

**Meeting minutes of Internal Discussion of Shelter Advisory Group held at
Collectorate, Mini Conference Hall, Nagapattinam on 10.02.2007**

The meeting which started at 10.45 am was chaired by Sri. Shanmuga Sundaram , Special Deputy Collector (Land Acquisition).

The Special Deputy Collector evinced an interest in knowing about the corrective actions, if suggested, taken in the sites visited by the Shelter Support Group during the earlier monitoring visits. He also requested that the District Monitoring Team follows- up and ensures compliance with such corrective measures suggested at the field level.

Following this, Mr. Dipan Shah made a presentation of all the sites visited by the Shelter Support Group. The Special Deputy Collector asked for site wise presentation so that there is a clear understanding of every site, thereby, enabling site- specific corrective recommendations by the Shelter Advisory Group.

Arcottuthurai

The Shelter Support Group reported the cutting of structural members such as column, beam, lintel etc for electrification work in Arcottuthurai where TMSSS is constructing the houses. In this regard the Shelter Advisory Group Member Prof. Santhakumar said that none of the structural members should be cut for any reason. He also said that if from a 9” column 4.5” is removed then the column will not be able to bear the load. The SDC asked about the rectification method for which Prof. Santhakumar suggested to increase 4.5” to 9” wall by having additional wall of 4.5” where ever the 9” wall was replaced by 4.5” wall. The Shelter Support Group member Mr. Dipan Shah said that it has to be justified by the concerned structural engineer as to why the column was cut. If any members are cut then it could be corrected by retrofitting only. Mr. Syed Abutaleb, Executive Engineer (R&R) OSD office raised the suggestion that the electrification be externally instead of concealed wiring.

During the presentation, Special Deputy Collector also observed that the Layout plan and execution was different in Mahalakshmi Nagar, where TMSSS was constructing houses, with all the designated open spaces being taken up for construction of houses. He stated that only 170 houses were planned in the layout, which was actually allotted for 210 houses. Despite the lesser number of houses, there were no open spaces. Apart from this, additional space for 10 more houses was given and yet did not improve the condition of scarcity. He wanted to ascertain that the size of the houses being constructed was in keeping with the layout approved. This was all the more important as the government was planning to construct 400 additional houses with financial support from from BSNL and Rajiv Gandhi Foundation close to the same site where TMSSS is constructing and had planned a common sewerage system for all the sites together, which may not be possible with this over extension of houses taking up all the space. In this regard, Prof. Santhakumar said that open spaces were of paramount importance in any habitat planning for community welfare centers, sewerage system, etc. Mr. Abutaleb quoted that a 3 meter open space is required in front and 2 meters in back and sides as per the Panchayat construction rules.

The Executive Engineer TWAD also stated that provision of sanitation facilities would be a problem if the open spaces were not available.

The Shelter Support group observed that despite three visits and continuous suggestions on improving quality of construction, the situation continues to remain the same. In this regard it was suggested that the district Administration takes serious note and dialogue with the NGO, TMSSS, regarding improving their quality of construction. The Special Deputy Collector agreed to hold discussions with them based on the report.

Kollitheevu:

The Shelter Support Group observed that though the site was visited thrice, test results of bricks, sand etc were not available in the site. As it is a load bearing type of construction, the quality of the bricks and sand used is of great concern. The Shelter Support Group also observed the non-provision of vertical rods in the corner and T joints. Prof. Santhakumar suggested that it is recommended to provide a vertical rod to make the structure as safe and disaster resistant. Exec. Engr., Mr. Abdutaleb, also stated emphatically that the bricks and sand has to be tested and results made available periodically, preferable for each batch purchased.

Mottantihoppu:

Shelter Support Group observed the columns here have shifted from its alignments. The main bar of the column was also not getting clear cover for this. Mr. Dipan Shah also quoted that this shift in column alignment would affect the stability and durability of the structure. Mr. Abutaleb observed that the structure was not provided with grade beam though it was specified that for every structure plinth and grade beam have to be provided.

It was also observed that the sunshade thickness is 1” in this site, which, is not durable. Mr. Abutaleb quoted that the specification given in the technical guidelines is as 2” each at end and 3” near the support.

The good practice observed in this site is the practice of consolidation of sand with watering and ramming simultaneously for the basement filling

Vettaikaranirruppu:

After the presentation of this site the Shelter Advisory Group member Prof. Santhakumar said that a continuous lintel is required to encounter horizontal forces caused by Tsunami, Cyclone, Flood, and Earth quake.

The EE, Mr. Abu Taleb, said that with regard to the continuous lintel, a number of trainings are being conducted and the same is also being specified in the socio technical study and still it is not followed up.

The quality of slab is good in the site as told by the SSG.

Kameshwaram:

The Shelter Advisory Group observed that the beam stirrup spacing, though specified as 6” in drawing, was found to be actually 8” on physical verification. Prof. Santhakumar stated that the lateral ties are too apart. The technical engineer said that initially it was so but later the concerned organisation and their engineer have agreed to rectify it in the forthcoming stages. The Shelter Support Group also observed that no stirrups were provided between lintel and roof slab and also brick work was used as formwork. The Special Deputy Collector asked all the technical engineers to make a note of all these and to inform the NGOs.

Olakottaimedu:

The Shelter Advisory Group quoted that the visit to this site was to understand the kind of issues would arise after a year of handing over which could be focussed on and rectified right now itself in the sites where construction is still in progress.

The Shelter Advisory Group observed a crack, of G+1 category, on the both sides of a common wall in the building, which is a load bearing structure. On further enquiry, it was also stated that similar cracks have been seen in five houses out of eight houses visited. The Special Deputy Collector asked as to whether it was due to the quality of water used, but this was refuted by the Shelter Support as the cracks were seen on both sides of the wall. Prof. Santhakumar of the Shelter Advisory Group explained that, judging by the direction of the cracks, this was probably because of the expansion of the slab in response to the temperature variance. He also stated that this was not a serious problem and can be rectified with simple plastering. However, this would be a matter of grave concern if the cracks had been seen in same direction.

Kottaimedu:

The Shelter Support Group underlined that in this site improvements are seen such as reinforcements were tied which, otherwise, might have lead to serious concerns.

Here also the Shelter Support Group noted that, like other sites, brickwork is being used as formwork for which the Shelter Advisory Group said that such practice should not be allowed at any cost as it would lead to misalignments of the column. Also the brick has high absorption capacity for water and would leach water from the concrete making the concrete weak.

It was also noted that in the bracket beam, at mid- landing of the staircase, two 10mm rod were replaced in place of three 12mm rod which was not as per the drawing. Prof. Santhakumar reiterated that no changes must be made from the approved plan and any such changes noticed will necessarily have to be explained by their structural engineer and the change got formally approved by the Distt. Administration.

Madavaimedu:

Here the SSG observed that the beam rods were not inside the rod of column. It is quite difficult to insert the reinforcement when the column and beam are of the same size and

same width .The Shelter Advisory Group suggested in this regard that the beam width can be reduced and depth can be increased for smooth workmanship.

Poombuhar:

The Shelter Support Group observed that there is a shift in column alignment seen atleast in 15 to 20 houses. Here also the SAG suggested that the brick work cannot be used as a formwork of a column.

Ambedkar Nagar South :

In this site, the Shelter Support Group observed that the bathing space available is only 2.5sq ft.

Panangudi (Melavanjore)

The Shelter Support Group observed that although there was column shifting it was not as severe as seen in the other sites. They also pointed out there was no support to column which were cast recently. Here also it was observed that the brick work was used as formwork for the column. The SAG underlined that in future it should be taken care.

Cooks Nagar:

During the presentation the SSG quoted that there was extensive honey combing in concrete especially in the waist slab and also they pointed out some columns were twisted from their own alignment. In this regard Prof. Sathankumar said that as per the construction tolerance a column shift can be accepted up to 5 mm. If the shifting is greater than this acceptable limit, then it will definitely affect the strength and durability of the column.

Sellur :UEL CI

The Shelter Support Group noted that there was cracks found in the roof slab in at least 3 to 4 locations. The technical engineer from Government said it is due to shrinkage. The Shelter Support Group also said that this is due to the lack of curing as required. On enquiry about the position of the cracks, Shelter Support Group stated that it was seen at top of the roof slab. The Shelter Advisory Group said that it is field- based neglect and if the concrete is not cured properly then definitely it will have problems. Rectification at this stage is costly, at least 500 time costlier than the cost of water, but needs to be done for purposes of safety.

The shelter support group also observed that the extension rods were simply inserted above the column to extend it as a dummy column. This may have been forgotten during the casting of the roof slab. However, considering the need for which these extension rods were being put into place, such insertions would not only not serve the purpose but will also be unusable and dangerous for extension.

Sellur : CSI

The Shelter Support Group observed Drilling / cutting of the column was done for fixing of door. The Technical engineer said that it is specified in the design. The Shelter Advisory Group noted that it is due to poor planning and failure to anticipate the need for

anchorage of the holdfast. If a 6” hold fast is affixed by cutting 9” column to accommodate it, then the 9” column loses its strength. The fixing of switch boxes by cutting the column is also serious. It is better to go for external wiring for electrification in such cases.

Follow- up on Recommendations:

For cases where even repeated visits and corrective measures advised did not evoke any response, it was suggested that the Distt. Admn. holds separate one- to- one discussions with the NGOs concerned along with their structural engineers. The SDC also strongly requested the Distt. Monitoring Teams to take note of the various recommendations and ensure that they are being complied with at the field level.

Third Party Quality Audit

As it was nearly a year after the last third party quality audit was conducted, NCRC suggested that the SAG could advise the need and the modalities of the next round of this exercise. The Distt. Admn. was emphatic on the need for this formal audit and was of the opinion that it should be conducted at the earliest. The Shelter Advisory Group also were of the opinion that this audit definitely has to be carried out at this point of time. Prof. Santhakumar suggested that the study be classified under three categories: one is an audit on the structural safety of the houses which are completed, two is the houses which are under progress as there are many problems emerging through the SAG visits and the third are the plans of those houses which are not being started which can be studied based on the learnings we have from the field so far.

The Special Deputy Collector requested the SAG to ensure that this audit be carried out by the end of this month. All support from the District Administration would be made available for the same. As regards the modalities, NCRC suggested that the District Administration, NCRC and UNDP could do it jointly, like the last round. The SAG however recommended that the District Administration authorize the study. The Special Deputy Collector requested the SAG to formulate a proposal for this Study at the earliest and sent to the District Administration for its authorisation.

SAG member, Mr. Dipan Shah, suggested the purchase of a rebound hammer and other related USB devices. The SAG member Mr. Prof. Santhakumar said a proposal for a full-fledged mobile lab is being submitted to the OSD, Mr. C.V. Shankar, which can be taken to any site as required. This asset can be owned by a selected Polytechnics College, with 1 or 2 engineers who can be deputed exclusively for this job. The Cost will be of two types one the recurring and capital cost. This unit, if sanctioned can be brought to Nagapattinam as and when required. The Distt. Admn. requested that a copy of this proposal be made available to them also which was agreed to by Prof. Santhakumar.

Check List for handing over Formalities

With regard to the check list for handing over the completed houses both to the Admn. and the community, the Special Deputy Collector requested that SAG to prepare the list both in English and Tamil.

The internal discussions ended with a vote of thanks to all by the Special Deputy Collector.

Participants for the Shelter Advisory Group meeting (internal discussion) at Collectorate, Nagapattinam, on Feb 10 2007.

Sl.no	Name and Designation	Department / NGO	Email-id / Ph.no
1	S. Mohanasundram JE / 08M / Nagore	TNEB	9443071027
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5	RM. Lakshmanan AE / Tsunami cell	Tsunami TDIU- Nagai	9442047847
6	P. Gunaseelan	AEE / TDIU - Nagai	9443456345
7	V. Annadurai AE / TNEB	TNEB / Tarangambadi	9442112237
8	V. Krishnamoorthy	TA / TDIU / Nagai	9442403424
9	R. Sivalingam	JE / TDIU / Nagai	9443720092
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12	S. Selvendran	Tech.eng / TDIU / Nagai	9245299825
13	L. Suresh Daniel	Tech.eng / TDIU / Nagai	9842657137
14	K.S. Mathan Kumar	Tech.eng / TDIU / Nagai	9942383203
15	S. Sukumar	Tech.eng / TDIU / Nagai	9942542425
16	K. Manikam	EE / TDIU / Nagai	9842498484
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18	Prof. A.R. Santhakumar	Advisor , UNDP	9840142384
19	Annie George	CEO,NCRC	9345400074
20	K. Murali	AE / TDIU / Nagai	9443665867

Meeting of Shelter Advisory Group with NGOs

Venue: Mini Conference Hall, Nagapattinam Collectorate

Date: 10 February 2007

The Special Deputy Collector, Mr. Shanmugasundaram chaired the meeting. The SDC initiated the meeting saying that these sessions were not only for those whose sites have been visited, but also for the other NGOs, in construction activities, who can also be benefited from this. The findings are very common such brick quality, column alignment, honey combs and faulty corner reinforcements. The findings are to be taken seriously by the NGOs specified and an “action taken report” submitted to the Administration and SAG.

The Shelter Advisory Group member Mr. Dipan Shah started the presentation saying that the all the NGOs were committed to building stronger and safer houses, but the issues seen at the field level were often quite repetitive, affecting the stability of the houses.

Arcottuthurai

The Shelter Support Group reported the cutting of structural members such as column, beam, lintel etc for electrification work in Arcottuthurai where TMSSS is constructing the houses. In this regard the Shelter Advisory Group Member Prof. Santhakumar said that none of the structural members should be cut for any reason. He also said that if from a 9” column 4.5” is removed then the column will not be able to bear the load. The rectification method Prof. Santhakumar suggested was to increase the 4.5” to 9” wall by having additional wall of 4.5”. The Shelter Support Group member Mr. Dipan Shah said that the change has to be justified by the concerned structural engineer as to why the column was cut. If any members are cut then it could be corrected by retrofitting only. Mr. Syed Abutaleb, Executive Engineer (R&R) OSD office raised the suggestion that the electrification be externally instead of concealed wiring.

During the presentation, Special Deputy Collector also observed that the Layout plan and execution was different in Mahalakshmi Nagar, where TMSSS was constructing houses, with all the designated open spaces being taken up for construction of houses. He stated that only 170 houses were planned in the layout, which was actually allotted for 210 houses. Despite the lesser number of houses, there were no open spaces. Apart from this, additional space for 10 more houses was given and yet did not improve the condition of scarcity. He wanted to ascertain that the size of the houses being constructed was in keeping with the layout approved. This was all the more important as the government was planning to construct 400 additional houses with financial support from from BSNL and Rajiv Gandhi Foundation close to the same site where TMSSS is constructing and had planned a common sewerage system for all the sites together, which may not be possible with this over extension of houses taking up all the space. In this regard, Prof. Santhakumar said that open spaces were of paramount importance in any habitat planning for community welfare centers, sewerage system, etc. Mr. Abutaleb quoted that a 3 meter open space is required in front and 2 meters in back and sides as per the Panchayat construction rules.

The Shelter Support group observed that despite three visits and continuous suggestions on improving quality of construction, the situation continues to remain the same. In this regard it was suggested that the district Administration takes serious note and dialogue with the NGO, TMSSS, regarding improving their quality of construction. The Special Deputy Collector agreed to hold discussions with them based on the report.

The representatives from TMSSS said that these will be discussed with their structural engineer and they will report the same to the SAG at the earliest.

Kollitheeve:

The Shelter Support Group observed that though the site was visited thrice, test results of bricks, sand etc were not available in the site. As it is a load bearing type of construction, the quality of the bricks and sand used is of great concern. The Shelter Support Group also observed the non-provision of vertical rods in the corner and T joints. Prof. Santhakumar suggested that it is recommended to provide a vertical rod to make the structure as safe and disaster resistant. Exec. Engr., Mr. Abdutaleb, also stated emphatically that the bricks and sand has to be tested and results made available periodically, preferable for each batch purchased.

The Shelter Support Group also observed the non-provision of vertical rods in the corner and T joints. The Shelter Advisory Group member Mr. Prof. Santhakumar suggested that it is recommended to provide a vertical rod to make the structure as safe and disaster resistant.

Mottandithoppu:

Shelter Support Group observed the columns here have shifted from its alignments. The main bar of the column was also not getting clear cover for this. Mr. Dipan Shah also quoted that this shift in column alignment would affect the stability and durability of the structure. The SSG observed that the brick work is being used as a formwork for columns leading to shifting of columns. The SAG also agreed that column size would be affected if brick work is being used as a formwork. Due to the absorption of water by the cement, this will also lead to honey combing. So, the brick work is to be done after the casting of columns .

Mr. Abutaleb observed that the structure was not provided with grade beam though it was specified that for every structure, plinth and grade beams have to be provided.

It was also observed that the sunshade thickness is 1” in this site, which, is not durable. Mr. Abutaleb quoted that the specification given in the technical guidelines is as 2” each at end and 3” near the support.

The good practice observed in this site is the practice of consolidation of sand with watering and ramming simultaneously for the basement filling
The representatives from TMSSS said that such would discussed with their respective structural engineer and will get back to us.

Vettaikaranirruppu – Sallikulam:

After the presentation of this site, the Shelter Advisory Group member, Prof. Santhakumar, said that a continuous lintel is required to encounter horizontal forces caused by Tsunami , Cyclone, Flood, and Earth quake.

The EE, Mr. Abu Taleb, said that with regard to the continuous lintel, a number of trainings are being conducted and the same is also being specified in the socio technical study and still it is not followed up.

The quality of slab is good in the site as told by the SSG.

The SSG observed that a good practice of installing of electrical pipes previous to the laying of the structures without cutting or drilling of any structures. The SAG also suggested it is good to do so since the cutting or drilling of any of structures would make the column too weak to bear the load capacity.

Kameshwaram

The Shelter Advisory Group observed that the beam stirrup spacing, though specified as 6” in drawing, was found to be actually 8” on physical verification. Prof. Santhakumar stated that the lateral ties are too apart. The technical engineer said that initially it was so but later the concerned organisation and their engineer have agreed to rectify it in the forthcoming stages. The Shelter Support Group also observed that no stirrups were provided between lintel and roof slab and also brick work was used as formwork. The Special Deputy Collector asked all the technical engineers to make a note of all these and to inform the NGOs.

The SSG observed that the site follows the practice of constructing the brick wall first and then putting just two- side formwork for column concreting. Because of this practice, in many places the brick were projecting inside the column section, reducing the column area. The SAG advised not to follow such practice which was agreed to by the site engineer.

The other observation by SSG was that for column concrete, the practice was to cast a concrete in a single lift of 7 feet height without vibrator. Prof. Santhakumar once again cautioned the site engineer to use vibrator for such work.

Olakottaimedu :

The Shelter Advisory Group quoted that the visit to this site was to understand the kind of issues would arise after a year of handing over which could be focussed on and rectified right now itself in the sites where construction is still in progress.

The Shelter Advisory Group observed a crack, of G+1 category, on the both sides of a common wall in the building , which is a load bearing structure. On further enquiry, it was also stated that similar cracks have been seen in five houses out of eight houses

visited. The Special Deputy Collector asked as to whether it was due to the quality of water used, but this was refuted by the Shelter Support as the cracks were seen on both sides of the wall. Prof. Santhakumar of the Shelter Advisory Group explained that, judging by the direction of the cracks, this was probably because of the expansion of the slab in response to the temperature variance. He also stated that this was not a serious problem and can be rectified with simple plastering. However, this would be a matter of grave concern if the cracks had been seen in same direction.

Care Plan:

The Shelter Support Group underlined that in this site improvements are seen such as reinforcements were tied which, otherwise, might have lead to serious concerns.

Here also the Shelter Support Group noted that, like other sites, brickwork is being used as formwork for which the Shelter Advisory Group said that such practice should not be allowed at any cost as it would lead to misalignments of the column. Also the brick has high absorption capacity for water and would leach water from the concrete making the concrete weak.

It was also noted that in the bracket beam, at mid- landing of the staircase, two 10mm rod were replaced in place of three 12mm rod which was not as per the drawing. Prof. Santhakumar reiterated that no changes must be made from the approved plan and any such changes noticed will necessarily have to be explained by their structural engineer and the change got formally approved by the Distt. Administration.

Madavaimedu :

Here the SSG observed that the beam rods were not inside the rod of column. It is quite difficult to insert the reinforcement when the column and beam are of the same size and same width .The Shelter Advisory Group suggested in this regard that the beam width can be reduced and depth can be increased for smooth workmanship.

The SSG observed that the PCC was running over the columns at few locations. The SAG suggested that column should be above PCC which would help in continuation of the column.

Poombuhar:

The Shelter Support Group observed that there is a shift in column alignment seen atleast in 15 to 20 houses. Here also the SAG suggested that the brick work cannot be used as a formwork of a column.

In few locations, column section has been reduced to about 6 to 7 inches. The SAG suggested to get clarified with their respective structural engineer and rectify it if found necessary.

Ambedkar Nagar South:

The SSG observed that the toilet and bath are common with hardly any space for bathing. It can lead to future flooding since only soak pit is given for both bathroom and toilet.

There was no damp proof course at plinth level and once the filling is done the NGL will rise leading to dampness entering inside. The representative from TMSSS asked the rectifying methodology if DPC is not used. The SAG advised to plaster with water proof mortar on the outside from the NGL to plinth level adding adhesives. The SAG also said plastering it outside would solve 90% of the problem.

Panangudi:

The Shelter Support Group observed that although there was column shifting it was not as severe as seen in the other sites. They also pointed out there was no support to column which were cast recently. Here also it was observed that the brick work was used as formwork for the column. The SAG underlined that in future it should be taken care.

Cooks Nagar:

During the presentation the SSG quoted that there was extensive honey-combing in concrete, especially in the waist slab, and also pointed out some columns were twisted from their own alignment. In this regard Prof. Sathankumar said that as per the construction tolerance a column shift can be accepted up to 5 mm. If the shifting is greater than this acceptable limit, then it will definitely affect the strength and durability of the column.

Sellur : UELCI

The Shelter Support Group noted that there was cracks found in the roof slab in at least 3 to 4 locations. The technical engineer from Government said it is due to shrinkage. The Shelter Support Group also said that this is due to the lack of curing as required. On enquiry about the position of the cracks, Shelter Support Group stated that it was seen at top of the roof slab. The Shelter Advisory Group said that it is field-based neglect and if the concrete is not cured properly then definitely it will have problems. Rectification at this stage is costly, at least 500 times costlier than the cost of water, but needs to be done for purposes of safety.

The Shelter Support Group also observed that the extension rods were simply inserted above the column to extend it as a dummy column. This may have been forgotten during the casting of the roof slab. However, considering the need for which these extension rods were being put into place, such insertions would not only not serve the purpose but will also be unsuitable and dangerous for extension.

Sellur : CSI

The Shelter Support Group observed Drilling / cutting of the column was done for fixing of door. The Technical engineer said that it is specified in the design. The Shelter Advisory Group noted that it is due to poor planning and failure to anticipate the need for anchorage of the holdfast. If a 6" hold fast is affixed by cutting 9" column to accommodate it, then the 9" column loses its strength. The SAG suggested installing door holding with a strong epoxy chemicals not with simple chemicals. The fixing of switch boxes by cutting the column is also serious. It is better to go for external wiring for electrification in such cases.

During the concluding remarks, Prof. Santhakumar gave the following suggestions:

1. Brickwork should not be used as formwork for column concreting. The columns should be casted independently of brickwork before doing brickwork and then only brickwork should be done. Using of brickwork as formwork for column will affect the quality of concrete and also may lead to misalignment of column.
2. No structural member should be damaged or cut for concealed electrical installations or for the door frame installation.
3. In a frame structure, column is most important element and it has to be in plumb and line and level. On no account one can afford overlooking this aspect. It will lead to structural instability of the building.
4. Detailing of reinforcement is very important and in no account the site team should change any aspects of detailing without the written consent of the respective structural engineer. If any details are not clear or not available in the drawings, the same should be asked from the structural engineer. Government guidelines can also be referred for the same.
5. On no account the number of bars provided and spacing should be changed by the field team.
6. Curing is very important and it should start immediately as the concrete hardens. The concrete should be cured and cured continuously without any breaks in between.

The meeting came to an end at 6.00pm

Participants list for Shelter Advisory Group meeting Minutes - held at Mini Conference hall, Nagapattinam Collectorate with NGOs on 10 February 2007.

Sl.no	Name and Designation	Department / NGO	Email-id / Ph.no
1	V. Elango	Bitsunami trust	9443530412
2	S.E. John Sundar	Kudumbam	9245449245
3	R. Francis Jaya roa	Build	9367733398
4	S. Srinivasan	Sri Vallaba Foundation	9380010133
5	K.L. Shantharama	TRC	9282109952
6	P. Ganesan	World Vision	9443712751
7	R. Rajesh	Real Plan	9843237211
8	S. Saravanan	Real Plan	9894594912
9	K. Buneswari	The Salvation Army	9842555948
10	S. Gopalachandran	Revenu Spl. Tasildar (L.A) Nagai	9442265752
11	R. Nagaraj	Eng. Voice Trust	9865425711
12	S. Ram kumar	Eng. Care Plan	9947261996

13	S. Navaabjan	Proj. Asst. CEE	9842873455
14	S. Subramani	Site.Eng. TVS	9443863915
15	N. Rajan	IID, Nagore	9360041968
16	K. Thiyadulasreeram	Site. Supervisor, Holy Cross	9965076044
17	P. Chandrasekar	Eng. DPG	9842152493
18	S. Karunanidhi	Social Worker, The Salvation Army	9843620291
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20	P. Prakasam	Senior Eng. Qlty control, Siffs	9442649844
21	Sajith Thomas	SIFFS	9442649847
22	K. Murali	AE / TDIU / Nagai	9443665867
23	Justin Samaul	UNDP , UNV	
24	Kitish Mohanta	Shelter and Habitat Development Facilitator , UNDP,	9865419186
25	D. Rajkumar	LWS	9843939172
26	G. Shanmugasundaram	JE / TDIU / Nagai	9843611181
27	T. Balamurugan	JE / TDIU / Nagai	9245275353
28	S. Jayapandi	T. Asst/ TDIU/.	9842010319
29	S. Selvendran	T. Asst. TDIU	9245299825
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32	S. Vijaykumar	CSI	
33	M.J. Kalavathi	SEVAI	054368 -265566
34	M. Manikandan	Word & Deed	9444779106
35	Kumar Vasanth	UELICI	
36	L. Vignesh	Eng. Engr	
37	J. Jebaraj	Help a Child of India	9865076761