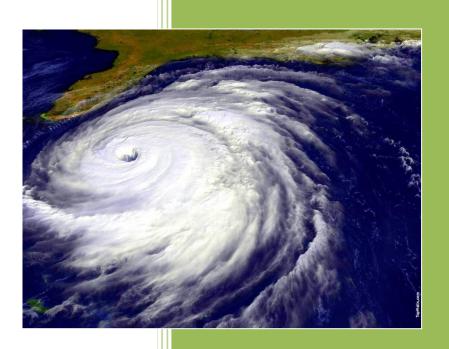
CYCLONE RISK
MITIGATION
PROJECT-PHASE II
KERALA

SITE SCREENING REPORT



District: Kannur

TABLE OF CONTENTS

Content	Page number
1.Introduction	4
1.1 Context	4
1.2 Objectives	4
1.3 Scope of work	4
2. Overview	5
3. Details of suitable sites	7
3.1 Identification number: NCRMP/KER/KNR/KNR/MATOOL-2	8
3.2 Identification number: NCRMP/KER/KNR/KNR/AZHIKODE SOUTH-1	10
3.3 Identification number: NCRMP/KER/KNR/KNR/KANNUR2-1	12
3.4 Identification number: NCRMP/KER/KNR/KNR/KANNUR1-4	14
3.5 Identification number: NCRMP/KER/KNR/THA/KATHIRUR-1	16
4. Details of unsuitable sites	18
4.1 Identification number: NCRMP/KER/KNR/KNR/KANNAPURAM-1	19
4.2 Identification number: NCRMP/KER/KNR/KNR/EZHOME-1	20
4.3 Identification number: NCRMP/KER/KNR/KNR/MATOOL-1	21
4.4 Identification number: NCRMP/KER/KNR/KANNUR1-1	22
4.5 Identification number: NCRMP/KER/KNR/KNR/KANNUR1-2	23
4.6 Identification number: NCRMP/KER/KNR/KNR/KANNUR1-3	24
4.7 Identification number: NCRMP/KER/KNR/KNR/MUZHUPPILANGAD-1	25
4.8 Identification number: NCRMP/KER/KNR/THA/THALASSERY-1	26
4.9 Identification number: NCRMP/KER/KNR/THA/THALASSERY-2	27
4.10 Identification number: NCRMP/KER/KNR/THA/THALASSERY-3	28
5. Assessment	29

5.1 Assessment criteria	29
5.2 Ranking	30
5.3 Site Assessment	31

1. INTRODUCTION

1.1 Context

Preliminary assessment of suitable land (referred to as "sites" in this report) proposed from Kannur District Administration, for construction of Multi-Purpose Cyclone Shelters (MPCS) under the National Cyclone Risk Mitigation Project-Phase II was performed on 18/11/15 and 19/11/15. The assessment was done in sites proposed as per proforma submitted from the District Administration. Sites which were not proposed in the prescribed proforma but potentially suitable for construction of MPCS were also assessed for suitability upon suggestion from the Officials.

1.2 Objectives

- Confirm site details such as titles description, site boundaries and area available for construction;
- Identify land use of the proposed site and the nearby areas;
- Assess the suitability of site for construction;
- Identify the environmental and social feature of the region;
- Document site history;
- Discuss with the officials and identify specific issues relevant to the site, if any;
- Mark the site using GPS for GIS based studies.

1.3 Scope of Works

- Review of documents with the District administration held on the land (Toposketch, Field Map Plan, Basic Tax Register);
- Document locally obtained information about the site;
- Document photographs of the site;
- Assessment of the data and preparation of a draft report;
- Review of site screening report by SPIU.

2. OVERVIEW

The District Administration suggested a total 15 sites were proposed for construction of Multi Purpose Cyclone shelters (MPCS) at various locations in Kannur District. The officers from State Project Implementation unit of NCRMP, Tahsildars and Village Officers and Village Officers visited the sites. Details of sites which were not proposed in the prescribed proform a but potentially suitable for construction of MPCS were also documented upon suggestion from the Officials. The details of the sites visited are as follows:

Site number	Identification number	Taluk, Village, Place	Ownership of land
1	NCRMP/KER/KNR/KAN/	Town Higher Secondary school,	Education
	KANNUR2-1	SN Park-Chalad	Department
2	NCRMP/KER/KNR/THA/ KATHIRUR-1	Revenue land, Ponniam	Revenue Department
3	NCRMP/KER/KNR/KAN/	Government HSS, Meenkunnu,	Education
	AZHIKODE SOUTH-1	Azhikode South	Department
4	NCRMP/KER/KNR/KAN/	Revenue land near Edakkad	Revenue
	KANNUR1-4	Village Office, Thottada	Department
5	NCRMP/KER/KNR/KAN/	Government High School,	Education
	MATOOL-2*	Matool (Site B)	Department
6	NCRMP/ KER/ KNR/KAN/	Revenue land near Taluk office,	Revenue
	KANNUR1-1*	Kannur	Department
7	NCRMP/KER/KNR/KAN/ KANNAPURAM-1	G.L.P.S, Kannapuram	Education Department
8	NCRMP/KER/KNR/KAN/	Government High School,	Education
	MATOOL-1	Matool (Site A)	Department
9	NCRMP/KER/KNR/KAN/ KANNUR1-2	G.L.P.S, Anayidukku	Education Department

10	NCRMP/KER/KNR/THA/ THALASSERY-3	Revenue land near District Nirmithi kendra	Revenue Department
11	NCRMP/KER/KNR/KAN/ KANNUR1-3	G.U.P.S, Neerchal	Education Department
12	NCRMP/KER/KNR/KAN/ MUZHUPPILANGAD-1	G.H.S.S, Muzhupilangad	Education Department
13	NCRMP/KER/KNR/THA/THALASSERY-2	Revenue land near Sub Collectors Office	Revenue Department
14	NCRMP/KER/KNR/KAN/EZHOME-1	Revenue land near Madai Village Office, Ezhome	Revenue Department
15	NCRMP/KER/KNR/THA/THALASSERY-1	Revenue land (Mappila School), Thalassery	Revenue Department

3. DETAILS OF SUITABLE SITE

3.1 Identification number: NCRMP/KER/KNR/KNR/MATOOL-2*

Site: Government High School, Matool (Site B)

Taluk: Kannur

Village: Matool

Survey number: Not Known

Panchayath: Matool

Ownership: Education Department

Lat: 11° 58′ 26.2″ Long: 75° 16′ 56.6″ (Ref GPS: 670)

Observations

• The proposed site is within the premises of Government High School, Matool

• Around 20 cents of land is available for construction

- The school has student strength of 800 for High school section (Classes 8-10) and 460 for Higher Secondary. Section.
- The site is approximately 500m away from the coastline. The proposed site is in close proximity to the vulnerable population and is easily accessible by the community during an event of disaster.
- A proposal for construction of school building in this site was reported by the school authority.
- The school was used as relief camps during Tsunami and during heavy rains.
- The site is accessible from Matool main road.
- On visual observation, the safe bearing capacity of the soil is not that good.

- The site details have to be received in the prescribed proforma from District administration and approval from School Authority is required prior to proposing the site.
- The site is suitable for construction of MPCS.



1. Aerial view of site at Matool 2. View of the site



State Project Implementation Unit, NCRMP-Kerala

3.2 Identification number: NCRMP/KER/KNR/KNR/AZHIKODE SOUTH-1

Site: Government Higher Secondary School, Meenkunnu, Azhikode South

Taluk: Kannur

Village: Azhikode South

Survey number: 567/3

Panchayath: Azhikode

Ownership: Education Department

Lat: 11° 54′ 26.8″ Long: 75° 19′ 32.8″ (Ref GPS: 672)

Observations

• The proposed site is within the premises of Government Higher Secondary School Azhikode.

- A dilapidated school building exists in the proposed site. The building has to be demolished to facilitate construction.
- As the school premise has many buildings careful master plan has to be prepared before
 initiating any new construction. The school authorities are in favour of construction of
 MPCS.
- The school has student strength of 670
- School buildings and Toilets built under SSA scheme exists near the site.
- A pump house and well is situated adjacent to the site.
- A building constructed under TRP scheme existing in the school is used as classrooms
- The site is around 450m from coastline.
- The site is near to the fisherman area at Neerkadavu.
- The school is an ideal place for conducting relief camps during heavy rains.
- The site is accessible from Meenkunnu road.
- School playground is located outside the school premises.

- Consent from Education Department is required to demolish the dilapidated building
- The site is suitable for construction of MPCS



1. Aerial view of the site at Meenkunnu 2. View of the site. Dilapidated building can be seen



3.3 Identification number: NCRMP/KER/KNR/KNR/KANNUR2-1

Site: Town Higher Secondary school, SN Park-Chalad

Taluk: Kannur

Village: Kannur-2

Survey number: Ward 3, Block 1, TS 44

Corporation: Kannur

Ownership: Education Department

Lat: 11° 52′ 20.5″ Long: 75° 21′ 33.5″ (Ref GPS: 673)

Observations

The proposed site is within the premises of Town Higher Secondary School, Chalad

• Approximately 20 cents of land is available for construction

• The proposed site is part of the playground and has playground equipment which will have to be relocated

- A recently prepared jumping pit was noted in the site
- LBS centre for training is adjacent to the site.
- Construction of two classroom buildings is in progress in the school premises
- The school was used as relief camps in earlier during heavy rains and flooding.

Assessment

The site is suitable for construction of MPCS



1. Aerial view of site at Chalad 2. View of the site



3.4 Identification number: NCRMP/KER/KNR/KNR/EDAKKAD-1

Site: Revenue land near Edakkad Village Office, Thottada

Taluk: Kannur

Village: Edakkad

Survey number: 21/4B

Corporation: Kannur

Ownership: Revenue Department

Lat: 11° 5. 3'19.4" Long: 75° 23' 20.5"

Observation

• The proposed site is adjacent to Edakkad village Office.

• Approximately 30 cents of land is available for construction.

• A badly maintained tiled Village Extension Office building exists near to the site

• Teak, *Vaga* and other trees present in the site will have to be cut down to facilitate construction

• The proposed site is directly accessible from National Highway.

• The proposed site is 450m from Coastline

Assessment

The site is suitable for construction of MPCS



1. Aerial view of site at Thottada 2. View of site



3.5 Identification number: NCRMP/KER/KNR/THA/KATHIRUR-1

Site: Revenue land, Ponniam

Taluk: Thalassery

Village: Kathirur

Survey number: 89/3

Municipality: Thalassery

Ownership: Revenue Department

Lat: 11° 46′ 24″ Long 75° 31′ 24.1″

Observations

• The proposed site is a barren land of 89 cents which is used as play ground

- It was informed by the Village Officer that the MPCS could be used as community halls as no such facility is available in the village
- the proposed site is 5km from the coastline
- A non perennial stream is located to one corner of the site
- An approach road of 50m length and 5m ROW connects the site to Thalassery Koorg main road
- The site was earlier proposed for NGO quarters.
- The safe bearing capacity of the soil is good.

Assessment

• The site is suitable for construction of MPCS



1. Aerial view of site at Ponniam 2. View of the site



4. DETAILS OF UNSUITABLE SITES

4.1 Identification number: NCRMP/KER/KNR/KNR/KANNAPURAM-1

Site 1: GLPS, Kannapuram

Taluk: Kannur

Village: Kannapuram

Survey number: 136/14, 137/4

Panchayath: Kannapuram

Lat: 11° 59′ 19.9″ Long: 75 18 29.9 (Ref GPS: 666)

Observations

• The proposed site is within the premises of GLPS, Kannapuram.

- Around 11 cents of land is available for construction
- The site can be accessed from a nearby pocket road (2m ROW) that connects the site to the main road. No direct access is possible to the site from the main road.
- A portion of the site is used as play area and remaining portion is used for vegetable farming
- An anganwadi is functioning within the school premises adjacent to the proposed site

- Sufficient land is not available and access to the site is difficult. Any further construction within the school compound will lead to congestion and loss of play ground
- The site is not suitable for construction



View of site at Kannapuram

4.2 Identification number: NCRMP/KER/KNR/KNR/Ezome-1

Site 2: Revenue land near Madai Village Office, Ezhome

Taluk: Kannur

Village: Ezhome

Survey number:64/2

Panchayath: Ezome

Lat: 12° 1′ 54" Long: 75° 60′ 0.1" (Ref GPS: 668)

Observations

- The proposed site is near to Madai Village Office situated in Ezhome village and around 3m below the road level
- Around 7 cents of land is available for construction
- An unpaved path of 2m ROW connects the site to the main road. Both sides of this path are owned by private individuals.
- It was informed by the Village officer that a shelter built under TRP funds exists near to the proposed iste.
- Only 7 cents of land is available for construction with no proper vehicle entry.
- A functional shelter is located in close proximity to the site.

- Sufficient land is not available for construction and necessity for shelter not seen.
- The site is not suitable for construction for MPCS



View of site at near Madai Village office

4.3 Identification number: NCRMP/KER/KNR/KNR/MATOOL-1

Site 3: Government High School, Matool (Site A)

Taluk: Kannur

Village: Matool

Survey number:232/1A,2,3,283/1B,1C,2

Panchayath: Matool

Lat: 11° 58′ 27.6″ Long: 75° 16′ 57.7″ (Ref GPS: 669)

Observations

- The proposed site is within the premises of Government High School, Matool
- Around 15 cents of school is available for construction
- A portion of the existing school building, in which classes are conducted, projects into the proposed site, which may have to be demolished to get a plot suitable for construction.
- The school has good strength of 800 for High school section(Classes 8-10) and 460 for Higher Secondary.
- The school was used as camp during Tsunami.
- The site is 150m away from the coastline
- On visual observation, the safe bearing capacity of the soil is not good

- Need for demolition of the school building and construction of MPCS is not seen.
- The site is not suitable for construction of MPCS.



View of site at Matool

4.4 Identification number: NCRMP/KER/KNR/KANNUR1-1

Site 5: Revenue land near Taluk office, Kannur

Taluk: Kannur

Village: Kannur 1

Corporation: Kannur

Lat: 11° 52′ 36.2″ Long: 75° 22′ 23.7″ (Ref GPS: 671)

Observations

• The proposed site is within the premises of Taluk Office, Kannur

- The site is used as parking area for the offices functioning in the compound such as Village office, election Depot, Kannur district employment pensioner's service co-operative society etc.
- To the North-west of the site Kannur prison is functioning. The wall of the prison is within 10m distance from the site
- For any new construction, sufficient clearance from the main road is required.
- Multi storied buildings is likely to attract objection from Prison Authorities
- A mahogany tree has to be cut for facilitating construction
- A building if constructed in this site, could be used for various activities of Taluk Office but being prime land any construction without a master plan of the whole area may not be ideal
- On visual Observation, Soil is having good safe bearing capacity

Assessment

• The site is not suitable for construction of MPCS



View of the site

4.5 Identification number: NCRMP/KER/KNR/KNR/KANNUR1-2

Site 7: G.L.P.S, Anayidukku

Taluk: Kannur

Village: Kannur-2

Survey number: Ward 4, Block 11, Survey number: 525/3

Corporation: Kannur

Ownership: Education Department

Lat: 11° 52′ 4.7″ Long: 75° 22′ 55.9″ (Ref GPS: 674)

Observations

• The proposed site is in the premises of Government Lower Primary School, Anayidukku

- The school was established in 1930 and has a poor student strength of 50 students
- An Anganwadi functions within the school premises.
- The proposed site has banana and coconut plantation.
- No proper vehicle access is possible to the site.
- Future road widening is expected in the area.

Assessment

• The site is not suitable for construction of MPCS



View of site at Anayidukku

4.6 Identification number: NCRMP/KER/KNR/KNR/KANNUR1-3

Site 8 G.U.P.S, Neerchal

Taluk: Kannur

Village: Kannur-1

Survey number: Ward 6, Block 6, T.S: 327

Corporation: Kannur

Ownership: Education Department

Lat: 11° 51′ 31.5″ Long: 75° 23′ 9.8″ (Ref GPS: 675)

Observation

• The proposed site is within the premises of Government Upper primary school, Neerchal.

- The proposed site is being used as play ground an space for open air stadium of school
- Approximately 10 cents of land is available for construction

- The area available for construction of MPCS is only 10 cents besides the site is being used as playground and as open air stadium.
- The site is not suitable for construction of MPCS



View of the site at Neerchal

4.7 Identification number: NCRMP/KER/KNR/KNR/MUZHUPPILANGAD-1

Site 9: G.H.S.S, Muzhupilangad

Taluk: Kannur

Village: Muzhupilangad

Survey number: 105/9

Panchayath: Muzhupilangad

Ownership: Education department

Lat: 11° 47′ 55.2″ Long: 75° 27′ 23.4″ (Ref GPS: 677)

Observations

• The proposed site is within the premises of G.H.S.S, Muzhupilangad & close to Village office

- A proposal for construction of new school building under MP fund is said to be sanctioned recently.
- The school authorities were not in favour of proposal for MPCS.
- The rear side of the school premises is a hilly terrain not that suitable for construction.
- An angnwadi building in the school premises was as relief camp during Tsunami.

- Any new construction in the school premises will lead to loss of the school playground.
- Site is not suitable for construction of MPCS



View of site at Muzhupilangad

4.8 Identification number: NCRMP/KER/KNR/THA/THALASSERY-1

Site 10: Revenue land (Mappila School), Thalassery

Taluk: Thalassery

Village: Thalassery

Ward no: 5 Block: 7, T.S: 112

Municipality: Thalassery

Ownership: Revenue

Lat: 11° 45′ 10.2″ Long: 75° 29′ 6.6″

Observations

• Less than 10 cents is only available

• Access road is present on both sides.

- A dilapidated building exists in the site. The building has to be demolished to facilitate construction
- Local objection noticed in proposing the land for MPCS was noticed.

- The available land is inadequate for construction of MPCS
- The site is not suitable for construction of MPCS



View of site

4.9 Identification number: NCRMP/KER/KNR/THA/THALASSERY-2

Site 10: Revenue land near Sub Collectors Office

Taluk: Thalassery

Village: Thalassery

Ward no: 5 Block: 10, T.S 169/1

Municipality: Thalassery

Ownership: Revenue

Lat: 11° 44′ 57.2″ Long: 75° 29′ 9.6″

Observations

• The proposed site is adjacent to Sub Collectors office and approximately 15 cents is available for construction of MPCS (Area not demarcated)

- The site is 200mfrom the coastline requiring CRZ clearance
- Thalassery Kotta of archaeological importance is at a distance of 50 from the site and hence sanction from Archaeological department will be required.

Assessment

• The site is not suitable for construction of MPCS



View of site

4.10 Identification number: NCRMP/KER/KNR/THA/THALASSERY-3

Site 10: Revenue land near District Nirmithi kendra

Taluk: Thalassery

Village: Thalassery

Ward no: 5 Block: 10, T.S 172/2A

Municipality: Thalassery

Ownership: Revenue

Lat: 11° 44′ 58.4″ Long: 75° 29′ 10.7″

Observations

The proposed site is adjacent to District Nirmithi Kendra and is being used as "Kalavara" for open store of construction materials

- The site is 200m from the coastline requiring CRZ clearance
- Thalassery Kotta of archaeological importance is at a distance of 50 from the site and hence sanction from Archaeological department will be required.

Assessment

The site is not recommended for construction of MPCS



View of site

5. ASSESSMENT

5.1 Assessment criteria

The following criteria were considered in assessing the suitability of proposed site for construction of MPCS:

- Necessity for MPCS: Aspects such as vulnerable population near to the proposed site, Availability of shelters within 1km radius of the site, Capacity and condition of such shelters, Population that will have access to the MPCS, History of relief camps in the area, were considered.
- **2. Area available for construction:** Sites which have atleast 15 cents of land available for construction were only considered. The effective area available for construction after provision for setbacks applicable as per Building rules was only taken into consideration.
- **3. Proximity to sea:** Sites within 10km distance from coastline were only considered. Those sites which fall beyond 500m from High Tide Line were preferred. The sites within 200m from the coastline were not preferred and sites that do not CRZ clearance were given priority.
- 4. **Accessibility to basic amenities:** The accessibility of site from nearby main roads, proximity of site to water supply, power, sewer etc was considered in selecting the site.
- **5. Ownership of land:** Land in possession with Revenue Department was preferred to that in possession with Education Department, Fisheries Department, Local Self Government Department and others.
- **6. Foundation cost:** Terrain of land, bearing capacity of soil on visual observation, drainage pattern in the region, maximum flood line etc was considered.
- **7. Requirement for demolition:** Sites that did not require any demolition to facilitate construction of MPCS were given priority. However, in sites that required demolition, the state of existing building, ownership of the building etc were taken into account.
- **8.** Clearances required for social/archaeological/environmental issues: Sites adjacent to archaeologically, religiously important structures were avoided. Sites with issues of Illegal tenants and any social concerns particular to the region were also avoided. Sites close to water bodies/Environmentally sensitive regions were not preferred.

9. Legal issues: Sites with legal issues regarding ownership, extent and boundaries of land and sites committed and finalized for other project etc were given less priority in the assessment.

5.2: Ranking

Each criterion was given a score depending on the importance of the criteria in screening the sites. Depending on the scores, the sites were categorized into three categories:

- 1. Rank 1: Highly recommended for construction of MPCS
- 2. Rank 2: Recommended for construction of MPCS
- 3. Rank 3: Not recommended

SI no				Selection criteria									
	Site Details		Necessity for MPCS	Area available for construction	Proximity to sea/Water bodies	Foundation cost	Accessibility to transportation and basic amenities	Ownership of land	Clearances required for social/archaeological/environme ntal issues	Requirement for demolition	Legal issues	TOTAL SCORE	RANK
	Site Identification number	Place	15	15	15	15	10	10	10	5	5	100	
1	NCRMP/KER/KNR/KAN/ KANNUR2-1	Town Higher Secondary school, SN Park- Chalad	12	10	10	9	10	5	8	4	3	71	1
2	NCRMP/KER/KNR/THA/ KATHIRUR-1	Revenue land, Ponniam	10	10	10	10	9	9	6	5	2	71	1
3	NCRMP/KER/KNR/KAN/ AZHIKODE SOUTH-1	Government HSS, Meenkunnu, Azhikode South	12	10	10	6	8	5	5	3	4	63	2
4	NCRMP/KER/KNR/KAN/ KANNUR1-4	Revenue land near Edakkad Village Office, Thottada	10	8	10	8	6	9	4	3	4	62	2
5	NCRMP/KER/KNR/KAN/ MATOOL-2*	Government High School, Matool (Site B)	10	10	6	6	6	4	2	5	1	50	2

6	NCRMP/KER/ KNR/KAN/KANNUR1- 1*	Revenue land near Taluk office, Kannur	4	4	8	8	6	4	2	2	1	39	3
7	NCRMP/KER/KNR/KAN/ KANNAPURAM-1*	GLPS, Kannapuram	6	4	8	6	2	4	5	2	2	39	3
8	NCRMP/KER/KNR/KAN/ MATOOL-1	Government High School, Matool (Site A)	10	2	6	6	6	4	2	1	2	39	3
9	NCRMP/KER/KNR/KAN/ KANNUR1-2	G.L.P.S, Anayidukku	5	2	6	6	4	5	5	3	3	39	3
10	NCRMP/KER/KNR/THA/ THALASSERY-3	Revenue land near District Nirmithi kendra	2	7	5	6	7	5	1	3	3	39	3
11	NCRMP/KER/KNR/KAN/ KANNUR1-3	G.U.P.S, Neerchal	5	2	5	6	4	5	4	3	3	37	3
12	NCRMP/KER/KNR/KAN/ MUZHUPPILANGAD-1	G.H.S.S, Muzhupilangad	4	2	10	6	4	5	2	2	2	37	3
13	NCRMP/KER/KNR/THA/ THALASSERY-2	Revenue land near sub Collectors Office	2	4	5	6	7	5	2	3	3	37	3
14	NCRMP/KER/KNR/KAN/ EZHOME-1	Revenue land near Madai Village Office, Ezhome	2	2	8	7	2	5	4	3	2	35	3
15	NCRMP/KER/KNR/THA/ THALASSERY-1	Revenue land (Mappila School), Thalassery	2	1	8	6	5	5	2	2	2	33	3

^{*}Details of site not availbale in proforma from District Administration