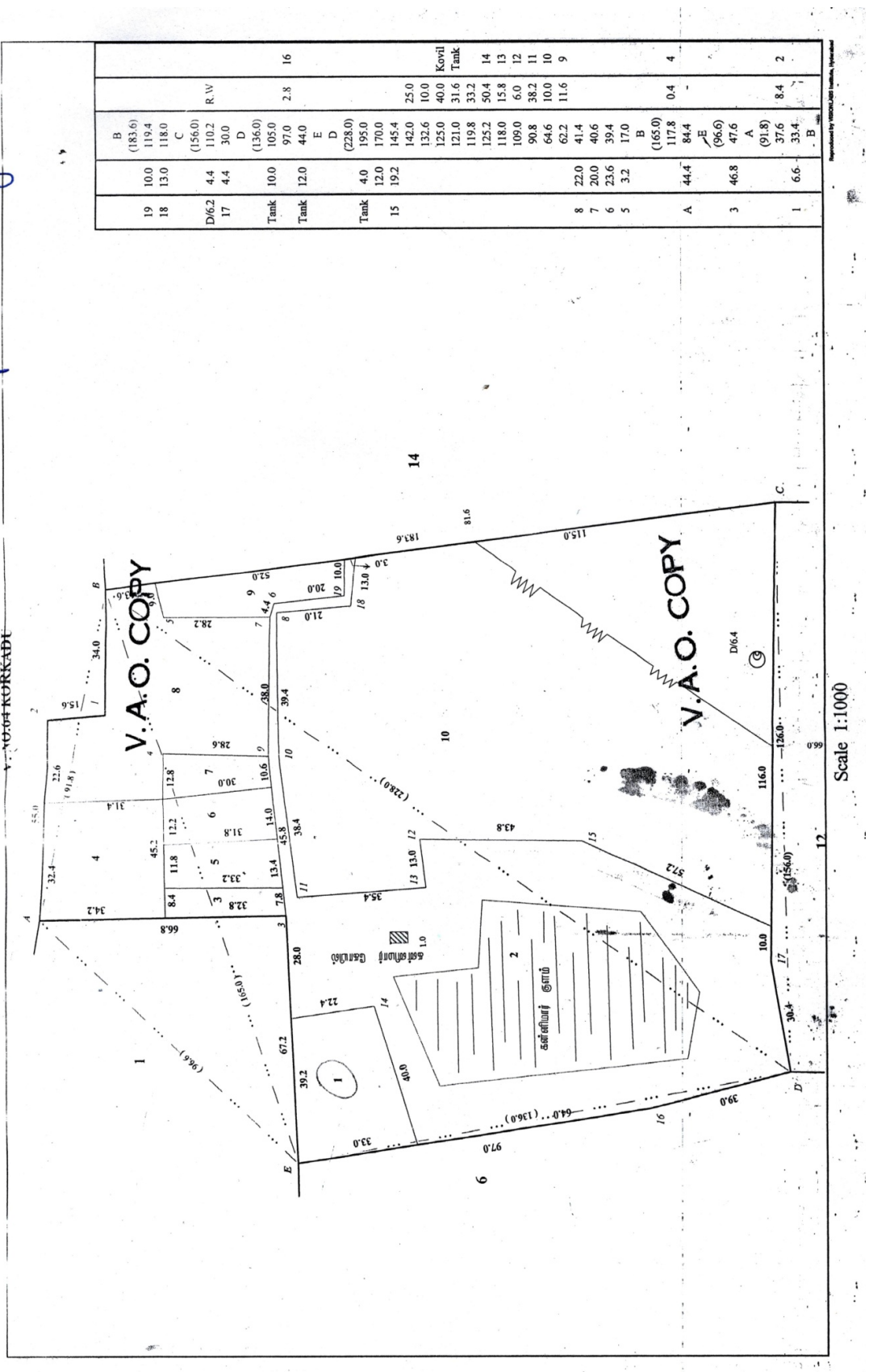
14. Is it given for lease? No.

15. Whether desilted earlier? No

16. No of trees around the bund: 10 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



30. VellaKulam, Embalam Revenue village

1. Commune: Nettapakkam Commune Panchayat

2. GPS coordinates: 11º 51` 58.05" N 79º 43` 09.30" E

3. Dimension: Side 1: 200 ft.
   Side 2: 200 ft.
   Side 3: 210 ft.
   Side 4: 130 ft.

4. Total Area: 0-81-50

5. Depth of pond: Depth 1: 7 ft.
   Depth 2: 7 ft.
   Depth 3: 7 ft.

6. Is water available: Yes, if yes, water level from top: 4 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: No

9. Are inlet and outlet available: No

10. Source of water: Rain

11. Status of bund? Fully covered with bushes need strengthening
    i. Is strengthening required? Yes
    ii. Are planting trees possible? Yes

12. Do people use the pond: Nil

13. Is waste water discharged inside the pond? No. biomedical wastes were found in the pond during inspection.

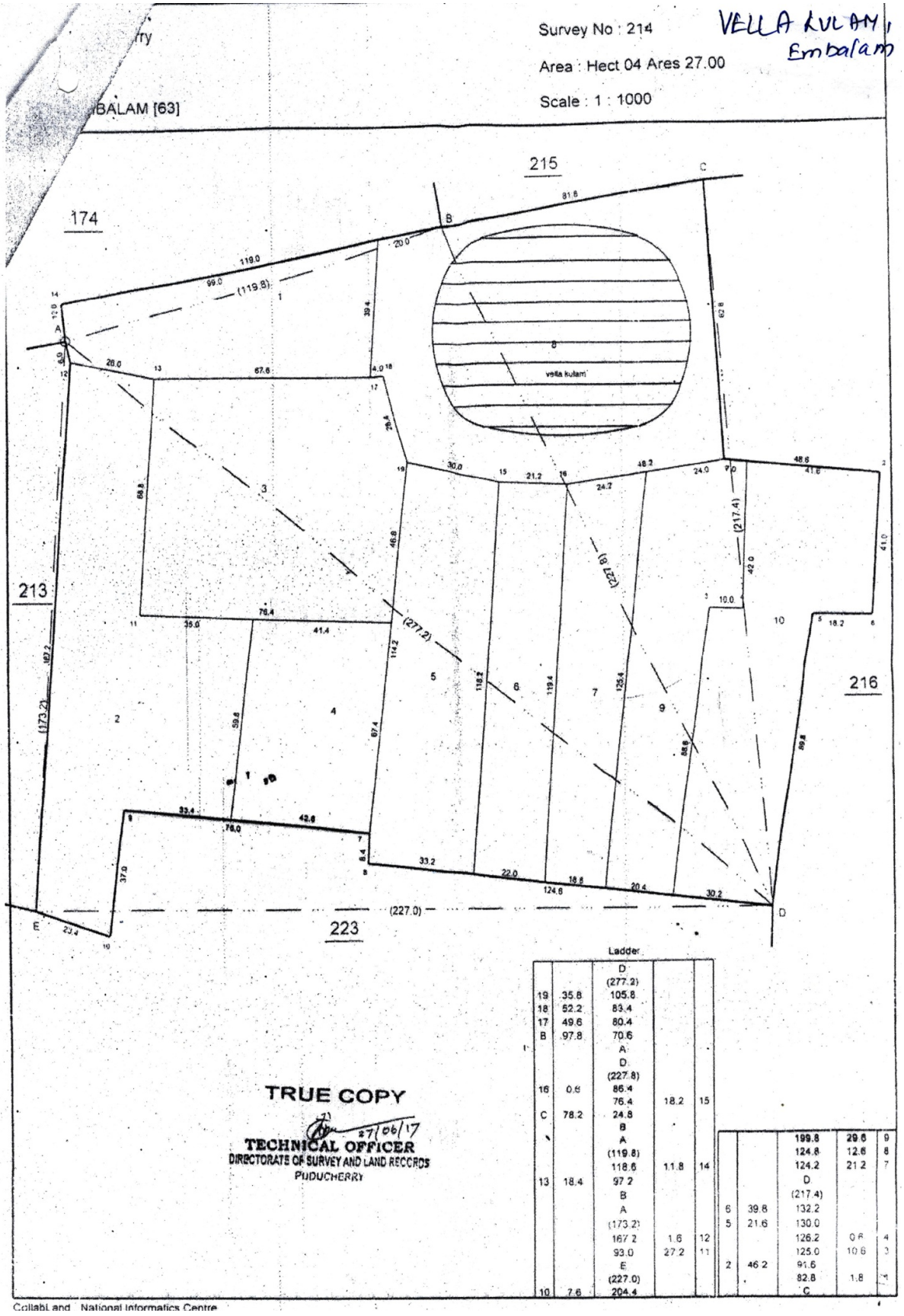
14. Is it given for lease? No.

15. Whether desilted earlier? No

16. No of trees around the bund: 10 trees alive.

17. Pond photos before execution of the work:

18. FMB Diagram of the pond:



31. Thirukanchikulam at Thirukanchi

1. Commune: Villianur Commune Panchayat

2. GPS coordinates: 11º 53` 02.87" N 79º 45` 48.48" E

3. Dimension: Side 1: 2297 ft.
   Side 2: 40 ft.
   Side 3: 2428 ft.
   Side 4: 40 ft.

4. Total Area: 1,34,979 sq. ft.

5. Depth of pond: Depth 1: 3 ft,
   Depth 2: 4 ft,
   Depth 3: 5 ft.

6. Is water available: Yes, if yes, water level from top: 5 ft.

7. Status of Eutrophication: Fully present

8. Is water available throughout the year: No

9. Are inlet and outlet available: Yes, if yes, are they alive? Yes

10. Source of water: a. Rain,
    b. Inlet channel (channel from Kuduvaiyar river)

11. Status of bund? Covered with bushes.
    i. Is strengthening required? Yes ii. Are planting trees possible? Yes

12. Do people use the pond a. for cattle,
    b. fishing,
    c. Agriculture

13. Is waste water discharged inside the pond? No.

14. Is it given for lease? No.

15. Whether desilted earlier? Yes
    i. When was it desilted? 2017-2018 (partly disilted)
    ii. by whom? B.D.O.(MGNERA Scheme)

16. No of trees around the bund: 500 and its status: Alive

17. Pond photos before execution of the work:

32. (Theertha) kulam at Vadhanur village

1. Commune: Mannadipet Commune Panchayat

2. GPS coordinates: 11º 57` 10" N 79º 39` 06" E

3. Dimension: Side 1: 220 ft.
   Side 2: 600 ft.
   Side 3: 230 ft.
   Side 4: 620 ft.

4. Total area: 135625.3 Sq. ft.

5. Depth of pond: Depth 1: 10 ft,
   Depth 2: 10 ft,
   Depth 3: 10 ft.

6. Is water available: No

7. Status of Eutrophication: Partially Present

8. Is water available throughout the year: No

9. Are inlet and outlet available: No

10. Source of water: Rain

11. Status of bund? Need strengthening
    i. Is strengthening required? Yes.
    ii. Are planting trees possible? Yes.

12. Do people use the pond a. bathing/washing of cloths,
    b. for cattle

13. Is waste water discharged inside the pond? Yes. If Yes, Source: Domestic waste water

14. Is it given for lease? No.

15. Whether desilted earlier? No

16. No of trees around the bund: 10 and its status: Alive

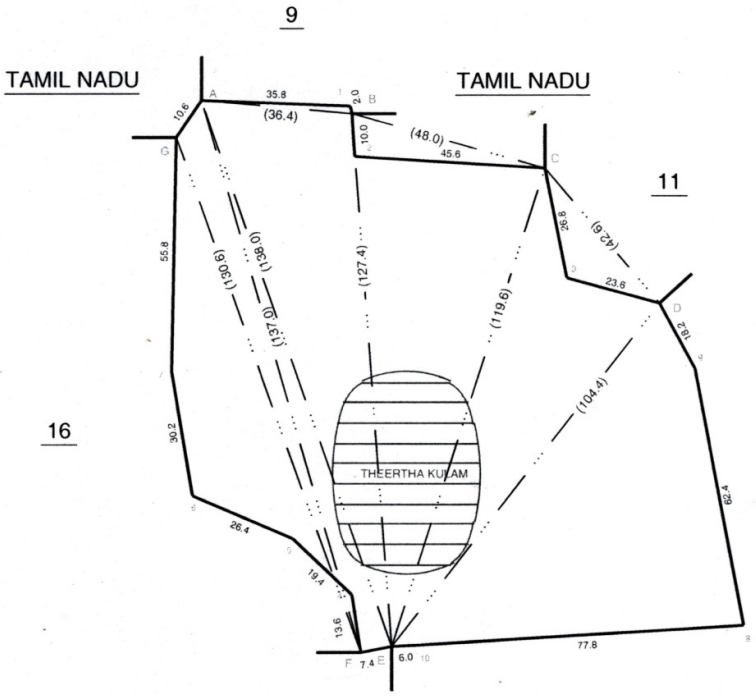
17. Pond photos before execution of the work:

18. FMB Diagram of the pond:

District : Puducherry | Survey No : 15

Taluk : Villianur | Area : Hect 01 Ares 28.50

Village : VADANUR [5] | Scale : 1 : 1000



Ladder

		A		
		(137.0)		
G	8.2	130.4		
		F		
		A		
		(138.0)		
		123.0	33.2	B
		40.0	LINE	DT
F	7.2	1.2		
		E		
		B		
		(127.4)		
		111.0	45.0	C
		100.0	LINE	DT
		E		
		C		
		(119.6)		
		97.8	36.2	D
		E		
		D		
		(104.4)		
		97.2	16.2	9
		40.0	LINE	DT
		56.2	63.2	8
		4.4	4.6	10
		E		
		G		
		(130.6)		
7	20.0	78.4		
6	25.6	48.8		
5	6.0	31.0		
		13.6	2.6	4
		F		
		D		
		(42.6)		
		23.2	13.2	3
		C		
		(48.0)		
		3.4	9.6	2
		B		
		A		
		(36.4)		
		0.6	1.8	1
		B		

CollabLand : National Informatics Centre