



AGRICULTURAL ENGINEERING DEPARTMENT

Kanniyakumari District

**DOCUMENTATION OF
Special Area Development of Programme
2016-17**



**Executive Engineer(AE)
Agricultural Engineering Department
Nagercoil**

1. Title of the scheme

SPECIAL AREA DEVELOPMENT OF PROGRAMME

2. Objectives of the Scheme

Special Area Development of Programme intends focus on the buffer zone adjoining the protected forests areas, which often suffer from lack of investment as they fall neither in the forests nor one close to habitations but are critical to soil and water conservation. Hence, scope of SADP would cover the interaction between water and production landscapes and human livelihood; water and eco system services and water biodiversity. There would be focus on enhancing livelihood opportunities in-situ or micro watershed-based planning. SADP, addresses the common problems faced in the hill ranges delineated above which are treated as a single biogeographical entity. Premised on Tamil Nadu's vision of fostering sustainable development and preserving its natural heritage, the SADP would be a pioneer in demonstrating the reconciliation of conserving natural resources and biodiversity for fulfilling human needs and aspirations.

3. Implementing Department

Agricultural Engineering Department, Kanyakumari District

4. Outlay of the project

Sl. No	Year	Name of Work	No. of works	Outlay Rs. in Lakhs
1.	2016/17	Gabion Check Dam	25	27.96137
2.	2016/17	Erosion control Structures	22	10.68782
3.	2016/17	Masonry Check Dam	1	2.37630
4.	2016/17	Cart Track Crossing	1	1.14750
	Total		49	42.17299

5. Area covered under the scheme (Rural/Urban)

Thovalai and Melpuram blocks of Kanyakumari District

6. Current Status of the parameter/situation prior to the implementation of the scheme.

1. The Project area is the sloping lands and it creates problem of soil erosion, hence experiences heavy silt load in the runoff.
2. Heavy flows from the adjoining steep hills covered with Reserve Forest.
3. Unchecked flow with high velocity in deep and wide gullies resulting in scouring and widening of gullies
4. Due to heavy runoff, no chance of ground water recharging
5. Silting up in Tanks in downstream side area.
6. Agricultural productivity decreases.
7. No sustainable income to farmers
8. No employment opportunities

7. Impact of the scheme

- Construction of water storage structures like, Masonry check dams would replenish the ground water potential and avoid silting up of Tanks in downstream side area .
- Construction of water Gully control structures like Gabion check dams would regulate the streams.
- Construction of water Stone walls would prevent soil erosion at stream banks and adjoining lands

8. Target population benefited / Service Delivery improved.

More than 75 Farmers and Agricultural labourers benefitted due to increase in employment opportunities , agricultural production and sustainable income. Formation of Gabion Check dams in smaller streams for prevention of soil erosion

9. Performance of the indicators.

Local Farmers and people get employment opportunities , increased agricultural production and sustainable income, water and alternate income generation source

10. Outcome of the Project

Formation of Masonry Check dams across streams prevents soil erosion to avoid silting up of Tanks in downstream side area and water storage in pinch period to replenish the ground water recharge upto 85%.

Formation of Gabion Check dams across smaller streams regulates the streams for prevention of soil erosion and sediment yield up to 92% and runoff reduces upto 70%.

Formation of Erosion Control Structures such as stone walls along smaller streams prevents of soil erosion up to 92% .

Due to improved ground water recharge and reduced soil erosion , Agricultural production increases upto 80% and farmers benefitted with sustainable income.

By providing employment opportunities to the people, the socio-economic status has been improved and alternate employment opportunities are provided to people. Due this opportunity the livelihood is gradually improved

11. Photographs

Documentation of Special Area Development of Programme-2016-17 Agricultural Engineering Department, Kanniyakumari District.

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	134
Name of work	:	Gabion Check Dam - 1
Estimate No & Date	:	EE(AE) / Ngl / 11/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,00,000/-
Year	:	2016 - 17
Latitude	:	8.25558
Longitude	:	77.41791

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	135
Name of work	:	Gabion Check Dam - 2
Estimate No & Date	:	EE(AE) / Ngl / 11/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,00,000/-
Year	:	2016 - 17
Latitude	:	8.25497
Longitude	:	77.41898

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	131
Name of work	:	Gabion Check Dam - 3
Estimate No & Date	:	EE(AE) / Ngl / 11/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,00,000/-
Year	:	2016 - 17
Latitude	:	8.25421
Longitude	:	77.41805

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	132
Name of work	:	Gabion Check Dam - 4
Estimate No & Date	:	EE(AE) / Ngl / 11/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,00,000/-
Year	:	2016 - 17
Latitude	:	8.25414
Longitude	:	77.41839

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Navalkadu
S.F. No.	:	22
Name of work	:	Erosion control Structure - 1
Estimate No & Date	:	EE(AE) / Ngl /08/2016-17, dt: 23.05.2017
Estimate Amount	:	Rs. 3,75,000/-
Year	:	2016 - 17
Latitude	:	8.22048
Longitude	:	77.42156

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Navalkadu
S.F. No.	:	9
Name of work	:	Erosion control structure - 2
Estimate No & Date	:	EE(AE) / Ngl /08/2016-17, dt: 23.05.2017
Estimate Amount	:	Rs. 3,75,000/-
Year	:	2016 - 17
Latitude	:	8.25200
Longitude	:	77.41857

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	: Nagercoil
District	: Kanniyakumari
Taluk	: Thovalai
Block	: Thovalai
Village	: Navalkadu
S.F. No.	: 56
Name of work	: Erosion control structure - 3
Estimate No & Date	: EE(AE) / Ngl / 08/2016-17, dt: 23.05.2017
Estimate Amount	: Rs. 3,75,000/-
Year	: 2016 - 17
Latitude	: 8.24087
Longitude	: 77.42121

Special Area Development Programme - 2016 - 2017



Before



During



After

Sub Division	: Nagercoil
District	: Kanniyakumari
Taluk	: Thovalai
Block	: Thovalai
Village	: Esanthimangalam (South)
S.F. No.	: 135
Name of work	: Erosion control structure - 4
Estimate No & Date	: EE(AE) / Ngl / 08/2016-17, dt: 23.05.2017
Estimate Amount	: Rs. 3,75,000/-
Year	: 2016 - 17
Latitude	: 8.25466
Longitude	: 77.41934

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Navalkadu
S.F. No.	:	131
Name of work	:	Erosion control structure - 5
Estimate No & Date	:	EE(AE) / Ngl / 08/2016-17, dt: 23.05.2017
Estimate Amount	:	Rs. 3,75,000/-
Year	:	2016 - 17
Latitude	:	8.25457
Longitude	:	77.41780

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (North)
S.F. No.	:	1
Name of work	:	Gabion Check Dam - 1
Estimate No & Date	:	EE(AE) / Ngl / 13/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,50,000/-
Year	:	2016 - 17
Latitude	:	8.26047
Longitude	:	77.42210

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (North)
S.F. No.	:	1
Name of work	:	Gabion Check Dam - 2
Estimate No & Date	:	EE(AE) / Ngl / 13/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,50,000/-
Year	:	2016 - 17
Latitude	:	8.26067
Longitude	:	77.42262

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (North)
S.F. No.	:	1
Name of work	:	Gabion Check Dam - 3
Estimate No & Date	:	EE(AE) / Ngl / 13/2016-17, dt: 25.05.2017
Estimate Amount	:	Rs. 5,50,000/-
Year	:	2016 - 17
Latitude	:	8.25996
Longitude	:	77.42271

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	: Nagercoil
District	: Kanniyakumari
Taluk	: Thovalai
Block	: Thovalai
Village	: Esanthimangalam (South)
S.F. No.	: 121
Name of work	: Gabion Check Dam - 4
Estimate No & Date	: EE(AE) / Ngl / 13/2016-17, dt: 25.05.2017
Estimate Amount	: Rs. 5,50,000/-
Year	: 2016 - 17
Latitude	: 8.25978
Longitude	: 77.42287

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	: Nagercoil
District	: Kanniyakumari
Taluk	: Thovalai
Block	: Thovalai
Village	: Esanthimangalam (South)
S.F. No.	: 121
Name of work	: Gabion Check Dam - 5
Estimate No & Date	: EE(AE) / Ngl / 13/2016-17, dt: 25.05.2017
Estimate Amount	: Rs. 5,50,000/-
Year	: 2016 - 17
Latitude	: 8.25955
Longitude	: 77.42323

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	120
Name of work	:	Gabion Check Dam - 1
Estimate No & Date	:	EE(AE) / Ngl / 06/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 6,50,000/-
Year	:	2016 - 17
Latitude	:	8.26097
Longitude	:	77.42441

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	120
Name of work	:	Gabion Check Dam - 4
Estimate No & Date	:	EE(AE) / Ngl / 06/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 6,50,000/-
Year	:	2016 - 17
Latitude	:	8.26061
Longitude	:	77.42498

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Nagercoil
District	:	Kanniyakumari
Taluk	:	Thovalai
Block	:	Thovalai
Village	:	Esanthimangalam (South)
S.F. No.	:	120
Name of work	:	Gabion Check Dam - 5
Estimate No & Date	:	EE(AE) / Ngl /06/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 6,50,000/-
Year	:	2016 - 17
Latitude	:	8.26037
Longitude	:	77.42524

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	kaliyal
S.F. No.	:	30
Name of work	:	Gabion Check Dam - 1
Estimate No & Date	:	EE(AE) / Ngl /02/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 5,61,000/-
Year	:	2016 - 17
Latitude	:	8.46259
Longitude	:	77.24511

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	30
Name of work	:	Gabion Check Dam - 2
Estimate No & Date	:	EE(AE) / Ngl / 02/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 5,61,000/-
Year	:	2016 - 17
Latitude	:	8.46213
Longitude	:	77.24551

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	31
Name of work	:	Gabion Check Dam - 3
Estimate No & Date	:	EE(AE) / Ngl / 02/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 5,61,000/-
Year	:	2016 - 17
Latitude	:	8.46112
Longitude	:	77.24595

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	30 & 31
Name of work	:	Erosion control structure - 7 units
Estimate No & Date	:	EE(AE) / Ngl / 03/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 4,00,000/-
Year	:	2016 - 17
Latitude	:	8.46201
Longitude	:	77.24595

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	31
Name of work	:	Erosion control structure - 1 unit
Estimate No & Date	:	EE(AE) / Ngl / 03/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 4,00,000/-
Year	:	2016 - 17
Latitude	:	8.46190
Longitude	:	77.24595

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	28 & 29
Name of work	:	Erosion control structure - 5 units
Estimate No & Date	:	EE(AE) / Ngl / 04/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 2,50,000/-
Year	:	2016 - 17
Latitude	:	8.46421
Longitude	:	77.24382

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	942
Name of work	:	Gabion Check Dam - 1
Estimate No & Date	:	EE(AE) / Ngl / 05/2016-17, dt: 23.05.2017
Estimate Amount	:	Rs. 2,52,000/-
Year	:	2016 - 17
Latitude	:	8.47237
Longitude	:	77.24009

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	966/4
Name of work	:	Gabion Check Dam - 2
Estimate No & Date	:	EE(AE) / Ngl / 05/2016-17, dt: 23.05.2017
Estimate Amount	:	Rs. 2,52,000/-
Year	:	2016 - 17
Latitude	:	8.46682
Longitude	:	77.24525

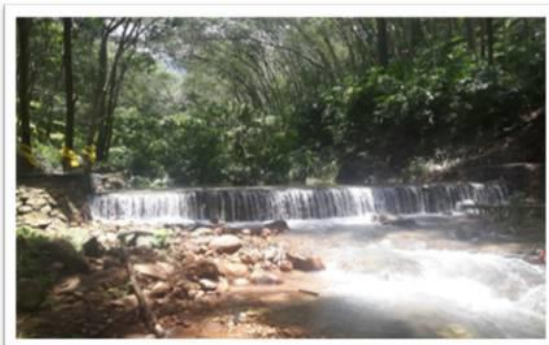
Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	28
Name of work	:	Gabion Check Dam - 1
Estimate No & Date	:	EE(AE) / Ngl / 01/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 6,83,000/-
Year	:	2016 - 17
Latitude	:	8.46501
Longitude	:	77.24380

Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	28
Name of work	:	Gabion Check Dam - 2
Estimate No & Date	:	EE(AE) / Ngl / 01/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 6,83,000/-
Year	:	2016 - 17
Latitude	:	8.46421
Longitude	:	77.24384

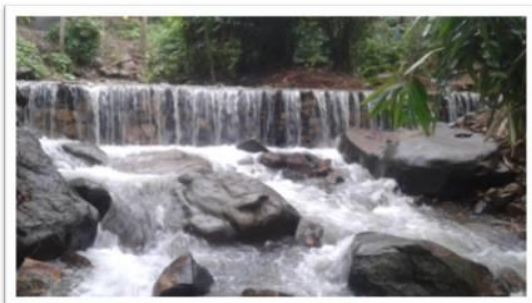
Special Area Development Programme – 2016-17



Before



During



After

Sub Division	:	Thuckalay
District	:	Kanniyakumari
Taluk	:	Vilavancode
Block	:	Melpuram
Village	:	Kaliyal
S.F. No.	:	29
Name of work	:	Gabion Check Dam - 3
Estimate No & Date	:	EE(AE) / Ngl / 01/2016-17, dt: 12.05.2017
Estimate Amount	:	Rs. 6,83,000/-
Year	:	2016 - 17
Latitude	:	8.46330
Longitude	:	77.24389