| Urban Health Post | NA NA |
|--|---------------------------------|
| Primary Health Centre | NA NA |
| Government Hospital | Within distance less than 10 km |
| Maternity Centre | NA |
| Private Clinic | NA |
| Registered Medical Practitioner (RMP) | NA |
| Ayurvedic Doctor/Vaidya | NA |
| Social Development/Welfare | NA |
| Community Hall | NA NA |
| Livelihood/Production Centre | NA |
| Vocational Training/Training cum Production Centre | NA NA |
| Street Children Rehabilitation Centre | NA |
| Night Shelter | NA NA |
| Old Age Home | NA NA |
| Self Help Groups/DWCUA Groups in Slum | NA |
| No. of Neighbourhood Groups (NHGs) in slum | NA NA |
| Slum-dwellers Association | NA NA |
| Youth Association | 1 |
| Women's Association/Mahila Samithis | NA NA |

20. DHARAMBIRA -1 NORTH BUSTEE

| Education & Social Infrastructure | |
|-----------------------------------|----------------------------------|
| Pre-primary School | |
| Anganwadi under ICDS | Within distance less than 1 km |
| Municipal Pre-school | NA |
| Private Pre-school | NA |
| Primary School | |
| Municipal | NA |
| State Government | Within distance less than 0.5 km |
| Private | NA |
| High School | |

| Municipal | NA |
|--|----------------------------------|
| Private | NA NA |
| State Government | Within distance less than 0.5 km |
| Adult Education Centre | NA NA |
| Health Facilities | NA NA |
| Urban Health Post | NA |
| Primary Health Centre | NA NA |
| Government Hospital | Within distance less than 10 km |
| Maternity Centre | NA NA |
| Private Clinic | NA |
| Registered Medical Practitioner (RMP) | NA |
| Ayurvedic Doctor/Vaidya | NA NA |
| Social Development/Welfare | NA |
| Community Hall | NA NA |
| Livelihood/Production Centre | NA NA |
| Vocational Training/Training cum Production Centre | NA |
| Street Children Rehabilitation Centre | NA NA |
| Night Shelter | NA |
| Old Age Home | NA NA |
| Self Help Groups/DWCUA Groups in Slum | NA NA |
| No. of Neighbourhood Groups (NHGs) in slum | NA NA |
| Slum-dwellers Association | NA NA |
| Youth Association | 1 |
| Women's Association/Mahila Samithis | NA NA |

21. BAZAR PARA BUSTEE

| Education & Social Infrastructure | |
|-----------------------------------|--------------------------------|
| Pre-primary School | |
| Anganwadi under ICDS | Within distance less than 1 km |
| Municipal Pre-school | NA |
| Private Pre-school | NA |

On

| Municipal | NA |
|--|----------------------------------|
| and notpar | 192 |
| State Government | Within distance less than 0.5 km |
| Private | NA |
| High School | |
| Municipal | NA NA |
| Private | NA |
| State Government | Within distance less than 0.5 km |
| Adult Education Centre | NA |
| Health Facilities | NA |
| Urban Health Post | NA |
| Primary Health Centre | NA |
| Government Hospital | Within distance less than 10 km |
| Maternity Centre | NA |
| Private Clinic | NA |
| Registered Medical Practitioner (RMP) | NA |
| Ayurvedic Doctor/Vaidya | NA |
| Social Development/Welfare | NA |
| Community Hall | NA |
| Livelihood/Production Centre | NA |
| Vocational Training/Training cum Production Centre | NA |
| Street Children Rehabilitation Centre | NA |
| Night Shelter | NA NA |
| Old Age Home | NA NA |
| Self Help Groups/DWCUA Groups in Slum | NA NA |
| No. of Neighbourhood Groups (NHGs) in slum | NA |
| Slum-dweilers Association | NA |
| Youth Association | 1 |
| Women's Association/Mahila Samithis | NA NA |

22. RAILWAY BOUNDARY ROAD EAST BUSTEE

| Education & Social Infra | su ucture |
|--|----------------------------------|
| Pre-primary School | |
| Anganwadi under ICDS | Within distance less than 1 km |
| Municipal Pre-school | NA NA |
| Private Pre-school | NA |
| Primary School | |
| Municipal | NA NA |
| State Government | Within distance less than 0.5 km |
| Private | NA NA |
| High School | |
| Municipal | NA |
| Private | NA NA |
| State Government | Within distance less than 0.5 km |
| Adult Education Centre | NA NA |
| Health Facilities | NA NA |
| Urban Health Post | NA NA |
| Primary Health Centre | NA NA |
| Government Hospital | |
| | Within distance less than 10 km |
| Maternity Centre | NA |
| Private Clinic | NA |
| Registered Medical Practitioner (RMP) | NA |
| Ayurvedic Doctor/Vaidya | NA |
| Social Development/Welfare | NA NA |
| Community Hall | NA |
| Livelihood/Production Centre | NA |
| Vocational Training/Training cum Production Centre | NA NA |
| Street Children Rehabilitation Centre | NA |
| Night Shelter | NA |
| Old Age Home | NA |
| Self Help Groups/DWCUA Groups in Slum | NA |
| No. of Neighbourhood Groups (NHGs) in slum | NA NA |



| Slum-dwellers Association | NA |
|-------------------------------------|-------|
| Youth Association | 1 |
| Women's Association/Mahila Samithis | NA NA |

Non Sium Bazar Para

| Education & Social Infra | structure |
|--|----------------------------------|
| Pre-primary School | |
| Anganwadi under ICDS | Within distance less than 1 km |
| Municipal Pre-school | NA |
| Private Pre-school | NA |
| Primary School | |
| Municipal | NA |
| State Government | Within distance less than 0.5 km |
| Private | NA NA |
| High School | |
| Municipal | NA |
| Private | NA |
| State Government | Within distance less than 0.5 km |
| Adult Education Centre | NA NA |
| Health Facilities | NA |
| Urban Health Post | NA |
| Primary Health Centre | NA NA |
| Government Hospital | Within distance less than 10 km |
| Maternity Centre | NA |
| Private Clinic | NA |
| Registered Medical Practitioner (RMP) | NA |
| Ayurvedic Doctor/Vaidya | NA |
| Social Development/Welfare | NA |
| Community Hall | NA |
| Livelihood/Production Centre | NA NA |
| Vocational Training/Training cum Production Centre | NA NA |



| Street Children Rehabilitation Centre | NA |
|--|----|
| Night Shelter | NA |
| Old Age Home | NA |
| Self Help Groups/DWCUA Groups in Slum | NA |
| No. of Neighbourhood Groups (NHGs) in slum | NA |
| Slum-dwellers Association | NA |
| Youth Association | 1 |
| Women's Association/Mahila Samithis | NA |

The project slums and existing scenario of infrastructure:

22 nos Slums have been selected as a First Project under PMAY scheme by Halisahar Municipality in consultation with the state level Nodal Agency-The State Urban Development Agency (SUDA) under M.A. Department, GoWB.

RAMPRAMPRASAD SARANI SUBASH NAGAR BUSTEE:

The project slum site is at the core area of the Municipality at Ward no-07. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The near est railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is with 336265square metres. The owner ship of land lies Own .Theexistingnumberofhouseholdsis742withatotalpopulation of 2640. Most of the slum dwellers works as casual labour in local industries, others engaged in local house keeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in near by areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a un hygienic condition prevailing at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

2. KHASBATI SOUTH BUSTEE:

The project slum site is at the core area of the Municipality at Ward no-10. Metal road is running in front of the slums connect into major areas of Halisahar Municipality. The nearest

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railway station at a distance is 2.5 Km. The slums are 20years old with a total site area is117922square meters. The ownership of land lies with Own. The existing number of households 444 with a total population of1670.Mostoftheslumdwellersworks as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

3. WEST BASANTA BURI TALA BUSTEE

The project slum site is at the core area of the Municipality at Ward no-22. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 25 years old with a total site area is 54558 square kilo metres. The ownership of land lies with own. The existing number of households 442 with a total population of 1989. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

4. LEBUBAGAN COLONY BUSTEE

The project slum site is at the core area of the Municipality at Ward no-9. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway

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station at a distance is 3.0Km. The slums are 25 years old with a total site area is 75665 square kilo metres. The ownership of land lies with own. The existing number of households 236 with a total population of 1062. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

5. BACHHA SINGH ROAD SIDE BUSTEE

The project slum site is at the core area of the Municipality at Ward no-21. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.5Km. The slums are 25 years old with a total site area is 45314 square kilo metres. The ownership of land lies with own. The existing number of households 305 with a total population of 1372. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

6. MITTRA PARA LALKUTHI BUSTEE

The project slum site is at the core area of the Municipality at Ward no-11. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.5Km. The slums are 25 years old with a total site area is 1541 square kilo metres. The ownership of land lies with own. The existing number of households 55 with a total population of 248. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

7. AMBAGAN COLONY BUSTEE

The project slum site is at the core area of the Municipality at Ward no-13. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 25 years old with a total site area is 131942 square kilo metres. The ownership of land lies with own. The existing number of households 469 with a total population of 2069. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

PAL PARA BUSTEE

The project slum site is at the core area of the Municipality at Ward no-08. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 25 years old with a total site area is

112126 square kilo metres. The ownership of land lies with own. The existing number of households 357 with a total population of 2069. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

8. DESHBANDHU COLONY BUSTEE

The project slum site is at the core area of the Municipality at Ward no-14. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 2.0Km. The slums are 30 years old with a total site area is 100037 square kilo metres. The ownership of land lies with own. The existing number of households 253 with a total population of 1152. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

9. SUSHIL SARANI BUSTEE

The project slum site is at the core area of the Municipality at Ward no-5. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 99811 square kilo metres. The ownership of land lies with own. The existing number of households 212 with a total population of 901. Most of the slum dwellers work as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at



Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

EAST PRASAD NAGAR BUSTEE

The project slum site is at the core area of the Municipality at Ward no-17. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 2.0Km. The slums are 30 years old with a total site area is 155659 square kilo metres. The ownership of land lies with own. The existing number of households 588 with a total population of 2356. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

10. SARKAR PARA BUSTEE

The project slum site is at the core area of the Municipality at Ward no-03. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 41991 square kilo metres. The ownership of land lies with own. The existing number of households 446 with a total population of 1789. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with

surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

DHARAMBIRA COLONY NO -2 BUSTEE

The project slum site is at the core area of the Municipality at Ward no-2. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 92776 square kilo metres. The ownership of land lies with own. The existing number of households 357 with a total population of 1432. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

11. MITTRA BABU BAZAR BUSTEE

The project slum site is at the core area of the Municipality at Ward no-23. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 19530 square kilo metres. The ownership of land lies with own. The existing number of households 239 with a total population of 867. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing

huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

12. ARABINDA PALLY 1

The project slum site is at the core area of the Municipality at Ward no-04. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 83530 square kilo metres. The ownership of land lies with own. The existing number of households 214 with a total population of 878. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

13. SOUTH KONA COLONY BUSTEE

The project slum site is at the core area of the Municipality at Ward no-12. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 125578 square kilo metres. The ownership of land lies with own. The existing number of households 402 with a total population of 1675. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most

of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

14. SOUTH M C MITTRA BUSTEE

The project slum site is at the core area of the Municipality at Ward no-18. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 44238 square kilo metres. The ownership of land lies with own. The existing number of households 301 with a total population of 1176. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

15. BALUR PARA WEST BUSTEE

The project slum site is at the core area of the Municipality at Ward no-20. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 35809 square kilo metres. The ownership of land lies with own. The existing number of households 196 with a total population of 844. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum

with domestic connection.

16. NORTH KALACHAND PALLY BUSTEE

The project slum site is at the core area of the Municipality at Ward no-16. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 2.0Km. The slums are 30 years old with a total site area is 37001 square kilo metres. The ownership of land lies with own. The existing number of households 137 with a total population of 521. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

17. DHARAMBIRA -1 NORTH BUSTEE

The project slum site is at the core area of the Municipality at Ward no-01. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 114625 square kilo metres. The ownership of land lies with own. The existing number of households 210 with a total population of 834. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum



with domestic connection.

18. BAZAR PARA BUSTEE

The project slum site is at the core area of the Municipality at Ward no-06. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The slums are 30 years old with a total site area is 192746 square kilo metres. The ownership of land lies with own. The existing number of households 259 with a total population of 987. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum with domestic connection.

19. RAILWAY BOUNDARY ROAD EAST BUSTEE:

The project slum site is at the core area of the Municipality at Ward no-15. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 1.0Km. The slums are 30 years old with a total site area is 72760 square kilo metres. The ownership of land lies with own. The existing number of households 284 with a total population of 564. Most of the slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this slum

with domestic connection.

The project Non slumsand existing scenarioof infrastructure:

One non Slum area has been selected as a First Project under PMAY scheme (Housing For All) by Halisahar Municipality in consultation with the state level Nodal Agency-The State Urban Development Agency(SUDA) under M.A. Department, Go WB.

NON SLUM AREA AT WARD NO-04

BAZAR PARA

The project slum site is at the core area of the Municipality at Ward no-04. Metal road is running in front of the slums connects it to major areas of Halisahar Municipality. The nearest railway station at a distance is 3.0Km. The Non slum is more than 100 years old with a total site area is.08100 square kilo metres. The ownership of land lies with own. The existing number of households 186 with a total population of 765. Most of the non slum dwellers works as casual labour in local industries, others engaged in local housekeeping, as sweepers in local areas, as cleaners at Municipal area and as vegetable sellers in nearby areas.

The environmental condition in the slums is little bit poor. The slum is partially covered with surface drains but drains are tilted and broken condition resulting clogging. Most of the roads within slums are semi metallic or kuchha road. There is 100% street lights present in the slum. Most non of the population adopts unhygienic method for disposing their waste; thereby causing huge damage to health. The site visit has revealed a unhygienic condition prevailing there at present due to absence of any organized structures and infrastructure for keeping them. Most of the dwelling units are kaccha or dilapidated. Water supply net work is needed in this non slum with domestic connection.

| Desil and a second | Doguiromento |
|--|--------------------------------|
| Particulars | Requirements |
| Housing: Dwelling Unit provision for Househo | olds with standard provisions: |
| | 1 Multipurpose Room |
| | 1 Bed Room |
| | |
| | 1 Kitchen |
| | 1 Kitchen 1 Toilet |

| Physical Infrastructure Requirement: | Standard Infrastructure Provision for |
|--|---|
| | □ Water Supply |
| | □ Drainage |
| | □ Roads |
| | ☐ Electricity |
| Project Development Option | |
| In-situ redevelopment and whole of the | project will be addressed in the project |
| Proposed Development | |
| Based on preliminary understanding, the | e following components are being proposed |
| ☐ Housing Units [Single storied | d in situ]. |
| Standard Physical Infrastructors form of Circulation of Water Supple Electricity | |

Innovations proposed in Project Planning

Background

Housing activities are known to have the capacity to play a significant role in social-economic development, because they help not only in creation of shelter for the people by also in generating employment opportunities for a large variety skilled and unskilled work force which is a prerequisite for growth and development of settlement. A considerable section of the people without land are in a still worse position as housing schemes for the poor have hither to been targeted on paper but not applied in practice. Both the serviced land and shelter have become beyond the reach for half of the population-hence formation of slums, encroachments, informal colonies and unauthorized constructions. No land is earmarked for Economically Weaker Sections and Low Income Groups in Master Plan. The population density norms are required to re-look to enable better utilization of valuable land, as certain areas in the city. This growing slum population and the lack of basic facilities like water and sanitation will badly impact on overall development and prosperity of urban centers like Municipality.

To overcome the existing situation and to promote planned development the following innovative strategies can be adopted for the improvement of the city.

 To ensure that housing, along with the supporting services is treated as a priority and at par with the infrastructure sector.

- Forging strong partnerships between private, public, and cooperative sectors to enhance the capacity of the construction industry.
- Organizing public consultations to meet the special needs of slum dwellers.
- Promotion of livelihood for the slum dwellers.

Financial Implementation:

Beneficiary led Participation:

implies development of housing by involvement of Beneficiary

Tasks:

- Composition of beneficiaries and organizing the area meetings.
- Involvement of community and sustainable livelihood framework (SLF) in decision making and prioritization of needs of the slum.
- ☐ Understating of Social-economic profile

Post Project Monitoring

A Monitoring & Evaluation team has to be formed to know the post project impact on the slums and to document the best practices.

Physical Infrastructure

Background

The National Sample Survey Organization (NSSO) in the Ministry of Statistics and Programme Implementation, Government of India has released the report of a nation-wide survey carried out by it during July 2008 to June 2009 (65th round) on the condition of urban slums.

The aim of the survey was to collect information on the present condition of the slums and on recent changes, if any, in the condition of facilities available therein. Both 'notified slums' — areas notified as slums by the municipalities, corporations, local bodies or development authorities — and non-notified slums were surveyed — a non-notified slum being any compact urban area with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions. The present report gives the condition of urban slums, covering ownership, area type, structure, road within and approaching the slum, living facilities like

electricity, drinking water, latrine, sewerage, drainage, garbage disposal, and distance of slums from the nearest primary school and government hospital/health centre. It also estimates the proportion of slums where certain specific facilities have improved/deteriorated over the five years preceding the date of survey.

Comprehensive data on this subject was last collected by NSSO in its 58th round (July - December

2002). The present report provides key indicators from the 58th round as well, for comparison. Some important findings of the survey are given below.

| mp | arison. Some important findings of the survey are given below. |
|--|---|
| | About 49 thousand slums were estimated to be in existence in urban India in 2008- |
| | 09, 24% of them were located along nallahs and drains and 12% along railway lines. |
| boo | About 57% of slums were built on public land, owned mostly by local dies, state government, etc. |
| | In 64% of notified slums, a majority of the dwellings were pucca, the |
| | corresponding percentage for the non-notified ones being 50%. |
| | For 95% slums, the major source of drinking water was either tap or tube wells. |
| | Only 1% notified and 7% non-notified slums did not have electricity connection. |
| de la constantina della consta | About 78% of notified slums and 57% of the non-notified slums had a pucca road inside the slum. |
| | About 73% notified and 58% non-notified slums had a motorable approach road. |
| | About 48% of the slums were usually affected by water logging during monsoon - |
| | 32% with inside of slum waterlogged as well as approach road to the slum, 7% where the slum was waterlogged but not the approach road, and 9% where only the approach road was waterlogged in the monsoon. |
| | The sanitary conditions in the slums in terms of latrine facility during 2008-09 showed considerable improvement since 2002. Latrines with septic tanks (or similar facility) were available in 68% notified and 47% non-notified slums (up from 66% and 35% respectively in 2002). At the other extreme, 10% notified and 20% non-notified slums (down from 17% and 51% in 2002) did not have any latrine facility at all. |
| | About 10% notified and 23% non-notified slums did not have any drainage facility. The corresponding proportions in 2002 had been 15% for notified and 44% for non-notified slums. Underground drainage systems or drainage systems constructed of pucca materials existed in about 39% notified slums (25% in 2002) and 24% non-notified slums (13% in 2002). |
| | Underground sewerage existed in about 33% notified slums (30% in 2002) and |
| | |

M

19% non- notified slums (15% in 2002). Government agencies were collecting garbage from 75% notified and 55% nonnotified slums. Among these slums, garbage was collected at least once in 7 days in 93% notified and 92% non-notified slums. About 10% notified and 23% non-notified slums did not have any regular mechanism for garbage disposal. Over the last five years, facilities had improved in about 50% of notified slums in terms of roads (both within-slum road and approach road) and water supply. The incidence of deterioration of any of the existing facilities in notified slums during the last five years was quite low (about 6% or below). In case of most slum facilities - sewerage and medical facilities being exceptions the facility was reported to have improved during the last five years in more than 20% of non-notified slums. Deterioration of any of the existing facilities in non-notified slums, like notified slums, was rare (about 9% or below). Facilities such as street light, latrine, drainage, sewerage and medical facilities were each reported by more than 10% of notified slums to be non-existent both at the time of survey and five years earlier. In case of non-notified slums, facilities like street light, latrine, drainage, sewerage and garbage disposal were each reported by more than 20% of the slums to be non- existent, both during the survey and five years earlier. Where improvement had been brought about during the last 5 years, it

Government's efforts in about 80-90% of slums, both notified as well as non-notified and for all the facilities. Improvement in educational facilities at primary level was attributed to NGOs in 13% of the notified slums where such improvement was reported. NGOs were also found to have played a role in the improvement of latrine and sewerage system in non-notified slums.

Topographical survey and GIS mapping

was due to the

The preparation of base map of Wood Industries slum has been prepared with Global Positioning Stations (GPS) and temporary Benchmarks (TBM) for Georeferencing and accurately locating the slum. These points have been selected and located at well defined locations on the ground after discussion with the ULB officials. The existing topographical features have been represented to the actual terrestrial position.

Based on the Total Station survey and Socio-economic survey GIS based thematic maps were generated. This helped in accurate representation of the ground scenario with that of the socio-economic conditions of the people. The following GIS maps were generated for inclusive planning:

Map showing existing Land use Map

Map showing Household Size

| Map showing House Type/Structure, Flooring, Cooking |
|---|
| Map showing Minority Status |
| Map showing existing toilet facility |
| Map showing existing road type in front of house |
| Map showing existing source of drinking water |
| Map showing existing source of house lighting |

Water Supply

Proposal Rationale

Water and poverty are inextricably linked. Poor access to water and insufficient sanitation affect the health of the poor, their food security, and their prospects for making a living especially for vulnerable groups, such as children, the elderly, and women in general. Safe and adequate quantities of water and food security are recognized as preconditions for an acceptable development standard.

In almost whole of Asia and the Pacific region - home to nearly 900 million of the world's poorest people - one in three people does not have safe drinking water and one in two lacks adequate sanitation. Water is a critical resource for the poor and plays a key role in many aspects of their livelihoods.

Poor people depend on or are affected by water resources in four key ways:

| As direct inputs into production |
|--|
| For health, welfare, and food security |
| For ecosystems viability |
| For combating water-related hazards |

Keeping the above in mind, a water scheme for the urban poor needs to be drawn up which shall **Improved Access to Quality Water Services and also** build up institutions accessible to the poor that can efficiently manage water resources. These institutions need to be responsive to the poor and should have an adequate opportunity for the poor to raise their views.

The management of water resources must take place within the wider ecosystems context, and all actions should be based on an understanding of the flows of water resources within river basins and how they affect the poor.

In view of this, the water scheme needs to take into account the following broad objectives:



☐ To provide adequate Treated Water

To ensure access for the Urban poor

☐ To develop institutional framework taking into account the requirements of the Urban Poor

Outcome

Water is a basic requirement of life. Absence of adequate water is a major issue for health as well as comfort for the poor. With the implementation of the project, the slum dwellers will have access to safe drinking water, which will greatly help their personal health, and hygiene. Quality of life would improve significantly and the multiplier effect due to this investment would reap significant benefit to the economy of this region within a considerable short period of time.

Water supply includes sources of supply, features of collection and distribution system, water demand and availability, quality of surface and groundwater source, reuse and recycling of water including conservation of water at the household level. The endeavour for all the proposals is to optimize the total cost of the system.

Assessment of Overall State of Infrastructure

In line with the City Development Plan for Kolkata Metropolitan Area (Pg 11-28), it has been resolved that the entire KMA are will be switched over to surface water.

The following norms have been fixed for the region:

☐ Kolkata Municipal Corporation Area 200 lpcd

☐ Howrah Municipal Corporation Area 150 lpcd

■ Municipal & Non-Municipal Area 135 lpcd

Previously the area was largely dependent on ground water. The status of ground water availability is as follows:

Keeping in mind the reduced rate of aquifer, traces of Arsenic Contamination and presence of Iron on the water, it has been decided to switch over to surface water from River Damodar.

Accordingly, the plant design is adequate to cater to the future requirement of the entire region and no augmentation of supply is required for the present project

Situation Appraisal & Key Intervention for Identified Slum

Presently accessibility to water supply facilities in the slum pocket is inadequate. The major



source of water is from the common tap water available in the slums. The slum is partially connected to the municipal water supply main.

It is now proposed that water pipeline shall be provided in each household with requisite number of

taps, as computed during the survey as felt needs shall be provided under this Project. However, considering that the houses are being provided with water, the provisions of multiple taps have not been encouraged and kept to the minimal level.

| Design basis: | of distribution system was carried out on the following |
|------------------|---|
| | Population projection |
| | Project horizon years |
| | Design period for various project components |
| | Per capita water supply |
| | Factors affecting consumption |
| | Existing water supplies |
| | Pipeline pressure requirement |
| | Supply of water on 24 x 7 basis |
| | Economical size of conveying main |
| | Choice of pipe materials |
| | Peak factor |
| | Residual pressure |
| | Hydraulic zoning |
| | |

Design Period for various Project Components

Water supply projects are designed normally to meet the requirements over a period of 30 years after their completion. The time lag between design and completion of the project should also be taken into account which should not exceed two to five years depending on the size of the project. CPHEEO guidelines have been followed has suggested the design period for various water supply components.

Service Plan

The pipelines needs to be regularly and kept in full working conditions. It is proposed that operation and maintenance of these pipelines and other assets be done in conjunction with the maintenance

programme of the Municipal Corporation. The Bustee Working Committee shall be the first level of responsibility for ensuring that the pipelines etc are kept in good order. The overall operation and maintenance shall be carried out by the project cell of the Municipal

Corporation.

Proposed Interventions

According to the above, the water supply design requirement for Municipality has been fixed at 135 lpcd

(Domestic Requirement) + 15% (head loss) + 100*(p^0.5) = 163.25 lpcd (approx).

There is existing water supply scheme which has the capacity for meeting the requirement. Thus there is no additional requirement of any reservoir. There are street stand posts for the slum proposed. But to achieve house connection at slum 100 mm dia. DI pipes are proposed. The details of water supply lines provide are as follow:

Transmission of Water

Halisahar Municipality has water supply through ESR having (24x7) water supply. For the proposed multi-storied buildings sump and pump with OHR is provided for each building. The water supply network for this slum will be connected to the citywide water supply network.

Water supply system broadly involves transmission of water from the water supply main to the area of consumption normally through pipelines. Pipelines normally follow the profile of the ground surface quite closely, normally at 1 metre below ground.

Following design criteria are adopted for this Project:

| | Gravity pipelines have to be laid below the hydraulic gradient. |
|----|---|
| | Pipes are of Ductile Iron, Mild steel, GRP, HDPE, uPVC, Plastic etc. |
| | The design of water supply conduits is dependent on pipe friction, available head, velocity allowable, etc. |
| | Minimum sizes of 100mm for towns having population up to 50,000 and 150mm |
| | for those above 50,000 are recommended. |
| Ho | There are a number of formulae available for use in calculating the velocity of flow. wever, |
| CO | Hazen William's formula for pressure conduits and Manning's formula for free flow nduits |
| | are popularly used. |

Drainage and Soild waste management

Proposal Rationale

The status of adequate Drainage has a close and direct link with environment, water supply and its cleanliness, health and hygiene. The problem of adequate drainage associated with steep influx of population in urban areas, therefore needs to be addressed forth with,

debated and deliberated at length, by the policy planners for the development of urban/city areas. Inadequate Drainage results in accumulation of stagnant water and is a major health hazard for the people living in the region.

In the slums there is no proper drainage system and hence stagnation of water is a common occurrence for the slums. In order to improve the situation, there is a need for constructing pucca drains, which will dispose of the stagnant water to the main drains.

Outcome

The proposed drainage system by means of construction of new drains and improvement of existing will help to provide relief to the slum dwellers by means of efficient and effective disposal of storm water through the outfall channels. The outcome of this scheme will by and large enhance the quality of civic life by way of promotion and safeguarding the public health and environmental pollution.

Assessment Overall State of Infrastructure

One of the priority area identified for Wood Industries slum has been absence of adequate drainage. Most of the drainage is kutcha and inadequate for covering the slums which had led to water logging which in turn affected the environment and health of the people on an overall basis.

As mentioned above poor drainage system and consequently chronic water logging are the major issues of concern. There is hardly any pucca drain. The state of drain also affects the condition of the road.

Though there are storm water drains on the main road around the slums, but there is no systematic connection with the internal areas of the slum, thereby leading to acute water logging within the slum. It is worth mentioning that apart from lack of drainage network in several slum pockets, major challenge lies with its maintenance. In numerous cases drains in slums gets choked due to improper disposing of solid waste and other hazardous materials into the existing drains.

Situation gets beyond control particularly during monsoon season like July and August. Accumulated water causes to generate public health problems. Haphazard growth and settlement in the slum area

has blocked the natural drainage courses, which in turn causes water logging and stagnation in

different parts of the slum.



Proposed Interventions

It is thus proposed to have an integrated drainage programme covering the slum pocket. The programme shall envisage construction of pucca drain throughout the road length and installing a maintenance programme to ensure that the drains are kept free from clogging from plastics and other materials. Depending on the availability of space and requirement, a sections have been designed, Designs of which have been provided in the relevant sections.

Road Infrastructure

Proposal Rationale

A key component of the Proposal is a focused initiative to provide strong connectivity and provision of movement in the slums. This will enable the poor people to benefit from greater mobility and would increase their employment opportunities, open up trading and marketing of products, and important improve access to health, education, and other social services.

Roads in the slum are highly undeveloped and ill maintained. Poor roads are strong barrier to the development of the slums. Poor road condition and absence of road facility in several slums makes life difficult for all slum dwellers, especially, women and children. It also hampers prompt movement of sick; particularly those who require urgent medical attention. Lack of maintenance, coupled with poor drainage makes life even worse during monsoon season. Road are rarely re-built or re-paired periodically due to several reason. Provision of basic quality road is thus an important element of slum development. The existing road network system of the slum has become inadequate to cope up with the present and ever increasing needs. In order to bear the additional pressure due to enhanced civic, economic and commercial activities of the slum, existing road network system in several places are required either to be up-graded or winded and new roads are also be constructed in a number of places where the network is inadequate.

Proposed status and strategy

The existing condition of the road is poor and cause great hardship to the slum dwellers particularly women and children. The existing roads in the slum areas are predominantly made of brick pavement. These roads are substantially worn out. The lane roads are Kutcha roads. These roads are highly vulnerable and are in a poor condition particularly in rainy season

One of the major issues is absence of proper maintenance. In view of this it is proposed that the entire road network is to be converted to concrete pavement as concrete pavements are

durable and easy to maintain.

The Road needs to be maintained. It is proposed that operation and maintenance and servicing of these roads be done by the Municipality. The Bustee Working Committee shall be the first level of responsibility for ensuring that the pipelines etc. are kept in good order. The project cell of the Municipal Corporation shall carry out the overall operation and maintenance.

Proposed Intervention

All the proposed roads are rigid pavement-cement concrete roads. Rigid pavements are those which posses note worthy flexural strength. The concrete pavement slab can very well serve as a wearing surface as well as effective base course. Therefore usually rigid pavement structure consists of a cement concrete slab, below which a granular base or sub base course may be provided. Rigid pavements are generally designed and the stresses are analyzed using elastic theory, assuming pavement as an elastic plate resting over elastic or a viscous foundation.

Construction of granular sub-base (GSB) 200 mm thick. Construction of 150 mm thick cement concrete pavement, as per Clause 1501.2.2 M30 (Grade), as per drawing and Technical Specification Clause 1501.

Outcome

After successful implementation of the scheme the slum dwellers will have facilities like preschool education, adult education, non-formal education and social, recreational activities in the slum area. The community centres would provide the people to gather in, to meet and discuss their problems. It is not just a physical location but a space; where poor people could own, develop their thoughts and also could contribute their own skill and labour to make their dream come true. It will also provide the Municipal Corporation in networking with the urban poor communities in order to exchange information and views.

Proposed Intervention

In view of the above, it is proposed that a Community Centre is established to cater the slum population. For community development a community centre is proposed. The one storied community centre has total plinth area of 223.4 sq m.

There will be Multipurpose hall which may be used as skill development centres or livelihood centre, health centres and Crèche are provided.

The Community Centres act mainly as a supporting unit for livelihood and for revenue generation for

| Mat | orin | le of | cons | teneti | an. |
|-----|------|-------|------|--------|-----|
| | | | | | |

| PCC (1:3:6) for foundation |
|--|
| RCC M-20 for substructure & superstructure (Column, Beam, Slab) |
| HYSD Steel |
| 1st Class Brick Masonry |
| 1:6 (Cement: Sand) plaster - 10 mm on soffit of beam & slab, 15 mm on internal |
| walls & 20 mm on external walls |

□ IPS flooring

Definition of Slum for Housing

Different definitions of a slum exist in different statutes and in urban poverty literature. For the purpose of HOUSING SCHEME, it is proposed to adopt the definition given in the 2001 Census, which is as follows:

- a. All areas notified as 'Slum' by State/Local Government and UT Administration under any Act;
- b. All areas recognized as 'Slum' by State/Local Government and UT Administration, which have not been formally notified as slum under any Act;

*Slum' or *Slum Area*- is a compact settlement of at least 20 households (For NE & Special Category States it is 10-15 households) with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions.

Situation Appraisal

The people living in the slums mostly have kutcha (10) and semi-pucca (186) housing. In certain cases where pucca housing is available, they are usually in dilapidated condition. The kutcha houses are in very poor condition and require extensive repairs. Most of the houses have tiles on roof. While during the survey some of the houses have been noted to be in average condition, the quality of these houses is also speedily deteriorating.

Proposed Intervention

In line with the vision to 'housing for all', an integrated housing programme is proposed to be implemented. The target will be all the slum dwellers in the pocket. In situ single dwelling units are proposed.

Table-28: Dwelling units

| Number of DU |
|---|
| 2004 within 22 slums & 18 within 1 non slum |
| |



Building Plan

The buildings are proposed to cover an area of approximate 32 Sq.mt along with provision of 2 rooms, kitchen and sanitation facility. The layout, size and type design of housing dwelling units depends on the local conditions and the preferences of the beneficiary. The houses, has been designed in accordance with the desire of the beneficiaries, keeping in view the climatic conditions and the need to provide ample space, kitchen, ventilation, sanitary facilities, etc. and the community perceptions, preferences and cultural attitudes.

In line with the scheme, carpet area of the house will be not less than 25 sq. mts and preferably two room accommodation plus kitchen and toilet should be constructed.

| Buil | ding material |
|------|---|
| | PCC (1:3:6) for foundation |
| | RCC M-20 for substructure & superstructure (Column, Beam, Slab) |
| | HYSD Steel |
| | 1st class Brick Masonry |
| | 1:6 (Cement: Sand) plaster – 10 mm on soffit of beam & siab, 15 mm on internal |
| | walls & 20 mm on external walls |
| П | IPS flooring |
| Stru | ctural Design |
| | Following are the general considerations in the analysis/design. |
| | For all structural elements, M20 grade concrete and Fe 415 grade of steel is used. |
| | Plinth beams passing through columns are provided as tie beams. |
| | Pedestals are proposed up to ground level. |
| | Beam Centre-line dimensions are followed for analysis and design. |
| | For all the building, walls of 250 mm and 125mm thick with 20 mm External plaster |
| | and 12 mm thick internal plaster are considered. |
| | Seismic loads are considered acting in the horizontal direction along either of the two |
| | principal directions. |
| Des | ign data |
| | Live load: 2.0 kN/m2 at typical floor |
| | 1.5 kN/m2 on terrace (With Access) : 0.75 kN/m2 on terrace (without Access) |
| | Floor finish 50mm (0.05*24) = : 1.2 kN/m2 |
| E | Ceiling plaster 12mm (0.012*20.8) : 0.25 kN/m2 |

| | Partition walls (Wherever Necessary) : 1.0 kN/m2 |
|-------|---|
| | Terrace finish: 1.5 kN/m2 |
| | Earthquake load: As per IS-1893 (Part 1) - 2002 |
| | Depth of foundation below ground: ,0.7 m |
| | Walls: 250 mm thick brick masonry walls at external and 125mm walls internal. |
| Refer | ence codes; |
| | IS 456: 2000 - Code of practice -Plain and Reinforced concrete. |
| | IS:1893:2002 - Criteria for Earthquake resistant design of structures(Part-1) |
| П | IS: 13920: 1993 - Ductile detailing of Reinforced concrete structures subjected |
| | to seismic forces. |
| | SP: 34 - Hand Book on Concrete Reinforcement and Detailing. |
| | S: 875: 1987 - Code of practice for design loads (other than earthquake) for |
| | buildings and structures. (Part-2) |

Identification of Beneficiaries

Municipality Municipal Corporation, in consultation with State Urban Development Agency (SUDA), will approve the phasing of the beneficiaries in the region. The beneficiaries so identified and the projects so prepared shall be done in consultation with the committees and community development societies already existing in that particular city. The identification of beneficiaries will be on the basis of the baseline survey already conducted under PMAY Demand Survey.

Allotment of Houses

Allotment of dwelling units will be in the name of the female member of the household. Alternatively, it can be allotted in the name of husband and wife jointly. Ownership of land required for every Benificiary.

Town Planning Norms

Up-gradation of existing constructions and construction of new houses shall only be taken after approval of the lay out by the urban local body. Respective State Govts. may relax some town planning norms for sanction of such layout Plans, to facilitate HOUSING SCHEME, however, minimum acceptable standards of Town Planning will need to be set and followed.

All planning are done as per UDPFI & CPHEOO guidelines and local Municipal Bye-laws.



Compliance with Municipal Bye laws

All designs & drawings are created keeping in line with the municipal bye laws.

Tenure

Unlike rural areas, land is scarce in urban areas particularly in large metropolises. Under HOUSING SCHEME, the responsibility for providing land for the project rests with the State Government or its agencies.

or no agonolo.

Summary of Investment

Project Costing

The costing for the individual sectors has been made on the basis of applicable Schedule of Rates. The details of each of the sub-projects have been provided in the respective sections.

The cost components include:

Infrastructure: Cost of infrastructure development/up-gradation includingwater supply, sewerage, storm water drainage, solid waste management, roads & drainage, street lights, etc.

Housing: Construction Costs would need to be arrived from the various components that are proposed to be implemented and would vary depending on the development option identified.

GOI Contribution:

PMAY scheme guidelines stipulate that, 1.5 lakhs of the unit cost of Dwelling unit.

The Central share would be available as per milestones set out in Memorandum of Agreement (MoA).

Beneficiary Contribution:

In order to ensure beneficiaries interest, financial contribution by the beneficiaries is critical. The share of beneficiary contribution in housing is proposed to be a minimum of 25000/-. As per PMAY guidelines no contribution from the beneficiaries is expected in infrastructure improvements

State Contribution:

The decision would be left to the remaining share would have to be arranged by the State. State will contribute 5% of total Dwelling cost for infrastructure.

ULB Contribution:

ULB have no contribution on dwelling unit cost. ULB will contribute 5% of total Dwelling cost for infrastructure.

In the 1st Meeting of SLSMC of West Bengal it has been decided that the flowing funding pattern should be adopted for implementation of PMAY until further revision.

Table-29: Share of Fund

| Type of City/Towns as per | Component | Contribution of | | | |
|---------------------------------|----------------|-----------------------|---------------------|-------------------|-----------------------------|
| 2011 census | | Central Rs.(Lakhs) | State Rs.(Lakhs) | ULB Rs.(Lakhs) | Beneficiaries Rs.(Lakhs) |
| Total cost of | Housing | 1.5 | 1.93 | Nil | 0.25 |
| Benificiary LED Construction | Infrastructure | Nil | 5 % | 5 % | Nil |

4.2 Statutory approval including environmental clearance (as applicable)

Table-30: Statutory approval including environmental clearance

| | IMPACT & | REMEDIES |
|----|---|---|
| 1. | Utilization of alternative material Characteristics and availability of alternative material | Locally available bricks etc. will be used. |
| 2. | Rehabilitation of water bodies & measures for maintaining surface runoff smoothly | No water body is affected by the alignment of road. The road side open C. C. / Brick masonry drains have been provided for free flow of storm water. |
| 3. | Measures for Erosion Control | Not applicable for the slum area. |
| 4. | Conservation of Topsoil a. Extent of loss of topsoil b. Area requirement for topsoil conservation c. Inclusion of conservation of topsoil d. | Not applicable for the slum area. |
| 5. | Impact on Heritage & Culture a. Identification of locally significant cultural properties b. Assessment of likely impacts on each cultural property due to project implementation c. Possible measures for avoidance i) Identification of alternative routes ii) Relocation of Culture property in consultation with the local community iii) Common Property | Question does not arise. |
| 6. | Location of Natural Habitants | It will not be disturbed |
| 7. | Construction of site office / Camp | Temporary construction of camp / office shall be established by contractor and since the project is small and scattered, the temporary impact on environment for Construction Camp / office at the time of execution of work is negligible. |
| 8. | Quarrying of Materials | |
| | Sourcing of materials from quarries Lead from various existing quarries Adequacy of material for the project in these quarries | The construction materials require for the project shall be procured from: a) Stone metal: from the existing. b) Bricks: From the existing brick fields nearby the |



| | | project site. c) Sand : From the nearest source. All the materials are sufficiently available. |
|-----|--|---|
| 9. | Water Requirement; Identification of potential sources of water | Water required for the construction of work will be available from ground water. There is no scarcity of water in the region. |
| 10. | Location of Waste Water Disposal : | |
| | a. Location for disposal of waste water | The surface drain have been proposed in the slum for disposal of waste water. |
| | b. Outfalls locations for longitudinal drains | |
| | i) Outfall level and back flow | Natural slope of the ground will be maintained for waterways for discharge of surface runoff. No possibility of back flow except in the case of heavy flood. |
| | ii) The outfall is in natural stream; measures shall be taken to prevent sediment into the stream. | The storm water drain of the slums will discharge the water to the main high drain of the town. |
| 11. | Air Pollution during construction work | Work shall be carried out by equipments like concrete mixer machine vibrator etc. at this time of concerting work only for which air pollution will be negligible. |
| 12. | Identify locations susceptible to induced development | Locations vulnerable to induced development: In such location the Municipality has committed not to allow building construction activity. a. Lands within 50 m of junctions b. Agricultural lands with enforce restriction on building activity on either side of road. Stretches within 100m of worship places, weekly fairs and locations of community mass gatherings. |
| 13. | Roles and responsibilities of municipality in regulating development | The municipality shall lay down restrictions on building activities along the by-pass roads: 1. Municipality will enforce restriction on building activity on either side of road. 2. Development of Residential sites outside Existing Settlement. Appropriate measure towards the removal of encroachments onto the public land to be taken. |
| 14. | Traffic Congestion and related air & noise pollution | As the road passes through the slum area of the town and two wheelers, Three wheelers, light vehicle will move hence there will not be any traffic congestion, related air & noise pollution. |
| 15. | Opportunity in economic activities due to ease of transportation system | The benefits due to this project are: Generation of Man days Improvement in Household or population sector i.e. Improvement of personal health, hygiene, socioeconomic condition, education etc. |

Section 5 - Project Cost Estimate

Project Cost and Financing Strategy For Dwelling Unit

Total no of Dwelling unit = 2022 Nos
Rate per Dwelling unit = 3.68 Lakhs

Total Cost of Dwelling unit = 2022 x 3.68 = 7440.96 Lakhs

Central Share = 2022 x 1.5 Lakhs = 3033 Lakhs

State Share = 2022 x 1.93 Lakhs = 3867.72 Lakhs

Beneficiary Share = 2022 x 0.25 Lakhs = 505.5 Lakhs

ULB Share = NIL

For Infrstructure

10 % of total Dwelling unit cost = 7440.96 Lakhs x 10% = 744.096 Lakhs

Central Share = NIL

State Share = 50% x 744.096 Lakhs = 372.048 Lakhs

Beneficiary Share = NIL

ULB Share = 50% x 744.096 Lakhs = 372.048 Lakhs

The total project cost will be 81.85 crores

Out of these 81.85 Crores is the cost of Housing Infrastructure. The following table shows the share of cost between housing infrastructure & Physical Infrastructure.

Table- 31: Cost Breakup between Housing & Infrastructure

| SI No. | Component | Cost on Lakhs | |
|--------|------------------------------------|---------------|--|
| 1. | Housing Cost (2022) Dwelling Units | 7440.96 | |
| 2. | Infrastructure Cost | 744.096 | |
| | Total | 8185.10 | |

5.1 Abstract cost estimate

5.1.1 Component wise abstract for each slum/Non slums area

Table-32: Component wise abstract for each slum/Non slums area

| SL. NO | SLUM/ NON- SLUM NAME | | DWELLING UNIT | INFASTRUCTURES | | | | |
|-----------|---|------|------------------|------------------------------|-------------------------------------|--|---------------------|--|
| | | SLUM | | WATER CONNECTION (Nos) | TOILET FACILITIES (in number) | ELCTRIC POLES WITH CONNECTION OF ELECTRICITY (In Number) | ROADS (In Meter) | |
| 1 | RAMPRAMPRASAD SARANI SUBASH NAGAR BUSTEE | 001 | 236 | 236 | NA | NA | 2028 | |
| 2 | KHASBATI SOUTH BUSTEE | 003 | 131 | 131 | NA | NA | 1126 | |
| 3 | WEST BASANTA BURI TALA BUSTEE | 005 | 38 | 38 | NA | NA | 327 | |
| 4 | LEBUBAGAN COLONY BUSTEE | 007 | 84 | 84 | NA | NA | 722 | |
| 5 | BACHHA SINGH ROAD SIDE BUSTEE | 800 | 81 | 81 | NA | NA | 696 | |



| 1 | Bazar Para | Non Slum | 18 | 18 | No | No | 155 |
|-----------|--------------------------------------|-------------|------------------|------------------------------|-------------------------------------|--|--------------------|
| SL. NO | NON- SLUM NAME | SLUM | DWELLING UNIT | WATER CONNECTION (Nos) | TOILET FACILITIES (in number) | ELCTRIC POLES WITH CONNECTION OF ELECTRICITY (In Number) | ROADS (In Meter |
| | | | | INFASTRUCTURES | | | |
| | | | | | | | 17223 |
| 22 | RAILWAY BOUNDARY ROAD EAST BUSTEE | 091 | 46 | 46 | NA NA | NA | 395 |
| 21 | BAZAR PARA BUSTEE | 078 | 25 | 25 | NA | NA | 215 |
| 20 | DHARAMBIRA -1 NORTH BUSTEE | 072 | 171 | 171 | NA | NA | 1470 |
| 19 | NORTH KALACHAND PALLY BUSTEE | 070 | 63 | 63 | NA | NA | 541 |
| 18 | SOUTH M C MITTRA BUSTEE | 067 | 62 | 62 | NA | NA | 533 |
| 17 | BALUR PARA WEST BUSTEE | 062 | 40 | 40 | NA | NA | 344 |
| 16 | SOUTH KONA COLONY BUSTEE | 059 | 190 | 190 | NA | NA | 1633 |
| 15 | ARABINDA PALLY -1 BUSTEE | 073 | 37 | 37 | NA | NA | 318 |
| 14 | MITTRA BABU BAZAR BUSTEE | 051 | 6 | 6 | NA | NA | 52 |
| 13 | DHARAMBIRA COLONY NO - 2 BUSTEE | 049 | 28 | 28 | NA | NA | 241 |
| 12 | SARKAR PARA BUSTEE | 046 | 121 | 121 | NA | NA | 1040 |
| 11 | EAST PRASAD NAGAR BUSTEE | 037 | 96 | 96 | NA | NA | 825 |
| 10 | SUSHIL SARANI BUSTEE | 036 | 68 | 68 | NA | NA | 584 |
| 9 | DESHBANDHU COLONY BUSTEE | 034 | 66 | 66 | NA | NA | 567 |
| 8 | PAL PARA BUSTEE | 033 | 100 | 100 | NA | NA | 859 |
| 7 | AMBAGAN COLONY BUSTEE | 025 | 298 | 298 | NA | NA | 2561 |
| 6 | MITTRA PARA LALKUTHI BUSTEE | 011 | 17 | 17 | NA | NA | 146 |

Table-33: Summary

| SL. NO | DESCRIPTION OF WORK | QUANTITY | UNIT | RATE PER UNIT (In Rs.) | TOTAL COST (Rs. In lakh) |
|--------|---------------------|----------|------|------------------------|--------------------------------|
| 1 | WATER CONNECTION | 2022 | Nos | 1572.00 | 31.79 |



| | Total = | | | | 743.76 |
|---|--|-------|-------|---------|--|
| 4 | ROADS | 17378 | METER | 4097.00 | 711.98 |
| 3 | ELCTRIC POLES WITH CONNECTION OF ELECTRICITY | NA | NA | | |
| 2 | TOILET FACILITIES | NA | NA | | A Company of the Comp |

5.2. Detailed Estimates

5.2.1. Detailed Estimate of Provision of Housing

Table-34: Detailed Estimate of Provision of Housing

DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For All (Urban)

Total Covered Area- 32.18 sq.m (With Electrical Works)

Referance of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.) Floor Area 25.37 sqm

| SL No. | Description of Works | Quantity | Unit | Rate (Rs.) | Amount (Rs.) |
|-----------|---|----------|--------|---------------|--------------|
| 1 | Earthwork in excavation in foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing spreading or stacking the spoils within a lead of 75 m as directed including trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water etc. as required complete. a) Depth of excavation not exceeding 1500mm. SOR, PWD, P-1, I-2 a | 13.000 | %cu.m. | 12047.00 | 1566.11 |
| 2 | Earth work in filling in foundation trenches or plinth with good earth in layers not exceeding 150 mm. including watering and ramming etc. layer by layer complete.(Payment to be made on the basis of measurement of finished quantity of work) a) With earth obtained from excavation of foundation. SOR, PWD, P-1, T/3 a | 11.120 | %cu.m. | 7831.00 | 870.81 |
| 3 | Supplying Laying Polithin Sheets etc. SOR, PWD, P-45, T - 13 | 22.000 | sqm | 25.00 | 550.00 |
| 4 | Cement concrete with graded Stone ballast (40 mm.) excluding shuttering.a) In ground floor and foundation.6 : 3 : 1 proportion Pakur variety SOR, PWD, Page 24 ; Item -10 a | 3.500 | cu.m. | 5823.00 | 20380.50 |

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HALISAHAR MUNICIPALITY

DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For All (Urban)

Total Covered Area- 32.18 sq.m (With Electrical Works)

Referance of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

Floor Area 25.37 sqm

| SL No. | Description of Works | Quantity | Unit | Rate (Rs.) | Amount (Rs.) |
|-----------|---|----------|-------|---------------|--------------|
| 5 | 25 mm. thick damp proof with cement concrete (4:2:1) (with graded stone aggregate 10 mm. Normal size) and painting the top surface with a coat of bitumen using 1.7 kg. per sq.m. including heating the bitumen and cost and carriage of all materials complete. SOR, PWD, P-45, T-12 | 6.810 | sqm, | 297.00 | 2022.57 |
| 6 | Brick work with 1st class bricks in cement mortar (6:1) | | | | 111111111111 |
| | a) In foundation and plinth. | 10.430 | cum | 5719.00 | 59649.17 |
| | b) In super structure SOR, PWD, P-29, T -22(a), (b) | 15.240 | cum | 5943.00 | 90571.32 |
| 7 | 125mm thick brick work with 1st. class bricks in cement mortar (4:1). a) In ground floor SOR, PWD, P-73, I -29 | 23.220 | sq.m. | 783.00 | 18181.26 |
| 8 | Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes. (i) Pakur Variety | 3.940 | cu.m. | 6851.66 | 26995.54 |
| | SOR, PWD, P-14, T -7(i) | | | | |
| 9 | Reinforcements for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc. including supply of rods, initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16G black annealed wire at every inter-section, complete as per drawing and direction. (a) For works in foundation, basement and upto roof of ground floor / upto 4m. (i) Tor steel/Mild steel. | 0.309 | мт | 60705.93 | 18775.74 |
| | SOR, PWD, P-27, T -15(i) | | | | |

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DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For All (Urban) Total Covered Area- 32.18 sq.m (With Electrical Works)

Reference of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

Floor Area 25.37 sqm

| SL No. | Description of Works | Quantity | Unit | Rate (Rs.) | Amount (Rs.) |
|-----------|---|----------|----------------|---------------|--------------|
| 10 | Hire and labour charges for shuttering with centreing and necessary staging upto 4 m. using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams, columns, lintels curved or straight including fitting, fixing and striking out after completion of works. (upto roof of ground floor). (When the height of a particular floor is more than 4 m. the equivalent floor ht. shall be taken as 4 m. and extra for works beyond the initial 4 m. ht. shall be allowed under 12(e) for every 4 m. or part thereof.)SOR, PWD, P-66, T -12(a) 25 mm. to 30 mm. thick wooden shuttering as per decision & direction of Engineer-in-charge. Ground Floor | 37.063 | M ² | 360.00 | 13342.68 |
| 11 | Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or roughening of concrete surface, including throating, nosing and drip course where necessary. In ground floor. A) With 6:1 cement mortar. | 116.940 | sq.m. | 181.00 | 21166.14 |
| | a) Inside wall 20 mm thick plaster SOR, PWD, P-151, T -2 (i)(b) b) Out side Wall, 15mm th. | 111.950 | sq.m. | 156.00 | 17464.20 |
| | SOR, PWD, P-151, I -2 (i)(c) B)10mm th celling plaster (4:1) SOR, PWD, P-151, I -2 (i)(c) | 23.330 | eq.m. | 140.00 | 3266.20 |
| 12 | Neat cement punning about 1.5mm thick in wall, dado, window, sills, floor, drain etc. SOR, PWD, P-152, I -8 | 26.700 | \$q.m. | 38.00 | 1014.60 |
| 13 | Artificial stone in floor,dado, staircase etc. with cement conctrete (4:2:1) with stone chips laid in panels as directed with topping made with ordinary or white cement (as necessary) and marble dust in proportion (2:1) including smooth finishing and rounding off corners and including application of cement slurry before flooring works, using cement @ 1.75 kg./sq.m. all complete including all materials and labour. In ground floor. 3 mm. thick topping (High polishing grinding on this item is not permitted) with ordinary cement. 20mm thick SOR, PWD, P-40, 1-3 (i) | 26.490 | sq.m. | 265.00 | 7019.85 |

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DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For Ali (Urban) Total Covered Area, 32 18 sq. m (With Electrical Works)

Total Covered Area- 32.18 sq.m (With Electrical Works)

Reference of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

Floor Area 25.37 sqm

| SL No. | Description of Works | Quantity | Unit | Rate (Rs.) | Amount (Rs.) |
|-----------|---|----------|--------|------------|--------------|
| 14 | Supplying, fitting & fixing MS clamp for fixing door and window frame made of flat bent bar, end bifurcated, fixed in cement concrete with stone chips (4:2:1)a fitted and fixed omplete as per direction. 40mm x 6mm x 125 mm length. (Cost of cement concrete will be paid separately) SOR, PWD, P-90, I -18 (c) | 34 | each | 22.00 | 748.00 |
| 15 | Wood work in door and window frame fitted and fixed complete including a protective coat of painting at the contact surface of the frame other Local wood SOR, PWD, P-85, T -1(i) | 0.213 | cu.m. | 46171.00 | 9834.42 |
| 16 | Panel Shutter of door & Window (each Panal Consisting Of single Plan without Join) 25 mm thick shutter with 12 mm thick Panal of size 30 to 45 cm. Other Local wood SOR, PWD, P-105, I -84 (iv)c | 8.520 | sq.m. | 1567.00 | 13350.84 |
| 17 | Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. a)75mm x 47mm x 1.70mm SOR, PWD, P-91, T -20(iv) | 32.000 | each | 34.00 | 1088.00 |
| 18 | Iron Socket Bolt of approved quality fitted and fixed complete. i) 150 mm long x 10 mm dia SOR, PWD P-93, I-25,c | 11.000 | each | 71.00 | 781.00 |
| 19 | White washing including cleaning and smoothening surface thoroughly (5 parts of stone lime and 1 part of shell lime should be used in the finishing coat). Two Coats SOR, PWD, P-155, I -3 (b) | 124.960 | %sq.m. | 1887.00 | 2358.00 |
| 20 | Colour washing with ella with a coat of white wash priming including cleaning and smoothing surface thoroughly external surface One Coat SOR, PWD, P-155, I - 4(ii)(a) | 100.560 | %sq.m. | 1514.00 | 1522.48 |
| 21 | Priming one coat on timber, plastered or on steel or other metal surface with synthetic enamel/oil bound primer of approved quality including smoothening surfaces by sand papering etc. 1) On timber surface SOR, PWD, P - 162, ! - 7(a) | 21.690 | sq.m. | 41.00 | 889.29 |
| | 2) On Steel Surface SOR, PWD, P - 162, I - 7(b) | 2.700 | sq.m. | 31.00 | 83.70 |

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DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For All (Urban) Total Covered Area, 32 18 ag m (With Floating) Works)

Total Covered Area- 32.18 sq.m (With Electrical Works)

Reference of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

Floor Area 25.37 sqm

| SL No. | Description of Works | Quantity | Unit | Rate (Rs.) | Amount (Rs.) |
|-----------|---|----------|-------|---------------|-----------------|
| 22 | Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface, if necessary: With super gloss (hi-gloss)-With any shade except white. | | | | |
| | a) On timber or plastered surface Two Coats | 21.690 | sq.m. | 89.00 | 1930.41 |
| | b) On Steel surface Two Coats SOR, PWD, P - 162, - 8A(aii),(bii) | 2.700 | sq.m. | 86.00 | 232.20 |
| 23 | Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16 mm diad with center bolt and round fitting. 300 mm long SOR, PWD, P-93, I - 27c | 2.000 | each | 193.00 | 386.00 |
| 24 | Precast piered concrete jally work as per design and manufacture's specification including moulding etc. with stone chips and necessary reinforcement shuttering complete including fitting, fixing in position in all floors. (a) 37.5 mm th. panels Cement & steel required for this item will not be issued by deptt. SOR, PWD, P-32, I - 38 (b) | 1.690 | sq.m. | 351.00 | 593.19 |
| 25 | Supplying, fitting and fixing UPVC down pipes A type and fittings conforming to IS 13592-1992 with necessary clamps nails including making holes in walls, etc. and cutting trenches in any soil, through masonry concrete structure etc. if necessary and mending good damages including jointing with jointing materials (Spun yarn, valamoid / bitumen / M. seal etc.) complete. P-173, I-21 A (ii), C(ii), D(ii) SOR, PWD, P173, I - 21 A (ii), C(ii), D(ii) | | | | |
| | i) UPVC Pipe 110 mm dia | 3.000 | Mtr. | 291.00 | 873.00 |
| | ii) UPVC Bend 87.5 degree 110 mm dia | 2.000 | each | 162.00 | 324.00 |
| | iii) UPVC Shoe 110 mm | 1.000 | each | 128.00 | 128.00 |
| 26 | M.S.or W.I. Ornamental grill of approved design joints continuously welded with M.S, W.I. Fiats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor. Grill weighing 10 kg/sq m to16 kg/m2 SOR, PWD, P - 76, I - 10 (i) (2.70sqm @ 10.5kg per sqm = 28.35 kg) | 0.284 | Qntl | 8247.00 | 2342.15 |

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DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For All (Urban) Total Covered Area- 32.18 sq.m (With Electrical Works)

Reference of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

Floor Area 25.37 sqm

| SL No. | Description of Works | Quantity | Unit | Rate (Rs.) | Amount (Rs.) |
|-----------|--|----------|------|---------------|--------------|
| 27 | Shallow water closet Indian pattern(I.P.W.C.) of approved make in white vitreous chinaware supplied fitted and fixed in position (excluding cost of concrete for fixing). 450 mm long SOR, PWD, (Sanitary) P - 65, I - 1 (III) | 1.000 | each | 1062.00 | 1062.00 |
| 28 | Foot rest for water closet of size 275 mm X 125 mm with Artificial stone(4:2:1) with 6 mm stone chips and chequered including adding colour as necessary. SOR, PWD, (Sanitary) P - 66, I - 9 | 1.000 | Pair | 70.00 | 70.00 |
| 29 | Supplying, fitting and fixing cast iron 'P' or 'S' trap conforming to I.S. 3989 / 1970 and 1729 / 1964 including lead caulked joints and painting two coats to the exposed surface. S Trap 100 mm SOR, PWD, (Sanitary) P - 54, I - 14(B-III) | 1.000 | each | 923.00 | 923.00 |
| 30 | Supplying, fitting fixing CI Round Gratings 150mm dia SOR, PWD, (Sanitary) P - 55, I - 18(II) | 1.000 | Each | 100.00 | 100.00 |
| | Construction of 2 circular leach pit of inside diameter 1000 mm. & a depth of 1000 mm. With a layer of 250 mm. Thick brick work with cement morter (6:1) & honeycombed brick wall (4:1) at every alternate layer upto a height of 925 mm. From bottom and then 125 mm. thick brick wall (4:1) for a height of 300 mm. and covered with 75m. RCC slab (4:2:1) with 8mm tor steel @ 150 mm. centre to centre both ways including plustering and neat cement punning on top of the slab and making hooking arrangment on slab for lifting of the slab if require as well as jointing the connection with the inspection pit (450 x 450) covered with 50mm thick RCC slab (4:2:1) with stone chips and necessary renforcement and connected with 100 mm dia PVC pipe laid over rammed earth and then covered the pipe properly with powder earth including supplying fitting fixing fibre glass pan P-tap & polythene pipe as per requirement to connect with the inspection pit complete with all respect as per direction of EIC.(ANNEXURE-II) | 1 | Item | 7544.00 | 7544.00 |
| | TOTAL AMOUNT | | Rs. | | 350000.36 |
| | Say | | Rs. | | 350000.00 |
| | Add for Electrical Works (ANNEXURE-I) | | Rs. | | 17858.00 |
| | TOTAL AMOUNT | | Rs. | | 367858.00 |

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DETAILED ESTIMATE FOR THE CONSTRUCTION OF SINGLE UNIT DWELLING HOUSE Pradhan Mantri Awas Yojana Housing For All (Urban)
Total Covered Area- 32.18 sq.m (With Electrical Works)

Reference of Schedule of Rates: PWD (W.B.), Schedule of Rates Building & Sanitary w.e.f-01.07.2014 & Corrigenda (Kolkata /24 Pgs (N & S)/ Kalyani Sub Div.)

Floor Area 25.37 sqm

| | Say (Rupees Three lakh Sixty e | ight thousan | Rs. | | 368000.00 |
|-----------|--------------------------------|--------------------------|-----|--|--------------|
| SL No. | | Quantity Unit Rate (Rs.) | | | Amount (Rs.) |

Table-35: ESTIMATE FOR ELECTRICAL WORKS FOR ONE DWELLING UNIT UNDER PMAY

| | (ANNEXURE-I) | | | | | | | |
|------|---|------|-------|----------|---------|--|--|--|
| SI.N | Item of works | Unit | Rate | Quantity | Amount | | | |
| 1 | Supplying & fitting polythene pipe complete with fittings as necessary. Under celing /beam/bound with 22SWG GI wire inclusive S & Drawing 1x18 SWG GI wire as fish wire inside the pipe & fittings and providing 55 mm dia disc of MS sheet (20SWG) having colour paint at one face first ended at the load point end of the polythene pipe with fish wire (synchronizing with roof/beam casting work of building construction) 19 mm dia 3 mm thick polythene pipe | RM | 39.00 | 25.00 | 975.00 | | | |
| 2 | Powerckt wiring supplying and drawing 1; 1KV grade single core stranded FR PVC insulated & unseathed single core stranded Copper wire (Finolex make) 2 x 2.5 sqmm (PH & N) +1x1.5 sqmm (ECC) per laid polythene pipe and by the prelaid GI fish wire & making necessary connections as required. | RM | 76.00 | 50.00 | 3800.00 | | | |

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| 3 | Concealed Distribution wiring in in 2x1.5 | points | 828.00 | 10.00 | 8280.00 |
|-------|--|--------|--------|----------|---------|
| | single core standard *FR* insulated and unseathed cop per wire Finolex make & 1x1.5 sq mm single core stranded PVC cinsulated and unseathed cop per (Finolex make) wire used as ECC in 19 mm bore 3 mm thk. polyythene pipe complete with all accessries embedded in wall smooth run to light / fan/call bell point with pino key type switchb (6 Amps) (Anchor make) fixed on sheet metal (16 SWG) Switch Board with bakelite/ perspex (wall maching colour) Top cover (3 mm thick) flushed in wall including mending all good damages to | | | | |
| | original finish Average per point 6.00 mt. | | | | |
| 4 | Deistribution concealed wiring with 2x1.5 sq mm (PH & N) single core stranded FR PVC insulated & unsheathed single core stranded 1.1 KV grade Copper Wire (finolex) & 1x1.5 sq mm (ECC) single core stranded (PH & N) 1.1 KV grade cu wire (finolex) & 1 x 1.5 sq mm single core stranded PVC insulted & unsheathed cu wire (finolex) used as ECC in 19 mm bore, 3 mm thick polythene pipe complete with all accessories embedded in wall 250 volt 5 amp 3 pin plug point including S & F 250 Volt 5 amp 3 pin flush type plug socket & piano key type swich (Anchor make) on existing switch board as mentioned si. no.3 | points | 76.00 | 2.00 | 152.00 |
| 5 | Supplying & drawing 1.1 KV grade single core srtanded FR PVC insulated & unseathed single core sranded cu Wire 3x2.5 sq mm (finolex make) in the prelaid polythene pipe & by the prelaid GI fishwire & making necessary connection as required (CESC supply to consumer DP near to CESC & inside the room another DP near CESC & inside the room another DP of dwelling units) | RM | 86.00 | 15.00 | 1290.00 |
| SI.No | Item of works | Unit | Rate | Quantity | Amount |
| 6 | Supplying Delivery & instalation on wall of 30/32 amp DP MCBof Havel's make with enclosed box along with all its necessary 1 connection complete.(Anchor) | nos | 808.00 | 2 | 1616.00 |

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| 7 | Earthing in soft soil with 50 mm dia GI pipe | each | 1715.00 | 1 | 1715.00 |
|---|---|------|---------------------------------|---|----------|
| | (TATA | | 111.000.000 | | |
| | make Medium) 3.64 mm th. X 3.04 Mtr long | | - | | |
| | and 1 x 4 SWG GI (hot dip) wire (4 m long) | | | | |
| | 13 mmdia x 80 mm long GI bolts, double nuts, | | | | |
| | double washer including S & F 15 mm dia Gl | | | | |
| | protection (1 mtr long) to be filled with | | | | |
| | bitumen partlyunder the ground level & partly | | | | |
| | above GL driven to an average depth of 3.65 | | | | |
| | m below the GL & restoring surface duly rammed. | | | | |
| | Turring. | | | 1 | |
| 8 | Connecting the equipment to earth BUSbar | M | 6.00 | 5 | 30.00 |
| | inclussive S&F 10 SWG (Hot Dip) GI wire on | | | | |
| | wall /floor with a staples buried inside wall | | | | |
| | /floor as required & making connection to | | | | |
| | equipments with bolt, nut, washer, cable lugs | | | | |
| | etc. as required & mending good damages. | | | | |
| | | | TOTAL | | 17858.00 |
| | Rupees Thirteen Thousand Eight Hundred | | THE RESERVE THE PERSON NAMED IN | | 17858.00 |

Cost Estimate for 2 Nos Leach Pit for single unit Dwelling Unit

| | (ANNEXURI | E-II) | | | |
|----------|---|----------|-------|----------|----------|
| SI No | Description of items | Quantity | Unit | Rate | Amount |
| 1 | Earth work in excavation of foundation trenches or drains in all sorts of soil (including mixed soil but excluding or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches leveling dressing and ramming the bttom boiling out water aqs required complete. Depth of exavation not existing 1500mm P.No-1, I-2(a) | 2.500 | %Cu.M | 12047.00 | 301.18 |
| 2 | Cement concrete with graded jhama Khoa ballast (30 mm size) excluding shuttering. In ground floor and foundation (a) 6:3:1 proportion. | 0.050 | Cu.M | 5803.06 | 290.15 |
| 3 | Brick work with 1st class bricks in cement mortar (6 :1). a) In foundation & Plinth P.no-29, I-21(a) | 0.010 | Cu.M | 5719.00 | 57.19 |
| 4 | 125 mm. thick brick work with 1st class bricks in cement mortar (4 : 1) G.Floor P.no-31, I-29 | 3.000 | SqM | 714.00 | 2,142.00 |

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| | | | | Total= | 7,544.00 |
|---|---|-------|-----------|--------------|----------|
| | | | Cost of 2 | no leach pit | 7,543.97 |
| } | Jaffri brick work 125 mm. thick with 1st class bricks in cement mortar (4:1) including 12 mm. thick cement plaster (4:1) in all faces in ground floor .P.no-32, I-35 | 2.000 | SqM | 792.00 | 1,584.00 |
| | ii) UPVC Bend 87.5 degree 110 mm dia P.no-174, i-21(B)C(ii) | 2.000 | Each | 162.00 | 324.00 |
| | i) UPVC Pipe 110 mm dia P.no-173, I-21(A)(II) | 4.000 | Mtr | 291.00 | 1,164.00 |
| | Supplying, fitting and fixing UPVC down pipes A type and fittings conforming to IS 13592-1992 with necessary clamps nails including making holes in walls, etc. and cutting trenches in any soil, through masonry concrete structure etc. if necessary and mending good damages including jointing with jointing materials (Spun yarn, valamoid / bitumen / M. seal etc.) complete. | | | | |
| | Reinforcemnet for reinforced concrete work in all sorts of structures incl. Distribution bars, stirrups, binder etc. incl. supply of rods, initial straightening & removal of loose rust (if necessary), cutting to requisite length, hooking etc P.no-27, I-15(a)(I) | 0.010 | M.T | 68508.00 | 685.08 |
| | Controlled Cement concrete with well graded stone chips (20 - mm nominal size) excluding shuttering and reinforcement with complete design of concrete as per I: 456 and relevant special publications submission of job mix formula after preliminary mlx design after testing of concrete cubes as per direction of Engineerin charge Consumption of cement will not be less than 300 Kg of cement -with Super plasticiser per cubic meter of controlled concrete but actual consumption will be determined on- the basis of preliminary test and job mix formulaI n ground floor and foundation. [Using concrete mixture] M 20 Grade P.no-12, I-6(a) | 0.145 | Cu.M | 6871.54 | 996.37 |

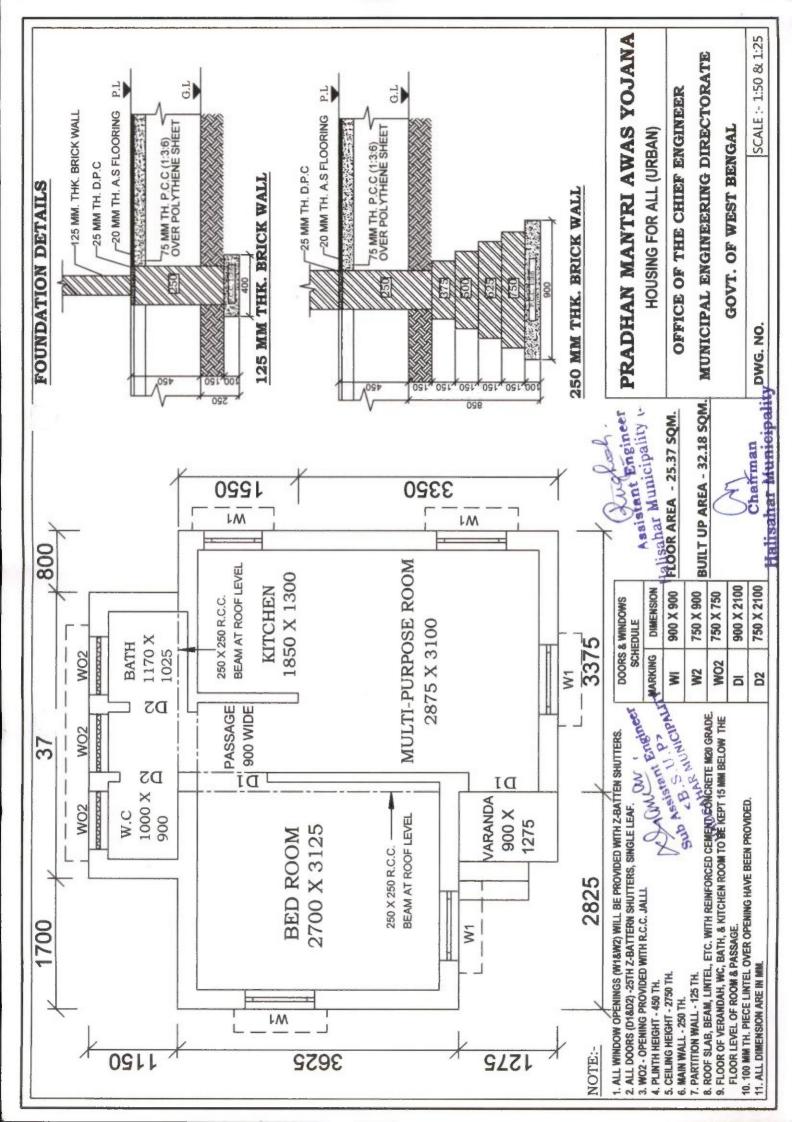
Table-36: Detailed Estimate for Single Dwelling unit

| Detailed Esti Floor area 25.3 | imate for Single Dwelling unit 16 sqm Built up area 32.18 sqm | |
|----------------------------------|--|-----------------|
| C/L of main outer wall | 125 mm Partitionwall | Varandah C/L |
| 4.65 | 3.375 | 1.275 |
| 0.8 | 1.15 | 0.9 |
| 1.15 | 1.15 2.3 | 2.175 |
| 3.45 | 2.187 | |
| 1.15 | 1.9 | |

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Halisahar Municipality (BSUP)

C.
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| | C/L of main ou | ter wall | | | 125 mm | | Varandah |
|--------|----------------|-----------|--|----------------|----------------|-------|----------|
| | O/L Of main ou | itel wall | The state of the s | | Partition | | C/L |
| | 1 | 1.7 | | | 1.387 | 5.474 | |
| | | 3.375 | | | 11.149 | | |
| | | 1.275 | | | | | |
| | | 2.825 | | | | | |
| | | 3.125 | | | | | |
| | | 23.5 | | | | | |
| | X wall | 1.25 | | | | | |
| | | | | | | | |
| Sl.no. | | 711177 | | | | | |
| 1 | Earth workin e | xcavation | | | | | |
| | 250 mm wall | | | | | | |
| | 1 | 23.5 | 0.75 | 0.7 | 12.34 | | |
| | | 0.875 | 0.75 | 0.7 | 0.46 | | |
| | | 24.375 | | | 12.8 | m3 | |
| | 125 mm Wall | | | | | | |
| | | 2.625 | 0.4 | 0.225 | 0.24 | | |
| | WC | 0.4 | 0.4 | 0.225 | 0.04 | | |
| 1931 | Bath | 0.65 | 0.4 | 0.225 | 0.06 | | |
| | 5.474 | 0.75 | | 0.225 | | | |
| | | 4.724 | 0.4 | 0.225 | 0.43 | | |
| | Varanda | 1.425 | 0.4 | 0.225 | 0.13 | | |
| | | | | | 0.88 | | |
| | | | | | | | |
| | Step | 0.5 | 0.9 | 0.075 | 0.034 | | |
| | | | | | 13.715 | m3 | |
| | | | | | | | |
| 2 | Soling | | | | | | |
| | | 24.375 | 0.75 | | 18.281 | | |
| | | 11.45 | 0.4 | | 4.58 | | |
| | | | | | 22.861 | | |
| | | | | | | | |
| 3 | Polythene shee | et | | | | | |
| | | 0 535 | 0.40= | | 0.04= | | |
| | | 2.575 | 3.125 | W | 8.047 | | |
| | | 2.875 | 2.625 | | 7.547 | | |
| | | 2 | 1.65 | | 3.3 | | |
| | passage | 0.625 | 2.375 | | 1.484 | | |
| | Bath&WC | 2.7 | 0.9 | | 2.43 | | |
| | Varndah | 1.025 | 0.6 | | 0.615 | | |
| | step | 0.9 | 0.5 | | 0.45 | | |
| | | | | | 23.873 | | |
| 4 | Ihama acres | | | - | | | |
| 4 | Jhama concret | е | 10 20 | 0.075 | 4 274 | | |
| | | | 18.28 4.58 | 0.075 0.075 | 1.371 0.344 | | |
| | | | 23.93 | 0.075 | 1.795 | | |
| | | | 23.93 | 0.075 | | | |
| | | | / | | 3.51 | | |

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| | C/L of main ou | iter wall | | | 125 mm | | | Varandah |
|---------------------------------------|-------------------|---------------|------------|---------|-----------|----------------|-----|----------|
| | | | | | Partition | | | C/L |
| 5 | Earth work in t | filling 1/5 e | excavation | | | | | |
| | | | 13.715 | 5 | 2.743 | | | |
| | | | 23.48 | 0.375 | 8.805 | | | |
| | | | | | 11.548 | m3 | | |
| | | | | | | | | |
| 6 | B.W (6:1) in Fo | | | | | | | |
| | | 23.5 | 0.625 | 14.6875 | | | | |
| | | 23.5 | 0.5 | 11.75 | | | | |
| | | 23.5 | 0.375 | 8.8125 | | | | |
| | | | | 35.25 | 0.15 | 5.288 | | |
| | | 23.5 | 0.25 | | 0.525 | 3.084 | | |
| | | | | | | | | |
| | X wall | 0.938 | 0.625 | 0.586 | | | | |
| | | 1 | 0.5 | 0.5 | | | | |
| | | 1.063 | 0.375 | 0.399 | | | | |
| | | | | 1.485 | 0.15 | 0.223 | | |
| | | 1.125 | 0.25 | | 0.525 | 0.148 | | |
| | 125mm | 3.125 | 0.25 | | 0.525 | 0.41 | | |
| | Bath&WC | 2 | 0.9 | 0.25 | 0.523 | 0.235 | | |
| | Kit | 5.224 | 0.25 | | 0.525 | 0.686 | | |
| | Vard | 1.925 | 0.25 | | 0.525 | 0.253 | | |
| | Steps | 0.5 | 0.9 | | 0.15 | 0.068 | | |
| | | 0.25 | 0.9 | | 0.15 | 0.034 | | |
| | | | | | | 10.427 | m3 | |
| - | 1000 | 00.5 | | | | | | |
| 7 | DPC | 23.5 | | | | | | |
| | | 1.125 | | | | | | |
| | | 24.625 | | 0.25 | | 6.156 | | |
| | - | 3.125 | | | | | | |
| | | 1.8 | | | | | | |
| | | 5.224 | | 0.405 | | 4.000 | | |
| | | 10.149 | | 0.125 | | 1.269 | | |
| | | | | | | 7.425 | | |
| | Less | 0.9 | | 0.25 | 0.225 | | - | |
| | | 0.9 | - | 0.125 | 0.113 | | | |
| | 3 | 0.75 | | 0.125 | 0.281 | 0.040 | | |
| | | | | | | 0.619 | | |
| | - | | | | | 6.806 | sqm | |
| 0 | DIA/ in a control | | 4) | | | | | |
| 8 | BW in super st | | .1) | | | and the second | | |
| · · · · · · · · · · · · · · · · · · · | | 23.5 1.125 | | | | | | |

Assistant Engineer
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Assistant Engineer
Halisahar Municipality (BSUP)

Chair man

Halisahar Municipality

| C/L of main ou | ter wall | | | 125 mm Partition | | | Varandah C/L |
|---|----------|-------|-------|---------------------|----------|--------|-----------------|
| *************************************** | 24,625 | 2.75 | 0.25 | 16.93 | | | |
| Parapet | 23.8 | 0.075 | 0.25 | 0.446 | | | |
| | | | | | 17.376 | | |
| Less opens | | | | | | | |
| 1 | 0.9 | 2.1 | 1.89 | | | | |
| 4 | 0.9 | 0.9 | 3.24 | | | | |
| 1 | 0.75 | 0.9 | 0.675 | | | | |
| 3 | 0.75 | 0.75 | 1.688 | | | | |
| | | | 7.493 | 0.25 | 1.873 | | |
| Lintel | | | | | | | |
| 1 | 1.525 | 1.525 | | | | | |
| 4 | 1.2 | 4.8 | | | | | |
| 1 | 1.05 | 1.05 | | | | | |
| | | 7.375 | 0.25 | 0.1 | 0.184 | | |
| Wo2 | | | | | | | |
| 1 | 3.05 | 3.05 | 0.25 | 0.1 | 0.076 | | |
| | | | | (-) | 2.134 | | |
| Net brick work | | | | | | 15.242 | m3 |
| 125 th. Brick w (6:1) | ork | | | | | | |
| room | | 3.125 | 2.6 | 8.125 | | | |
| kit | | 2.125 | 2.75 | 5.844 | | | |
| | | 1.65 | 2.75 | 4.5375 | | | |
| | | 1.45 | 2.65 | 3.8425 | | | |
| 2 | | 0.9 | 2.1 | 3.78 | | | |
| | | | | | 26.12875 | | |
| Less opening | | | | | | | |
| 1 | 0.9 | 0.9 | | | | | |
| 3 | 0.75 | 2.25 | | | | | |
| | | 3.15 | 2.1 | 6.615 | | | |
| Lintel | | | | | | | |
| 1 | 1.3 | 1.3 | | | | | |
| 1 | 1.025 | 1.025 | | | | | |
| | | 2.325 | 0.1 | 0.2325 | | | |
| | | | | 6.8475 | | | |
| | | | | | 19.28125 | | |
| Parapet | | | | | | | |
| | 23.5 | | 0.15 | | 3.525 | | |
| | | | | | 22.806 | | |
| passege | 0.75 | | 0.55 | | 0.4125 | | |

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Helisahai municipality (BSUP)

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| | C/L of main o | uter wall | | | 125 mm | | | Varandah |
|---------------------------------------|---|-----------|--------|--------|-----------|---------------|-------|----------|
| | | | | | Partition | wall | | C/L |
| 4.0 | | | | | | | | |
| 10 | Conc M-20 | | | | | | | |
| | Roof slab | | | | | | | |
| | 32.15 | 1.1475 | 31.003 | | 0.1 | 3.1 | | |
| | Beam | | 3.625 | 0.25 | 0.15 | 0.136 | | |
| | | | 2.575 | 0.25 | 0.1 | 0.064 | | |
| | Lintel | | | | | | 3.301 | |
| | D1 | 1 | 1.525 | 1.525 | - | | | |
| | W1 | 4 | 1.2 | 4.8 | | | | |
| | W2 | 1 | 1.05 | 1.05 | | | | |
| | WO2 | 1 | 3.05 | 3.05 | | | | |
| | | | | 10.425 | 0.25 | 0.1 | 0.261 | |
| | D1 | 1 | 1.39 | 1.39 | | | | |
| | D2 | 1 | 1.025 | 1.025 | | | | |
| | D2 | 2 | 1.4 | 2.8 | | | | |
| | 02 | 1 | 0.875 | 0.875 | | | | |
| A STATE OF | D2 | 2 | | 6.09 | 0.125 | 0.1 | 0.076 | |
| | Chaja | | | | | | | |
| | W1 | 4 | 1.2 | 4.8 | | | | |
| | W2 | 1 | 1.03 | 1.03 | | | | |
| | D1 | 1 | 1.275 | 1.275 | | | | |
| 15.5 | W02 | 1 | 3.05 | 3.05 | | | | |
| | | | | 10.155 | 0.3 | 0.075 | 0.228 | |
| | | | | | | | 3.866 | m3 |
| | | | | | | | | |
| 11 | Reinforcemen | nt | | | | | | |
| | - Nomiorodino | 3.866 | 0.80% | 1 | 7850 | 0.243 | MT | |
| · · · · · · · · · · · · · · · · · · · | | 0.000 | 0.0070 | | 1.000 | | - | |
| 12 | Shuttering | | | | | | | |
| - | O. C. | | | | | | | |
| | 31 | 23.5 | 1.125 | | | | | |
| - | 3. | 20.0 | 24.63 | 0.25 | - | | | - |
| | 31 | | 27.00 | 6.156 | 24.844 | | | |
| | Side beam | 2 | 3.125 | 0.15 | 0.9375 | | | |
| | Side Death | 2 | 2.325 | 0.15 | 0.9375 | | | |
| | side alah | | | | | | - | |
| | side slab | 1 | 25.3 | 0.1 | 2.53 | | | |
| | Lintel | 1 | 0.9 | | 0.225 | | | |
| | | 1 | 1.525 | 0.1 | 0.153 | | | |
| | | 1 | 1.275 | 0.35 | 0.446 | | | |
| | | 1 | 0.3 | 0.05 | 0.015 | 00.04= | | |
| | | | | | | 29.615 | sqm | |
| | 4W1 | 4 | 0.9 | 0.25 | 0.9 | Harry Charles | | |

Assistant Engineer
Helipatur Municipality (BSUP)

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POTION Engineer

Sub Assistant Propincie

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| | C/L of main ou | iter wall | | | 125 mm | | | Varandah |
|----|-------------------|-----------|-------|--|-----------|---------|-------|----------|
| | | | 4.6 | | Partition | nwall | | C/L |
| | | 4 | 1.2 | 0.1 | 0.48 | | | |
| | | 4 | 1.2 | 0.35 | 1.68 | | | |
| | 2 | 4 | 0.3 | 0.05 | 0.12 | | | |
| | 1W2 | 1 | 0.75 | 0.25 | 0.188 | | | |
| | | 1 | 1.05 | 0.1 | 0.105 | | | |
| | | 1 | 1.05 | 0.35 | 0.368 | | | |
| | 2 | 1 | 0.3 | 0.05 | 0.03 | | | |
| | WO2 | 3 | 0.75 | 0.25 | 0.563 | | | |
| | 1 | 1 | 3.05 | 0.1 | 0.305 | | | |
| | | 1 | 3.05 | 0.35 | 1.068 | | | |
| | 2 | 1 | 0.3 | 0.05 | 0.03 | | | |
| | Lintel 125 Wa | 11 | | | | | | |
| | D1 | 1 | 0.9 | 0.125 | 0.113 | | | |
| | | 2 | 1.3 | 0.1 | 0.26 | | | |
| | D2 | 2 | 0.75 | 0.125 | 0.188 | | 1 34 | |
| | 2 | 2 | 1.15 | 0.1 | 0.46 | | | |
| | D2 | 2 | 0.75 | 0.125 | 0.188 | | + | |
| | | 2 | 1.9 | 0.1 | 0.38 | | | |
| | | - | 1.0 | 0.1 | 0.00 | 7.423 | | |
| | | | | | | 37.038 | sqm | |
| - | | | // | | | 37.030 | Sqrii | |
| 13 | Plaster (6:1) | | | | | | | |
| 10 | Out side 15 mmth. | | | III III III III III III III III III II | | | - | |
| | Out side 15 mi | TRUT. | 2.85 | 4.405 | 0.45 | | | |
| | | 05.0 | 2.00 | 1.125 | 0.45 | 444.050 | | |
| | 1 | 25.3 | | | 4.425 | 111.953 | sqm | |
| | Inside 20 mm t | | | | | | | |
| | 2 | 2.7 | 3.125 | 2.75 | 32.038 | | | |
| | 2 | 2.875 | 2.625 | 2.75 | 30.25 | | | |
| | 2 | 2 | 1.65 | 2.75 | 20.075 | | | |
| | 2 | 2.075 | | 2.75 | 11.413 | | | |
| | Above lintel | | | | | | | |
| | 1 | 0.75 | | 0.65 | 0.488 | | | |
| | Bath | | | | | | | |
| | 2 | 0.9 | | 2.75 | 4.95 | | | |
| | WC | | | | | | | |
| | 1 | 2.95 | | 2.75 | 8.113 | | | |
| | 1 | 2.25 | | 2.75 | 6.188 | | 1 | |
| | 4 | 2.2 | | 0.9 | 7.92 | | 1 | |
| | T. 125 wall | | | | | | | |
| | 2 | 0.9 | | 0.125 | 0.225 | | | |
| | | | | | | | | |

Assistant Engineer halisahar Municipality (BSUP)

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| | | | or area 25.36 | | | | | | |
|----|------------------|------------|---------------|-------|--------|---------|--|----------------|----|
| | C/L of main ou | iter wall | | | 125 mm | | | Varanda C/L | ah |
| | 3 | 0.75 | | 2.1 | 4.725 | | | | |
| | | | | | (-) | 4.725 | | | |
| - | | | | | | 116.933 | sqm | | |
| | Celling Plaster | | | | 24.47 | | | | |
| | Less | | | | 1.14 | | | | |
| - | | | | | | 23.33 | Sqm | | |
| | | | | | | | | | |
| 14 | Neat cement p | unning | | | | | | | |
| | Out side | Plinth | | | | | | | |
| | | 25.3 | 0.45 | | | 11.385 | Sqm | 11.385 | |
| | | | | | | | | | |
| | Inside | | 2.7 | 3.125 | | | | | |
| | | 2 | | 5.825 | 0.1 | 1.165 | Sqm | | |
| | | | 2.875 | 2.625 | | | | | |
| | | 2 | | 5.5 | 0.1 | 1.1 | Sqm | | |
| | Kithen | | 2 | 1.65 | | | | | |
| | | 2 | | 3.65 | 0.45 | 3.285 | Sqm | | |
| - | | 1 | | 1.65 | 0.45 | 0.743 | Sqm | | |
| | | 2 | | 2.075 | 0.1 | 0.415 | Sqm | | |
| | Varanda | 100 | | 1.775 | 0.1 | 0.178 | Sqm | | |
| | step WC | 1 | | 3 | 0.45 | 1.35 | Sqm | | |
| | Bath | | | 3.5 | 2 | 7 | Sqm | | |
| | | 9. 1 | | 0.75 | 0.1 | 0.075 | Sqm | | |
| | In side punning | | | | | | 15.31 | 15.31 | |
| | Total | | | | | | | 26.695 | Sq |
| | | | | | | | | | |
| 15 | Art. Stone floor | ring | | | | | | | |
| | Floor area | | | | | 25.37 | sqm | | |
| | Step | 2 | 0.9 | 0.25 | | 0.45 | | | |
| | W1 | 4 | 0.9 | 0.1 | | 0.36 | account of the same of the sam | | |
| | W2 | 1 | 0.75 | 0.1 | | 0.075 | | | |
| | W3 | 3 | 0.75 | 0.1 | | 0.225 | | | |
| | | | | | | | 26.48 | Sqm | |
| 16 | Ms Clamp for o | door & win | dow | | | | | | |
| | D1+D2 | 4 | 6 | | | 24 | | | |
| | W1+W2 | 5 | 2 | | | 10 | | | |
| | | | | | | | 34 | nos. | |
| 17 | Wood work in | Door & wi | ndow frame | | | | | | |
| | D1 | 2 | 5.1 | 10.2 | | | | | |
| | D2 | 2 | 4.95 | 9.9 | | | | | |
| | W1 | 4 | 3.6 | 14.4 | | | | | |
| | W2 | 1 | 3.3 | 3.3 | | | | | |

Assistant Engineer
Halisahar Municipality (BSUP)

Sub Assistant Engineer
Sub Assistant P. P. PALITY
Sub Assistant P. P. PALITY

Cha: nan Halisahar Municipality

| | | | or area 25. | 30 8 | idm Ballt | | | m | | |
|----|--------------------|----------|-------------|---------------|-----------|--------------------|-------|-----|---------|-----------------|
| | C/L of main outer | wall | | | | 125 mn Partitio | | | | Varandah C/L |
| | | | | | 37.8 | 0.075 | 0.075 | | 0.213 | m3 |
| 18 | Z batten shutter | | | | | | | | | |
| | D1 | 2 | 0.775 | | 2.025 | | 3.139 | | | |
| | D2 | 2 | 0.625 | | 2.025 | | 2.531 | | F. T. | |
| | W1 | 4 | 0.775 | | 0.775 | | 2.403 | | | |
| | W2 | 1 | 0.775 | | 0.625 | | 0.484 | | | |
| 19 | Inna Buttilliana | | | **** | | | | | 8.557 | sqm |
| 19 | Iron Butt Hinges | | | | | | - | -15 | | |
| | D1+D2 | | | | | | | 12 | | |
| | W1 | 4 | | 4 | | | | 16 | | |
| | W2 | 1 | | 4 | | | | 4 | 32 | nos. |
| | | | | | | | | | 32 | 1103. |
| 20 | Iron soket bolt | | | | | | | | | |
| | Door | | | 1 | 6 | | | | | |
| | Window | | | | 5 | | | | | |
| | | | | | | | | | 11 | nos. |
| 21 | White wash | | | | | | | | | |
| | Inside+Celling Pla | aster- i | nside punni | ing | | | | | | |
| | | | 116.933 | | 23.33 | 15.31 | | | 124.953 | sqm |
| 22 | Colour wash | | | | | | | | | |
| | Out side Plaster- | out sid | e nunning | - | | | | | | |
| | Out side Flaster- | out sid | 111.953 | - | 11.385 | | | | 100.568 | 0.000 |
| | | | 111.903 | - | 11.305 | | | | 100.506 | sqm |
| 23 | Priming on timber | sutrfa | ce | + | | | | | | |
| | 2 | 2 | 0.9 | | 2.1 | | 7.56 | | | |
| | 2 | 2 | 0.75 | | 2.1 | | 6.3 | | | |
| | 4 | 2 | 0.9 | | 0.9 | | 6.48 | | | |
| | 1 | 2 | 0.75 | | 0.9 | | 1.35 | | | |
| | | | | 1 | | | | | 21.69 | sqm |
| | | | | | | | | | | |
| 24 | Painting best qua | lity on | wooden sur | face | | | | | | |
| | same sl.no. 23 | | | | | | | | 21.69 | sqm |
| 25 | MS ornamental gr | il10 | Kg-16 Ka | | | | | | | |
| | W1 | 4 | 0.75 | + | 0.75 | 2.25 | | | | |
| | W2 | 1 | 0.75 | + | 0.6 | 0.45 | | | | |
| | | | | 1 | | 2.7 | | | | |
| | | | | + | | @12Kg | /sam | | 32.4 | Kg |
| | | | | \rightarrow | | | | | | |

Halisahar Municipality (BSUP) Sub-ASSISTAND PORPALTY

| | | Flo | or area 25.36 | sqm Buili | t up area 32 | .18 sqm | | |
|----|------------------|----------|---------------|-----------|----------------------|---------|--------|-----------------|
| | C/L of main oute | er wall | | | 125 mm Partitionw | all | | Varandah C/L |
| 26 | Priming on Stee | sutrface | 9 | | | | 2.7 | sqm . |
| 27 | Painting best qu | ality on | steel surface | | | | 2.7 | sqm |
| | same sl.no. 24 | | | | | | | |
| 28 | R.C.C. Shelf | | | | | | | |
| | | 1.75 | 0.5 | | | | 0.875 | sqm |
| 29 | Roof treatment v | with cow | dang | | | | | |
| | | | | 32.18 | | | | |
| | Deduct | 1.14 | (varanda) | 1.14 | | | | |
| | Cornice | 25 | 0.125 | 3.125 | | | | |
| | | | | 27.915 | | | 27.915 | sqm |

5.2.2. Detailed Estimate of adoption of technology for Concrete Road:

Table-37: Detailed Estimate of adoption of technology for Concrete

| | PWD B | UILDING | SCHEDU | LE 2014 | | | | |
|--------------|---|------------|------------|-----------|--------------|-----------|---------------|--------|
| SI N o | Description of Items | Lengt h | Bread h | Dept h | Quantit y | Unit | Rate | Amount |
| 1 | Earth work in excavation of foundation trenches or drains in all sorts of soil (including mixed soil but excluding or stacking the spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches leveling dressing and ramming the bittom boiling out water aqs requred complete. Depth of exavation not existing 1500mm 1, I-2(a) | 1.00 | 2.5 | 0.400 | 1.000 | %Cu. M | 12047.0 0 | 120.47 |
| 2 | Filling foundation or plinth by silver sand in layer not exceeding 150 mm. as directed and consolidating same by through saturation with water rammingcomplete. Including the cost of supply of sand. (a) by fine sand P.No-2, 1-4(B) | 1.00 | 2.5 | 0.200 | 0.500 | %Cu. M | 110422. 00 | 552.11 |
| 3 | Single brick flat soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with powdered earth or local sand P.no-11, I-1 | 1.00 | 2.5 | | 2.500 | Sq.M | 377.00 | 942.50 |

Assistant Engineer
Halisahar Municipality (BSUP)

Sub Assistant Engineer
Sub Assistant Property
HAUSAHAR MUNICIPALITY

| | PWD BUILDING SCHEDULE 2014 | | | | | | | | | | |
|---------|---|------------|------------|-----------|--------------|------|---------|----------|--|--|--|
| SI N | Description of Items | Lengt h | Bread h | Dept h | Quantit y | Unit | Rate | Amount | | | |
| 4 | Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor as per relevant IS codes P.no-24, I-10(a) | 1.00 | 2.5 | 0.125 | 0.313 | Си.М | 6802.74 | 2,125.86 | | | |
| 5 | Brick edging 75 mm. wide with picked jharna bricks, laid true to line and level including cutting necessary trench in sopil or in hard metalled surface, laying the bricks and repacking the trench (on both sides of the edgeing) with spoils and ramming the same throughly, complete as per direction. (b) Brick-on-end edging (250 mm.) depth. P.No-189, I-3(b) | 2.00 | | | 2.000 | %Mtr | 9392.00 | 187.84 | | | |
| 6 | Removal of rubbish, earth etc. from the working site and disposal of the same beyond the compound in conformity with the Municipapal /Corporation Rules forsuch disposal, loading into truck and cleaning the site in all respect as per direction of Engineer - in -Charge P.no-9, 1-13 | 1.00 | 2.500 | 0.400 | 1.000 | Cu.M | 168.00 | 168.00 | | | |
| | | | | | | | Toati= | 4,096.78 | | | |
| | | | | | | | Total= | 4.097.00 | | | |

Rate Analysis Brick Work 4:1 in foundation & plinth

| Step - 1 | Schedule Rate | Rs | 6068.00(A) |
|----------|--|----|-------------|
| Step - 2 | Deduct cost of cement=(Quanty of cement)x(lissue rate of cement vide item no-1 column-4 Table1-1 of Annexure-1 0.055x8100 | Rs | 672.30(B) |
| Step - 3 | Add cost of cement supplied by cost contractor including 10% proffite = 1.1x(Quanty of cement)x(Basik price of cement vide item no -1 column- 5 table-1-1 of annexure -1 1.1x.055x7364 | Rs | 672.33 (C.) |
| | Note;- Quantity of cement shall be same as step-2 Final Rate of item = Rs A - Rs B + Rs C = Rs D | Rs | 6068.03 (D) |

Rate Analysis

Ordinary Mix Concreate 1:1.5:3

Assistant Engineer
Halisahar Runicipality (BSUP)

SUB ASES STANT ENGINEER
HALISAHAR MUNICIPALITY

Cha: ..an Halisahar Municipality

HALISAHAR MUNICIPALITY HALISAHAR, NORTH 24 PARGANAS

TYPICAL CROSS SECTION OF CEMENT CONCRETE ROAD

BRICK ON EDGEING SINGLE BRICK FLAT SOLING 200 TH. SILVER SAND FILLING -WIDTH OF ROAD 2500-P.C.C (1:1.5:3) AVG TH. 125 BRICK ON EDGEING

THAN 7.50 SQM. PROVISION FOR PAPER JOINT AT THE END OF EACH PANNEL IS TO BE MADE NOTE: CEMENT CONCRETE SHOULD BE LAID IN ALTERNATE PANNEL OF AN AREA NOT MORE

Benjar

lalisahar Municipani

Angeding the manuscripe Halisal translation and a significant with the significant and the significant and

| Step - 1 | Schedule Rate | Rs | 6802.63 (A) |
|----------|--|----|--------------|
| Step - 2 | Deduct cost of cement=(Quanty of cement)x(lissue rate of cement vide item no-1 column-4 Table 1-1 of Annexure-1 0.286x8100 | | |
| | | Rs | 2316.6 (B) |
| Step - 3 | Add cost of cement supplied by cost contractor including 10% proffite = 1.1x(Quanty of cement)x(Basik price of cement vide item no -1 column- 5 table-1-1 of annexure -1 1.1x.286x7364 | Rs | 2316.71 (C.) |
| | Note;- Quantity of cement shall be same as step-2 Final Rate of item = Rs A - Rs B + Rs C = Rs D | Rs | 6802.74 (D) |

Rate Analysis P.C.C 1:3:6 With Jhama Khoa

| Step - 1 | Schedule Rate | Rs | 5803.00 (A) |
|----------|---|----|--------------|
| Step - 2 | Deduct cost of cement=(Quanty of cement)x(lissue rate of cement vide item no-1 column-4 Table 1-1 of Annexure-1 0.16x8100 | Rs | 1296.00(B) |
| Step - 3 | Add cost of cement supplied by cost contractor including 10% proffite = 1.1x(Quanty of cement)x(Basik price of cement vide item no -1 column- 5 table-1-1 of annexure -1 1.1x.16x7364 | Rs | 1296.06 (C.) |
| | Note;- Quantity of cement shall be same as step-2 Final Rate of item = Rs A - Rs B + Rs C = Rs D | Rs | 5803.06 (D) |

Annexure - II

Format - A

(Format for Rate Analysis of Cement Concrete Item) Item 7. Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement if any, in ground floor as per relevant IS codes.

(i) Pakur Variety

Consumption of Stone aggregate (Page B-59)

20 mm = 0.573

0.287

Cum

10 mm =

Cum

Distance of site considered =

Km

| Steps | Quantity | Unit | Rate | Amount |
|--|----------|------|---------|---------|
| Step - 1 Rate of item as per relevant section of this Schedule A = | 1.00 | CUM | 5389.00 | 5389.00 |
| Step - 2 Add cost of stone aggregate of different grading as per consumption required for one cum of concrete. | | | | |

Quelosh,
Assistant Engineer Halisahar Municipality (BSUP)

Sub ASANAR MUNICIPALTY

HALISAHAR MUNICIPALTY

| (As per table:T-1) | | | | |
|---|---------------------|-----|---------|---------|
| Station : kalyani | | | | |
| 20mm Nominal Size: | 0.573 | CUM | 1463.00 | 838.30 |
| 10mm Nominal Size: | 0.287 | CUM | 1296.00 | 371.95 |
| Total B = | | | | 1210.25 |
| Step - 3 Add cost of carriage of stone aggregate as per consumption required for one cum of concrete. | | | | |
| (As per table:T-2) | | | | |
| 20mm Nominal Size: | 0.573 | CUM | 178.50 | 102.28 |
| 10mm Nominal Size: | 0.287 | CUM | 178.50 | 51.23 |
| Total C = | | | | 153.51 |
| Step - 4 Add cost for loading and unloading of stone aggregate | | | | |
| (As per table:T-3) | | | | |
| 20mm Nominal Size: | 0.573 | CUM | 58.00 | 33.23 |
| 10mm Nominal Size: | 0.287 | CUM | 58.00 | 16.65 |
| Total D = | | | | 49.88 |
| Final Rate of Item = [Rs. A - Rs.B + Rs.C + Rs.D] = Rs. | Manufacture William | | | 6802.64 |

5.2.3. Detailed Estimate of adoption of technology for Water Connection:

Table-38: Detailed Estimate of adoption of technology for Water Connection

OFFICE OF THE BOARD OF COUNCILLORS

HALISAHAR MUNICIPALITY,

COST ESTIMATE OF THE INTERIOR PIPE LINE FOR SINGLE **DWELLING UNIT**

P.W.D S.O.R Sanitary and Plumbing Work from 1st July-2014

| SL NO | DESCRIPTON | QUANTITY | UNIT | RATE | AMOUNT |
|--------------------------|--|----------|-------|--------|---------|
| 1 P-11 I- 19(I) | Supplying fitting fixing PVC pipes of pproved quality conforming to ASTMD-1785 and threaded to mach with GI pipes as per IS:1239 (Part-I) wit all necessary accessories specials viz.socket, beny, tee, union, cross, elbow, nipple, long screw, reducing socket, reducing tee, short piece, etc. complete in all respect including cost of all necessary fittings as required , jointing materials and two coats of painting with approved paint in any position above ground. (a) For exposed work PVC Pipes 15mm dia | 12.00 | Meter | 106.00 | 1272.00 |

Sud Sustant Engineer

ZB.S. WUNICIPALITY

HALISAHAR MUNICIPALITY

Chair uan Halisahar Municipality

146

| Total= | | | | | | |
|--------------------------|--|------|------|--------|--------|--|
| 2 P- 6 I (f)(i) | Supplying fitting and fixing polythene Bib Cock with metal inlet (EMCO / ATLAS or equivalent) 15mm | 3.00 | Each | 100.00 | 300.00 | |

Rupees One Thousend Five Hudread Seventy Two Only.

Sector wise Monitoring and Implementation Plan

Background

A strong implementation plan and administration framework is essential for implementation of the identified projects that require strengthening of the Municipal Corporation and evolution of a Community Structure.

Accurate assessment of investment requirements and devising a suitable financing strategy are the key components of any sustainable slum rehabilitation program. Implementing bodies must recognize and measure the various costs of developing infrastructure and housing, including the costs for subsequent maintenance. As the scheme is a collaborative effort of multiple stakeholders, with a few of them contributing financially as well, it is important to estimate the required capital expenditure for developing the infrastructure and improving the housing stock as accurately as possible.

National Level

PMAY Mission Directorate

There shall be a PMAY Mission Directorate under the charge of a Joint Secretary under the Ministry of Housing and Urban Poverty Alleviation, supported by staff and a Programme Management Unit with experts having expertise in the areas of survey and statistics, computerization and MIS, GIS, Planning, Project engineering, Social development, Monitoring and evaluation etc. for ensuring effective co-ordination with State Governments for expeditious processing of the State Slum-free PoAs and project proposals and providing handholding support to States/UTs.

State PMAY Mission Director

The State Level Nodal Agency for PMAY/SUDA, West Bengal will have coordination of all scheme and reform-related activities more than one department handling Urban

Assistant Engineer
Halisahur municipality (BSUP)

147 W Engineer
Sup Assistant P P PALITY
HALISAHAR MUNICIPALITY

development, Local self government, and Housing. SLNA. The Mission Directorate supported by a team of dedicated professionals having expertise in the fields of GIS, MIS, town planning, community development, project engineering, capacity development etc

Halisahar Municipality

The Municipality shall act as the implementation agency for the project. Keeping in mind the criticality of the project, a dedicated 'Bustee Works Management Committee (BWMC)' has been set up for implementation and operation & maintenance (O&M) of the proposed infrastructure under the scheme.

The BWMC will have representatives of local councillor, Chairman-in-Council, municipal engineers,

town project officer, community organizers and member from the local slum

dwellers. Some of the responsibilities of BWMC are listed below:

- Delineation of poverty pockets in this town to execute the scheme.
- ii. Recruitment of community organizers
- iii. Guiding and assisting the community organizer to form neighbourhood group (NHG) and for identification of

RCVs. iv. Formation of NHCs and

CDs.

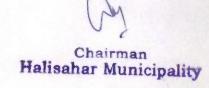
- v. Constitution of town level planning and monitoring committee (TLPMC).
- vi. Liaison with CMOH and other concerned district level officers and NGOs for conference.
- vii. Regular contact with SUDA and Department of Municipal Affairs.
- viii. Convening meeting of TLPMC to take stock of programme implementation and convergence.
- ix. Dovetail all poverty alleviation programmes with IHSDP.
- x. Obtain regular feedback from CDS and send the required monthly progress report to SUDA by the end of first week of the next month in the prescribed MIS format.

Participation through Beneficiary committees

People's participation in municipal planning and development is critical and shall be ensured

through of Ward Committees in each ward irrespective of their population and size.

The Ward Committee Rules have also been framed in such a way so as to ensure involvement of the members of the Ward Committees in the overall municipal administration



and resource mobilization. The Ward Committee created especially for the purpose of PMAY will be headed by the Councillor of the Ward, who would in turn submit the report of progress to BWMC.

Some of the responsibilities the Ward Committee will be:

- i. Supervision of the physical progress of the work under the project
- Designating in-charge, who would be held responsible for individual scheme under the project
- iii. Collecting user charges for operation and maintenance (O&M) activities
- iv. Ensuring proper maintenance of each of the assets that is created under the project

Participation through Community Based Organization

Participation of poor families in planning and implementation of slum level Basic Infrastructure Development as well as Socio-Economic Development has been ensured through formation of Community Based Organization. The Ward Committee will also have representative of weaker community. Similar structure have also been involved by the municipalities in providing civic services like conservancy services, maintenance of street light, etc. municipal administration and resource mobilization. However, basic guidelines, which will be followed in implementation of the projects, are been laid down below:

Social Infrastructure

In order to provide preventive health care, mother and childcare, supplementary nutrition, referrals and so on, a cost effective but sustainable community infrastructure or institution needs to be developed.

In the first step, community health facilities will be provided from centrally located Community Seva

Kendra in slum pockets and for different type of imparting education and other training purpose, Community Centre will be put in place.

The Community Seva Kendra will be the hub of all activities of the Unit like: immunization, health-

check up of pregnant women, growth monitoring, referrals, nutrition supplementation, awareness training and campaign and so on, besides other activities like Balwadi, NFE, cultural activities etc. Some part time medical staff may be posted for these Units in the slum pockets and some help from trained medicos will essentially be needed for services like health check up of pregnant women and children, and immunization.

Thus notwithstanding the guidelines in this regard, following alternatives will be tried:

☐ Creation of a dedicated cell for administrative activities and maintenance of the Community

Seva Kendra
 Assistance from some NGOs like Rotary, Lions, IMA, etc.
 Request to the district outfit of the Health and Family Welfare Department to depute doctors to the UHC by rotation for 2-3 hours, three times a week.
 Engage duly certified inoculators or health workers for immunization only on the basis of token honorarium.
 Engage private medical practitioners who are motivated to provide service to the poor community and pay them token honorarium in recognition of their service.

Physical Infrastructure

The Ward Committee will not only be supervising and monitoring the progress of the activities, but shall be actively involved in scheme implementation and in mobilization of funds. The Ward Committee will have teams for individual physical infrastructure projects who shall be held responsible the scheme in the slums in the ward. Primary activity of the Committee for schemes is provided below in details.

- Assess water supply needs and identify spots
- for tap. ii. Develop water supply plan.
- iii. Train RCVs in hand pump maintenance.
- iv. Develop slum level water and sanitation committee.
- v. Test water quality periodically.
- Construct platform around each hand pump that does not have it already.
- vii. Identify needs for community bathing cubicles for women and selecting ideal spot for constructing the same
- viii. Identify sites for building community toilets cum water points.
- ix. Link community toilets to biogas plant (on experimental basis).
- x. Improve the conditions of drains, soak pits and solid waste disposable bins.

Other Environmental Improvement Measures

- Organise hygiene and sanitation drives in slums. ii. Sports, games and cultural activities
- Encourage local NGOs/clubs to create facilities for games and athletics for the children and youth.
- iv. Give support to the above by providing materials for games, etc.
- Organize annual sports and tournaments.

- vi. Organize facilities for learning music and dramatics.
- vii. Organize annual competition of music, recitation, drawing, drama, etc.

Creating income and employment opportunities for women

- i. Identification of marketable skills for women.
- ii. Arrange skill training with fund available under SUME of NRY.
- Arrange credit-subsidy under SUME to enable the trained women to start and operate micro enterprise.
- Arrange for supply of inputs and marketing of finished products.
- v. Thrift and Credit Society Formation
- vi. SHG Formation
- vii. DWCUA Formation

Housing

Monitoring

Officers dealing with HOUSING SCHEME at the State headquarters shall visit the slums regularly and ascertain through field visits whether the programme is being implemented satisfactorily and whether the construction of houses is in accordance with the prescribed norms. A schedule of inspection which prescribes a minimum number of field visits for each supervisory level functionary from the State level to the corporation level shall be drawn up and strictly adhered to.

Evaluation Studies

Periodic evaluation studies on the implementation of HOUSING SCHEME shall be carried out by reputed institutions and organizations on issues identified during concurrent evaluation and reviews. Copies of these studies should be furnished to the Govt. of India. Remedial action shall be taken on the basis of the findings of these studies.

Modality of implementation

Before implementation it will be ascertained that either the property title in the name of the female member of the family or at least the female family member is the co-owner of the holding/property.

Transparency in implementation of Housing Scheme

The list of items on which information would be made available to people to bring about greater

transparency at the State, District and Corporation levels is given below:

- i. List of people below poverty line in the urban area.
- ii. List of beneficiaries identified during the preceding year and current year including details of SC/ST, BC, women beneficiaries and physically and mentally challenged persons under HOUSING SCHEME. Allocation made to the State under VAMBAY
- iii. Guideline of HOUSING SCHEME/ Criteria for selecting beneficiaries.
- iv. Display of HOUSING SCHEME signboard / logo on the allotted houses.

Monitoring & Evaluation

PMAY will be monitored at three levels: City, State and Government of India. In particular,

| | Ministry of Housing and Urban Poverty Alleviation will periodically monitor the scheme. |
|----------|---|
| □ Mir | State Nodal Agency would send Quarterly Progress Report (on-line) to the nistry of |
| | Housing and Urban Poverty Alleviation. |
| | Upon completion of a project, the State Nodal Agency, through the State |
| | Government, would submit completion report to the Central Government. |
| sai | Central Sanctioning-cum-Monitoring Committee will meet as often as required to notion |
| | and review/monitor the progress of projects sanctioned under the Mission. |
| П | States/Cities will be facilitated through independent quality control/ assurance/ third party teams at various levels that may be outsourced to specialized/technical agencies. |
| | Monitoring of projects by States/Urban Local Bodies by conducting Social Audit in conformity with guidelines to be prescribed, right from the stage of project preparation. |
| □ eva | The processes of implementation will be monitored by undertaking concurrent aluation |
| | through reputed independent institutions to ensure that corrections to distortions, |
| | oversights or shortcomings can be made in time. |

Convergence of Health and Education

Health

Development Objectives for the Health Care Service Delivery Improvement Plan. Some of the development objectives, which the Halisahar Municipalityaddress through

their Health Care Service Delivery Improvement Plan, are as follows:

Theme 1: Public Health Services:

- Better coordination with State Government hospitals and dispensaries for maintaining a better referral system.
- ii. Improve the asset and human resource utilization pattern of health services such as ambulance services, dispensaries etc.
- iii. Ensure that all types of cooked / uncooked food in the Municipal Corporation area are sold by licensed

food sellers to prevent spread of diarrhoeal and other disease in the area. iv. Strengthening and developing Health Management Information System.

- v. Exploring opportunities for strengthening decentralization and other public private
 - partnerships in providing such public health services
- vi. Partner with leading private sector providers of medical services for better utilisation and maintenance of medical infrastructure such as municipal dispensaries, maternity homes.

Theme 2: Reproductive and Child Health Care Services:

- i. To establish quality antenatal care to 100% of the slum women.
- ii. To establish 100% institutional delivery for all women living in slums.
- iii. 100% immunization of infants against six killer diseases within 12 months of birth.
- iv. Making sterilization services available by way of improving efforts related to family planning.
- v. Formulate a wider basket of services aimed at providing health priorities within the RCH
 - domain that have not been adequately addressed, as well as some health priorities outside the RCH domain which are major contributors to the burden of disease and impoverishment are included.
- vi. Spreading health awareness through various methods of communication not only to the beneficiaries of the Programme but also to the excluded groups and areas within the wards.

All other Government Programmes for Preventive Health Care and other Independent

Initiatives taken by the



ULB:

- Promotion of hygienic measures to lead to reduced diarrhoeal disease with prompt and appropriate care and reducing household expenditure on recurrent diarrhoea.
- Increase the coverage of vector control operations by rationalizing the use of assets and human resources available.
 - iii. Effective implementation of Government Programmes to achieve the targeted goals and objectives.
- iv. The following schemes under implementation by the State Govt. in the social sector can be dovetailed and integrated with the IHSDP Program to ensure effective slum development. The Socio Economic Survey has already identified beneficiaries under the scheme.

RCH & IPP VIII Extension:

A surveillance program initiated by the State Govt. after completion of the World Bank Assistance in the two schemes. Main objective is to provide Health care facilities at the door steps of the slum dwellers / BPL Population, with emphasis on Mother and child health, preventive cares and immunization, Institution delivery, birth control.

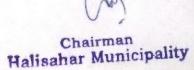
Health Program under DFID Assistance:

With the same objective as above with decentralization of health care activities by formation of Health sub centers, which can be operated from the Community Seva Kendras, proposed earlier.

Education

The Municipal Corporation has been actively implementing key initiatives in the Education sector through convergence with the following objectives:

| un | Improvement Of the Status & Infrastructure & Basic Service in Primary Schools der |
|----|---|
| | Municipal Corporation. |
| | Achieving 100% enrolment in schools for next 5 years. |
| | Enhancing the quality of education provided in pry school with respect to student performance & teaching quality. |
| | Leveraging the existing resources created under the NSDP and other programme and increase the coverage in excluded committee and squatter settlements |
| | Achieving higher enrolment of children in age group of 6-14 in SSK centres |



- Strengthening Parent Teacher Association and involving community participation in improving the performance of school
 Creating awareness in the community through the existing community structures
 - NHC, CDS members) on the importance of primary and adult education.

Extensive training programme for teachers & sahayekas is being organized for improvement of quality teaching. Construction, extension and repair of SSK buildings must be done so that a greater portion of children aged 5 to 14 yrs can attend there.

SSA: 'Sarba Siksha Abhiyan' - a scheme meant for 'education for all'

SSK: 'Sishu Siksha Kendra' – Mainly aimed at offering free primary education to the poorer section of the community.

Mid-day Meal: A program initiated to central the drop out rates, has been found success since its initiation.

Social Security

(NHG,

The following Social Security Schemes under State Plan are proposed to be integrated with the current program through convergence:

Adult Education: To promote self-dependability.

Thrift and Credit Society: For easier Credit and Finance availability.

Self Help Group: To promote self and micro entrepreneurship.

DWCUA: Upliftment of the life style and self-independency of Women Group.

Annapurna: To provide food stock at reduced price to the poorer section of the Community.

Antyoday Anna Yojana: To provide food stock free of cost to the older section of the community.

Constitution & functions of the Bustee Works Management Committee (BWMC):

- a) The BWMC will consist of minimum 5 members, all of whom will be resident of that particular slum.
- b) In addition, one RCV from that slum will be member.
- c) There will be at least two female members in the BWMC.
- d) The members of the BWMC may be from BPL / APL or both.
- e) e) At least one member will belong to a Neighbourhood Group (NHG) from that

- slum. f) The BWMC will be elected through an informal process of election.
- f) There must be good publicity to ensure wide attendance.
- g) At least 40% of slum dwellers must be present in the meeting during election of BWMC.
- h) The BWMC will be an independent body. The ULB will be responsible for overseeing the work of BWMC.
- i) The BWMC will hold office for a period of two years, after which a new committee will be elected. If any member resigns or moves out of the slums or is incapable of functioning for any reason, another member will be elected in his / her place within one month.
- j) Each BWMC will open and operate a separate bank account. This bank account will
- k) function as the O&M fund for that slum.
- The BWMC will be authorized by the ULB to raise funds for O&M as is elaborated under item no. 13.
- m) The ULB will make matching contribution against the fund raised by the BWMC
- n) through user charges to encourage the process.
- o) The BWMC will report to the slum dwellers in a meeting held once in six months on revenue, expenditure and maintenance issues. This meeting will be attended by Local Councillors, ULB Officials & Engineers, Community Organizer, Town Project Officer, CDS member.
- p) There must be an agreed upon O&M Plan between the ULB, CDS and BWMC for the assets created in that particular slum under IHSDP as listed in 1st meeting.
- q) They will need interim hand holding which will be extended by the ULB by
- r) providing their technical person and accounts person for technical and accounts support. Otherwise the ULB can take help of local NGOs / CSOs for providing support to BWMC.
- s) Chairman, Secretary and Cashier will be selected within the BWMC. Bank account
- t) will be operated by any two of them jointly.
- u) The existing Beneficiary Committee will cease after the BWMC is formed.

Solid waste management:

- Daily door to door collection and depositing to the nearby container / trailer
- 2. Will be done by the ULB with existing staff. The staff engaged for this work will report to the BWMC who will supervise their work. The BWMC will maintain the attendance of the staff attending the work and report on weekly basis to the ULB regarding their attendance and performance. BWMC will first assess how much money will be required every month. The BWMC will collect the contribution from Beneficiaries



every month. BWMC will supervise the work.

- 3. Transporting from container / trailer to dumping / composting ground
- 4. The ULBs will execute the work from their fund.

Duties of BWMC

 They will maintain a register showing the existing services / structures under their control:

i. Water supply

- a) What is the length of water line
- b) What is the diameter and material of water line
- c) How many stand posts are there
- d) How many small dia-deep tube wells are there and their status (functioning / defunct)
- e) How many big dia deep tube wells are there and their status (functioning /defunct)

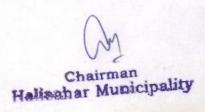
They will maintain a register for keeping stock of materials which are often required for day to day maintenance work like bib cock, short pipe for stand posts etc.

ii. Sanitation, Drainage, Solid waste management, Community Centre

- They will maintain a register showing number of existing community latrines, Community Seva Kendra and community centers under their control with their status. They will also maintain a register of consumable goods like Muriatic acid, brush, broom, towel, soap etc. which will be required for maintenance purpose.
- They will maintain an attendance Register for the persons attending duties. They should also maintain a register of income (collection) and expenditure.
- The Bustee Works Management Committee (BWMC) will be responsible for awareness generation amongst the slum dwellers for upkeep and maintenance of the assets created.

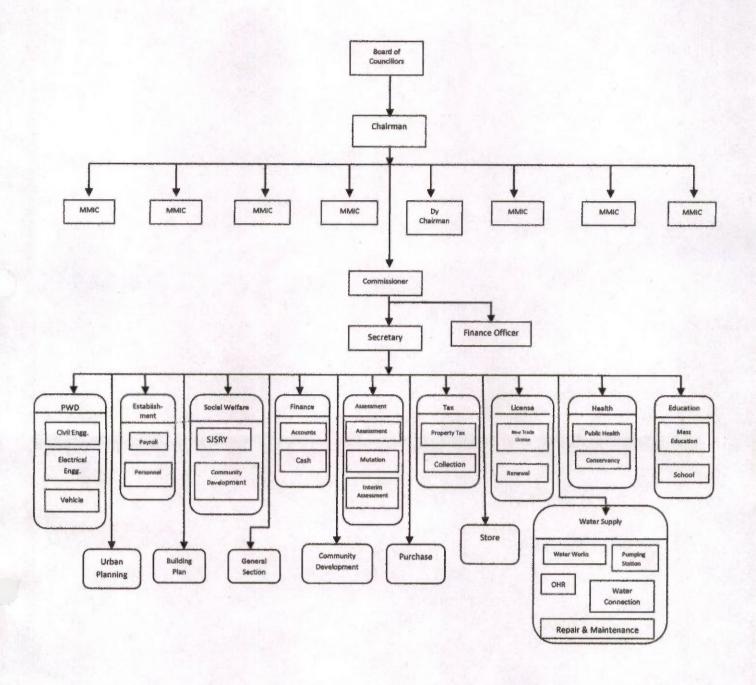
Institutional Capacity

Municipality Municipal Corporation, with its elected local body in place, has developed institutional strength to implement, operate & maintain proposed infrastructure. The Municipal Corporation spreading over an area of 154.2 square kilometres is comprised of



43 wards With efficient and trained manpower, the Municipal Corporation has developed both technical and administrative skills. The development of appropriate municipal organizational structures with qualified staff is essential if municipalities are to provide cost effective services to citizens. With local government reform municipalities are required to take on new tasks, and provide new services. This will only be possible if municipalities have cost-effective and appropriate structures and staff that are well qualified and highly motivated. The municipalities should plan in such a way so as to ensure that they can meet the needs of citizens effectively and efficiently.

Figure-6: Organogram



On

HALISAHAR MUNICIPALITY

WORK AND COST SUMMARY FOR DEVELOPMENT OF VARIOUS SLUMS / NON SLUM

2015-2016

| | | 2015-2016 | | | | | | | |
|-----------------------------------|--|---|---|-----------------------------------|--------------|---|--------------|------------------------------|---|
| | | | HO | USING | PHY | SICAL INF | RASTRU | CTURE | |
| Name of slum | Area SqKm | Population Dwelling Units 88.3.68 Lakivi each) | | Concrete Roads (@Rs.4097.00fM) | | internal Pipe Line | | Grand Total (Rs. In lakh) | |
| | | | Qty. | Amt. | Qty. | Amt. | Qty. | Amt. | |
| Ramprasad Sarani Subhash Nagar | 0.0336265 | 3294 | 236 | 868.48 | 2028 | 83.09 | 236 | 3.71 | 955.28 |
| Khasbati South Bustee | 0.117922 | 1988 | 131 | 482.08 | 1126 | 46.13 | 131 | 2.06 | 530.27 |
| West Basanta Buritala Bustee | 0.054558 | 1989 | 38 | 139.84 | 327 | 13.40 | 38 | 0.60 | 153.83 |
| Lebubagan Colony Bustee | 0.075665 | 1062 | 84 | 309.12 | 722 | 29.58 | 84 | 1.32 | 340.02 |
| Bachcha Singh Road side Bustee | 0.945314 | 1373 | 81 | 298.08 | 696 | 28.52 | 81 | 1.27 | 327.87 |
| Mitra Para Lalkuthi Bustee | 0.01541 | 248 | 17 | 62.56 | 148 | 5.98 | 17 | 0.27 | 68.81 |
| Ambagan Colony Bustee | 0.131942 | 2111 | 298 | 1096.64 | 2561 | 104.92 | 298 | 4.68 | 1206.25 |
| Paulpara Bustee | 0.112126 | 1607 | 100 | 368.00 | 859 | 35.19 | 100 | 1.57 | 404.77 |
| Deshbandhu Colony Bustee | 0.100037 | 1373 | 66 | 242.88 | 567 | 23.23 | 66 | 1.04 | 267.15 |
| Sushil Sarani Bustee | 0.099811 | 954 | 68 | 250.24 | 584 | 23.93 | 68 | 1.07 | 275.24 |
| East Prased Nagar Bustee | 0,155659 | 2646 | 96 | 353.28 | 825 | 33.80 | 96 | 1.61 | 388.59 |
| Sarkar Para Bustee | 0.041991 | 2007 | 121 | 445.28 | 1040 | 42.61 | 121 | 1.90 | 489.79 |
| Dharambira Colony No.2 | 0.092776 | 1607 | 28 | 103.04 | 241 | 9.87 | 28 | 0.44 | 113.35 |
| Mitra Babu Bazar Bustee | 0.01953 | 1076 | 6 | 22.08 | 52 | 2.13 | 6 | 0.09 | 24.30 |
| South Kona Colony Bustee | 0.125578 | 1809 | 190 | 699.20 | 1633 | 66.90 | 190 | 2.99 | 769.09 |
| Balur Para West Bustee | 0.035809 | 862 | 40 | 147.20 | 344 | 14.09 | 40 | 0.63 | 161.92 |
| South M.C Mitra Bustee | 0.044238 | 1356 | 62 | 228.16 | 533 | 21.84 | 62 | 0.97 | 250.97 |
| North Kalachand Pally Bustee | 0.037001 | 617 | 63 | 231.84 | 541 | 22.16 | 63 | 0.99 | 255.00 |
| Dharambira -1 North Bustee | 0.114825 | 945 | 171 | 629.28 | 1470 | 60.23 | 171 | 2.69 | 692.19 |
| Arabinda Pally - 1 Busted | 0.08353 | 963 | 37 | 136.16 | 318 | 13.03 | 37 | 0.58 | 149.77 |
| Bazarpara Busted | 0.192746 | 1166 | 25 | 92.00 | 215 | 8.81 | 25 | 0.39 | 101.20 |
| Railway Boundary Road East Bustee | 0.072757 | 603 | 46 | 169.28 | 395 | 16.18 | 46 | 0.72 | 186.19 |
| | 0.081000 | 1617 | 18 | 66.24 | 155 | 8.35 | 18 | 0.28 | 72.87 |
| Total | 1.8836515 | 33302 | 2022 | 7440.96 | 11774 | 711.98 | 1370 | 31.79 | 8185.00 |
| | Ramprasad Sarani Subhash Nagar Khasbati South Bustee West Basanta Buritala Bustee Lebubagan Colony Bustee Bachcha Singh Road side Bustee Mitra Para Laikuthi Bustee Ambagan Colony Bustee Paulpara Bustee Deshbandhu Colony Bustee Sushii Sarani Bustee East Prasad Nagar Bustee Sarkar Para Bustee Dharambira Colony No.2 Mitra Babu Bazar Bustee South Kona Colony Bustee Baiur Para West Bustee South M.C Mitra Bustee North Kalachand Pally Bustee Dharambira -1 North Bustee Arabinda Pally -1 Busted Bazarpara Busted Railway Boundary Road East Bustee | Ramprasad Sarani Subhash Nagar 0.0336265 Khasbati South Bustee 0.117922 West Basanta Buritala Bustee 0.054558 Lebubagan Colony Bustee 0.075685 Bachcha Singh Road side Bustee 0.045314 Mitra Para Laikuthi Bustee 0.01541 Ambagan Colony Bustee 0.131942 Paulpara Bustee 0.112126 Deshbandhu Colony Bustee 0.100037 Sushil Sarani Bustee 0.099811 East Prasad Nagar Bustee 0.099811 East Prasad Nagar Bustee 0.041991 Dharambira Colony No.2 0.092776 Mitra Babu Bazar Bustee 0.01953 South Kona Colony Bustee 0.125578 Baiur Para West Bustee 0.035809 South M.C Mitra Bustee 0.037001 Dharambira -1 North Bustee 0.037001 Dharambira -1 Busted 0.08353 Bazarpara Busted 0.192746 Railway Boundary Road East Bustee 0.072757 | Ramprasad Sarani Subhash Nagar 0.0336265 3294 | Name of slum Sept | City. Amt. | Name of slum PRY Page Page | Name of slum | Name of stum | Note Note |

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Region .