

Project Document

Energy Efficient Low Cost Housing for Poor

In Thatta, Badin and Karachi Districts

Government of Sindh

February 2009



Government of Pakistan



Government of Sindh



United Nations
Development Programme



The GEF SGP
Pakistan

**Peoples Housing Cell Government of Sindh
UNITED NATIONS DEVELOPMENT PROGRAMME
Programme Budget**

Project Number:
Project Title: **Energy Efficient Low Cost Housing for Poor**
Start : December 2008
End : August 2009
Executing Agent: NEX – National Execution People’s Housing Cell GOS
Implementing Agent: UNDP/GEF Small Grants Program Pakistan

Budget Financing (in Pak Rupees)	
Total Budget	Rs. 187,957,334.41
Cost Sharing	
PHC/Donor	Rs. 172,737,334.5 million
UNDP	Rs. 15,220,000 million

Revision Type:
LPAC Approval Date:
ARR / Programme Officer: Abdul Qadir Rafiq

Classification Information

DCAS Sector and Sub-sector: Primary Type of Intervention: Energy Efficiency
ACC Sector / Sub-sector: Primary sub-type of Technology Adaptation Intervention:
Primary Area of Focus: Low cost energy efficient housing for poor Primary Target Beneficiary Group: The Poor

Brief Description:

Peoples Housing Cell (PHC) of the Government of Sindh expressed its interest to replicate the field tested UNDP GEF SGP’s energy efficient ‘Benazir’ model house in the three districts of Sindh province Thatta, Badin and Karachi.
The project has direct relevance to the ‘housing for poor’ program of the Government of Sindh. The total cost of project in PKR is 187.957 million including UNDP share.

Approved by	Signature	Date	Name / Title
EAD:	_____	_____	_____
Executing Agency (PHC/GOS):	_____	_____	_____
UNDP:	_____	_____	_____

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Country: Pakistan

UNDAF Outcome(s): Improved living conditions through environmental management for sustainable development.

Expected Output(s):

- 500 energy efficient houses are constructed and beneficiary communities are mobilized to adopt better hygienic life-style in the targeted districts.
- At least over 1000 persons are trained with the energy-efficient low cost housing technologies
- Living Conditions of the targeted beneficiaries are improved through the use of energy efficient stoves and solar street lights

Implementing partner: UNDP GEF SGP Pakistan

Other Partners/co-financier: Government of Sindh

Narrative

Peoples Housing Cell (PHC) of the Government of Sindh expressed its interest to replicate the field tested UNDP GEF SGP's energy efficient 'Benazir' model house in the three districts of Sindh province Thatta, Badin and Karachi.

The project has direct relevance to the 'housing for poor' program of the Government of Sindh. The total cost of project in PKR is 187.9573 million including UNDP share.

Project Period: 9 Months, starting from the date of receiving the first installment

Intervention Title: Energy Efficient Low Cost Housing Project

Budget Code:

Estimated total budget:
PKR. 187,957334.41 (US \$2,406,624)

Allocated resources:

- Donor(Government):
Rs. 172,737,334.5 (US\$ 2,211,746)
- UNDP: PKR. 15,220,000.00 (US\$ 194,881)

Exchange Rate (78.10) December 2009

Agreed by (Sindh Government's Peoples Housing Cell): _____

Agreed by (Economic Affairs Division): _____

Agreed by (UNDP): _____

SECTION I: NARRATIVE PART

PART-I. SITUATION ANALYSIS

The three target districts Badin, Thatta and Karachi are situated in the southern part of the Sindh province in the deltaic region of the river Indus edging to the Arabian sea. Since centuries these districts have frequently been hit with disasters in the shape of floods, heavy rains, cyclones, earthquakes, sea intrusion, soil degradation and intermittent drought. The populace of these districts mostly relies on agriculture (land cultivation, livestock and fishing) whereas the targeted beneficiaries in the coastal areas of Karachi mostly are dependant on fishing directly or indirectly for livelihood and subsistence.

In the targeted rural area of three districts, the housing structures are made of thatched material and mostly wood is used for construction of the houses. The predominant source of the energy is also wood, which is used for cooking and heating purposes as well. This puts immense pressure on the natural resources as well as the economy of the poor people. The housing design and structure is also not energy efficient and thus exposes the people to heavy electricity bills as well as uncomfortable indoor environment as power shortage is a major issue in Pakistan these days. The frequent disasters, on the other hand, cause destructions and expose poor residents an unending cycle of rebuilding their houses. Whenever there is a disaster, not only the houses but also the household belongings (assets including livestock) are also lost. According to survey reports 86% of the population in Thatta and Badin are below poverty line. Hence rebuilding houses is a major problem for people in that area.

The unhygienic and unhealthy indoor-environment resulting of bad housing design and structure also exposes the residents to various diseases and severe health problems.

100 percent increase in the traditional construction material and all-time-high property and power rates demand new low-cost and energy efficient technologies and their mainstreaming on mass-scale.

PART-II. PROJECT STRATEGY

The Government of Sindh through People's Housing Cell will execute the project and the UNDP will implement it. The project will be implemented in the rural villages of Badin, Thatta and Karachi Districts. UNDP through GEF SGP will primarily be responsible for the implementation of the project. Under this project, 500 poor families will be selected and provided the energy efficient earthquake and cyclone resistant low cost houses. Each house consists two bed-rooms, one shower, one latrine with soak pit and kitchen. The house will be furnished with clay tile flooring. The electric wiring network of about 800 ft will be installed in each house with switches/points.

Technical features of the model house and drawings are attached as Annex A

The communities will be mobilized, sensitized and educated to shift to energy efficient houses and better hygiene. UNDP/GEF Small Grants Program will separately provide energy efficient products including energy efficient stove, solar lanterns and solar street lighting. These small energy efficient products will further reduce household expenditures, leading to poverty alleviation. Similarly, hand pumps will be provided to all those beneficiary villages where suitable underground water is available. These handpumps will be equipped with Arsenic removal technology. The beneficiary households will be oriented on the proper use of the house specially using soak pit latrines.

Keeping in view the concerns of some quarters regarding the failure of such housing schemes in the past. UNDP GEF SGP organized stakeholder dialogue and brainstorming to establish the key reasons of such failures. One of the key reasons of the failures of housing schemes in the past was wrong beneficiary-selection. In order to avoid such mistakes, a brainstorming was done to identify the types of people and finding the potential beneficiaries. It was found out that we have following categories of people living in those areas:

1. **Poorest-of-the-poor semi-nomadic:** this category is not recommended for housing because housing is their least priority. Hence they will abandon house immediately or try to sale it out
2. **Poorest of the poor settled communities** but no ownership of the plot or land: this category will be considered only when during the baseline and need assessment survey it is proven that they can have ownership of the plot/house.

3. Poor with their own land /plot occupying for a reasonably long time with a firm desire to have a good house: this is the ideal beneficiary

Since this is a pilot project and has to be complete by a tight deadline, it is essential that the right and feasible beneficiary villages as well as beneficiaries are selected. The village / beneficiary selection criteria is as under:

- The village should be situated in the disaster prone area of Badin and Thatta and coastal indigenous communities' settlement in Karachi.
- The beneficiary village or house should not be on the land owned by some private party other than the beneficiary
- The beneficiary will be a poor person living in a kutchra house and willing to demolish his/her kutchra house under an agreement to be signed between the beneficiary and the PHC and agreeing to adopt SGP model of energy efficient house.
- Preference will be given to those villages where the houses are in deplorable conditions and have been damaged due to natural disasters
- Maximum effort will be made to select small villages where all the families fulfill the criteria so that 100 percent coverage of the village can be made possible

The village selection will be carried out by the UNDP/GEF SGP in consultation with the elected representatives/district focal points identified by the Government of Sindh/PHC. UNDP / GEF SGP will send its teams to the identified villages for screening from the following point of view:

- The communities are motivated, mobilized and willing to change their lives
- The clusters or the villages are reasonably connected to the road network as during this pilot phase, it cannot be logistically afforded to work in the extremely remote areas.
- UNDP GEF SGP shall implement the project through efficient local NGOs. The selection of the NGOs will be made through the existing criteria of GEF SGP for its regular programme. The project management team will facilitate the NGOs and the local vendors to learn the technology and make things available to the respective NGOs for actual house construction. All houses will be numbered district and Taluka wise and proper record of the beneficiary will be provided to PHC with details before start of construction work. The pre and post condition of the village will be documented through some photographs or video. The video documentary will also be developed to demonstrate the success and impact of the intervention. At the time of giving possession of the house to the beneficiary, UNDP will take a comprehensive receipt from the owner, with details of the house and construction. The project team will mobilize the beneficiaries on the PHC's draft agreement to be signed between PHC and the beneficiary.

PART-III. MANAGEMENT ARRANGEMENTS

The Peoples Housing Cell (PHC) of the Government of Sindh will execute this project and UNDP GEF SGP will implement it. The chairman PHC will act as the Project Director (PD) on honorary basis. The PD will be the focal point for the Government of Sindh, whereas, the GEF SGP National Coordinator will be the Project Manager, responsible for day to day decision making for the project implementation and supervision. The PD will be involved for the endorsement of the work plan and progress review and monitoring. GEF SGP of UNDP will implement this project through NGOs in-line with its regular program being executed in the country. The PM/National Coordinator UNDP GEF SGP will approve the day to day disbursements based on the work plan under the existing rules and procedures of UNDP GEF SGP.

UNDP will appoint as per the provisions of the PCOM a full time Chief Technical Advisor (CTA) with sufficient background in construction management and energy efficient technologies. Reporting to the PM, the CTA will be responsible for the overall supervision of the construction work and ensure that all the work is being done according to the technical specifications and drawings of the project. Other professional/staff as listed in Table 3 in the Annexure-A, will be recruited according to the usual practice of UNDP for its NEX projects.

Owing to the special nature of this project because of a narrow deadline and introduction of a new technology, the Government of Sindh will pay 20 % mobilization advance upon signing of the agreement, 40% on physical commencing of work, 30% upon completion of 50% work and 10% upon completion of work . The project management team will seek timely disbursement of funds from GoS and onward distribution to project partners (NGOs/CBOs). The team will generate progress reports on quarterly basis and submit to GoS in timely manner. The technical team comprising CTA and Field Engineers will supervise the quality aspects of the construction both at manufacturing units and construction sites. The team will ensure rigorous field follow up with the NGOs/CBOs and the communities.

The existing National Steering Committee (NSC) of GEF SGP will appraise the project proposals from /and the NGOs and award. The Project Director will represent the Government of Sindh and PHC in the NSC meeting called particularly for the subject housing project.

The National Coordinator UNDP GEF SGP will be overall responsible for coordination among UNDP, Sindh Government and other stakeholders. The selected NGOs will implement the project on ground. The project will purchase vehicles including heavy-duty 4X4 and other equipments as per the needs and situation. These vehicles and CEB manufacturing machines will be returned to the PHC upon completion of the project.

PART IV: MONITORING AND EVALUATION PLAN AND BUDGET

The Project Manager and the Chief Technical Advisor will regularly monitor the project and the quality of work and will generate Project Review Report (PRR). The monthly progress reports will be generated to share with the NSC and Sindh government. The review meetings will be conducted by NSC, the NC GEF SGP with the project staff, partner NGOs and the targeted communities to assess the level of their satisfaction with the intervention. An operational work plan will be developed by the project team as soon as it gets on board. The day-to-day monitoring will be the responsibility of the PM and GEF SGP secretariat.

The evaluation will be arranged through some external body including the representative of some national building department. The TORs of the evaluation will be developed later on after completion of the project to assess the impact of the deliverables. UNDP GEF SGP and PHC will mutually select the third party for the final evaluation. The final evaluation report will be submitted to PHC.

PART V: LEGAL CONTEXT

The legal context for UNDP-assisted programmes and projects in Pakistan is established by two major agreements: 1) the Convention on the Privileges and Immunities of the United Nations, given affect by Act XX of 1948 of the Pakistan Constituent Assembly (Legislative) and assented to on June 16, 1948; and 2) the agreement between the Government of the Islamic Republic of Pakistan and the United Nations Development Programme concerning assistance under the Special Fund Sector of the United Nations Development Programme, signed by the parties on February 25, 1960.

This Project Document shall be the instrument (therein referred to as a Plan of Operation) envisaged in Article 1, Paragraph 2 of the agreement between the Government of the Islamic Republic of Pakistan and the United Nations Development Programme concerning assistance under the Special Fund Sector of the United Nations Development Programme.

UNDP-assisted programmes and projects for Pakistan are planned and executed in accordance with the global UNDP Financial Rules and Regulations and the Project Cycle Operations Manual (PCOM) for Pakistan and specific management arrangements as listed in the project document.

The Audit will be conducted by the legally recognized auditor of the Government or by a commercial auditor if Sindh government engages for the said project.

Dispute Resolution

Any dispute will be settled under the clauses of Arbitration Act

Cover Page

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Implementing partner: UNDP GEF SGP Pakistan

Other Partners: Government of Sindh

Narrative

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The project has direct relevance to the 'housing for poor' program of the Government of Sindh. The total cost of project is PKR 187.9573 million including UNDP share.

Project Period: 9 Months, starting from the date of receiving the first installment

Intervention Title: Energy Efficient Low Cost Housing Project

Budget Code:

Estimated total budget: PKR. 187,957334.41

Allocated resources:

- Donor(Government): Rs. 172,737,334.5
- UNDP: Rs. 15,220,000.00

Agreed by (Sindh Government): _____

Agreed by (UNDP): _____

Project Work Plan and Budget

EXPECTED CP OUTPUTS And indicators including annual targets	PLANNED ACTIVITIES	TIMEFRAME			RESPONSIBLE PARTY	PLANNED BUDGET		
		Q1	Q2	Q3		Source of Funds	Budget Description	Amount in PKR
1. Supporting admin and operational activities	• Staffing	X			GEF SGP	GOS		
	• Field Offices Establishment	X			GEF SGP	GOS		
	• Signing MOUs	X			GEF SGP/GOS	GOS		
	• Procurement of furniture, fixtures and supplies					GOS		
					Sub Total Cost	GOS		20.48268
2. 500 energy efficient houses are constructed and beneficiary communities are mobilized to adopt better hygienic lifestyle in the targeted districts.	• Selection of villages	X			GEF SGP	GOS		
	• Selection of poor households	X			GEF SGP	GOS		
	• Social mobilization	X			GEF SGP	GOS		
	• Procurement and supply of material	X	X	X	GEF SGP	GOS		
	• Starting construction of houses	X	X	X	GEF SGP	GOS		
						Sub Total		136.55125
3. living conditions of the targeted beneficiaries are improved through the use of energy efficient stoves and solar street lights	• Installation of energy efficient stoves and solar energy street lights			X	GEF SGP	UNDP		15.220
4. Effective project Management is ensured	• Regular site Monitoring	X	X	X	GEF SGP, GOS, PHC,			
	• Progress review meetings	X	X	X	GEF SGP NSC, Project team			-

EXPECTED CP OUTPUTS And indicators including annual	PLANNED ACTIVITIES	TIMEFRAME			RESPONSIBLE PARTY	PLANNED BUDGET		
		Q1	Q2	Q3		Source of Funds	Budget Description	Amount in PKR
	Progress reports submission	X	X	X	GEF SGP			
	3 % UNDP GMS							4.711
	7 % O.H and Supervisory Cost							10.9923
	Grand Total (Pak Rupees in Million)							187.9573
								GOS: 172.7373
								UNDP: 15.220

Table 1: Detailed Project Budget

S.NO	DESCRIPTION	QUANTITY	UNITS	RATE Rs.	AMOUNT (IN MILLION M)
1	EXCAVATION IN FOUNDATION	350000	CFT	5	1.75
2	CEMENT CONCRETE AND BRICK BLOCK IN FOUNDATION	165600	NOS	45	7.452
3	CONCRETE AND BRICK BLOCK IN COLUMN	644000	NOS	45	2.898
4	3/16 DIA BARS IN COLUMN AND 10 GUAGE RING IN COLUMN	19	TONS	100000	1.9
5	ARCH FOUNDATION WITH 6" THICK BRICK	300000	NOS	3.25	0.975
6	SPANDERAL WITH 6" THICK BRICK	300000	NOS	3.25	0.975
7	RCC BAND AT PINTH AND ROOF LEVEL	33000	CFT		
A	CEMENT	9610	NOS	430	4.132
B	CRUSH	36037	CFT	22	0.792825
C	SAND	36038	CFT	15	0.54
8	COMPRESSED EARTH BLOCK IN WALL	1584000	NOS	7	11.088
9	ARCHES OVER DOORS AND WINDOWS	50000	NOS	3.25	0.1625
10	PROVIDING AND FIXING DOORS				
A	3'-0" D1	1000	NOS	1500	1.5
B	2'-6" D2	500	NOS	1300	0.65
C	2'-0" D3	1000	NOS	1200	1.2
11	PROVIDING FIXING WINDOWS & VENTILATORS				
A	3' X4'-6" W	2000	NOS	900	1.8
B	1'-6" X 2'-0" V	2000	NOS	300	0.6
12	DPC AT PINTH LEVEL BY HYDRO SEAL	66000	RFT	6	0.396
13	ROOFING ASBESTOS SHEET IN VERANDA AND KITCHEN , BATH , WC	180000	SFT	35	6.3
14	ROOFING PYRAMID ON TWO ROOMS	500	NOS	47000	23.5
15	FLOORING ROOM AND VERANDAH	263000	SFT	10	2.63
16	STONE DUST 3" THICK UNDER FLOOR	92200	CFT	8	0.7376
17	FLOORING KITCHEN, BATH AND WC	36000	SFT	40	1.44
18	HOLD FAST AND J BOLT FOR ROOF	13000	NOS	30	0.39
19	WOODEN BEAM AND PURLIN				
A	12' X 5	6000	RFT	80	0.48
B	25 X 2X 5	24000	RFT	30	0.72
20	JOINT WALL	480000	NO.	3.25	1.56
21	KITCHEN, BATH AND WC WALLS	500000	NOS.	3.25	1.625
22	CEMENT SAND MORTAR			N ILL	
A	CEMENT	18000	NOS	430	7.74
B	SAND	135000	CFT	15	2.025
23	STEEL REINFORCEMENT				
A	3"/8 DIA 4-3/8 DIA = 4 X 550	45	TONS	92000	4.14
B	1/4 DIA 4 N= 4 X550				
C	1/4 DIA RING AT 9"C/C =1460=2.29=3358	46	TONS	92000	4.323
D	BINDING WIRE	10	TONS	98000	0.98

24	PAINING ON DOOR, WINDOW AND VENTILATOR				
	DOOR				
A	D1	1000	NOS	300	0.3
B	D2	500	NOS	250	0.125
C	D3	1000	NOS	200	0.2
	WINDOW AND VANTILATOR				
A	W	1000	NOS	300	0.3
B	V	2000	NOS	150	0.3
25	ELECTRIC WIRING				0
A	WIRING	80000	RFT	10	0.8
B	SWITCH AND PLUG	7500	NOS	15	0.1125
26	SOAK PIT AND CONNECTION	500	NOS	5500	2.75
27	GREY WATER TANK	500	NOS	1500	0.75
28	HAND PUMP AND HODI	500	NOS	4000	2
				TOTAL	105.039425
	30% LABOUR CHARGES				31.5118275
				TOTAL	136.5512525
	15% TRANSPORT AND EQUIPMENT				20.48268788
				TOTAL	157.0339404
	3% UNDP General MANAGEMENT SERVICES				4.711
	7 % O.H and Supervisory Cost				10.9923
		PKR in Million		TOTAL	172.7373344
	Cost of 1 house	In PKR			345,474.00
	UNDP Share				
	Solar Street Lights, Energy Efficient Stoves, Solar Lanterns			Rs.	15.22
				USD	200,000
	Total Project Cost in USD				2,469,872.99

Table 2: Budget Summery

S.No.	Particulars	Total Cost in PKR in m*
1	Material	105.039425
2	30% Labour Charges	31.5118275
	Sub Total	136.5512525
3	15 % transport and Equipment	20.48268788
	Sub Total	157.0339404
4	3 % UNDP GMS	4.711
5	7 % O.H and Supervisory Cost	10.9923
6	Government of Sindh's Total Share	172.7373344
7	UNDP share	15.22
	Total Project Cost	187.957

* All the project transactions will be made in the Pak rupees currency.

Table – 3: List of project professionals and other support staff

Sr. No.	Title	No. of Positions
	Project Management Unit (PMU)	
1.	Project Manager	1
2.	Assistant Project Manager	1
3.	Chief Technical Advisor	1
4.	Accounts Officer	1
	Field Units	
5.	Field Engineers	3
6.	Accounts/Admin Assistant	1
7.	Procurement Assistant	1
8.	Office Assistants	3
9.	Drivers	3
10.	Watch and Wards	4
	TOTAL:	19

Annex – A: Technical Specifications of the project

The Technology

Features of ‘Benazir House’

The proposed low cost ‘Benazir House’ is a unique housing solution combining in itself a blend of disaster risk reduction, energy efficiency and low features that especially suit to physical conditions of disaster prone areas of Thatta, Badin and coastal area of Karachi districts Khan.

The following features make the design a unique model:

Arched Foundation: The problem of seepage, dampness, salinity and cost can be reduced by using the arch shape foundation under wall. The technology is based on old techniques used by Roman and Greek architects in their structures. Arch foundation is consisted of burnt bricks (4-1/2” thick and 9” wide) in double layer. Cement sand is used in joints and mud mortar is laid between the two layers of bricks arch. Wooden framework used to support bricks temporary. Haunches are filled with the conventional 9”thick brick masonry. Arch foundation is designed to carry the wall load which comes directly on arches. The load from roof directly transfers from R.C.C roof beam wire reinforced brick block columns to foundation.

Pyramidal Roof: Thermal efficient, damp and leakage proof, light weight and economical roofing design as compared to conventional girder, t-iron and tile roofing. The pyramidal roof is constructed from wooden materials.

Compressed Earth Block: This block is consisted of ordinary soil with less content of clay. Generally muram soil is used with 5% to 6% lime or cement at optimum moisture content. Soil is mixed thoroughly dry with binder and sufficient quality of water added mixture of lime or cement and soil is put in mould of wood or steel and compacted to it full extent after few minutes. Mould is released the soil stabilized block is covered for fifteen days curing. The compressed earth blocks of 350 to 400 Psi will be produced.

Wire Reinforced Brick Block Masonry: It is consisted of 4 bricks laid in block mould of 9”X14” size with 1:6 cement sand mortar joint between bricks. Four holes of 1/2” dia are provided at the designed location. This block of size 9”X14” are cured for seven days prefab brick block ensure quality, cut down masons cost, speed up the work progress, make the construction simple and provide the provision of wire reinforcement to make the structure safe against earthquake and high wind and lateral pressure.

Specific Ingredients

The proposed low-cost energy efficient and environment friendly house has the following technical and architectural features:

1. Excavation 2’-0” deep for 3’-0” x 3’-6” footing for columns.
2. Brick block wire reinforced column and foundation.
3. Arch foundation under compressed earth block wall.
4. Plinth pad reinforced concrete 6” x 6”.
5. DPC Hydro seal coating over RCC pad.
6. CEB (compressed earth block masonry wall 4 1/2” thick.

7. Arch lintel brick masonry 6"thick.
8. Door's readily available in market standard size (Kiker, Mango ,Eucalyptus)
9. Windows readily available in market standard size.
10. Roof truncated pyramid wooden frame will GI plain topping and hard board false sealing or reed plank wire binded.
11. Verandah roof a/c sheet white wash on ceiling.
12. Kitchen, Bath and WC reed with roof Ferro cement topping.
13. Clay tile flooring in room and verandah.
14. Cement flooring in KIT / B /WC.
15. Frame, roof with kiker. Eucalyptus and Neem wood.
16. Roof will be fixed by hold fast, tightly against wind.
17. Steel reinforcement 6" x 6" RCC 2-3/8" dia bar at bottom and 2-1/4" dia bar at top 1/4" dia ring at 9"c/c.
18. Painting will make on door, window, wall and roof.
19. Courtyard and flooring will be 9" above the road level
20. Room and verandah will be 12" above the road level.
21. The boundary wall will be the responsibility of the owner/ beneficiary.
22. If material available the owner will construct his own wall with available material.
23. Kitchen garden and cattle shed area are reserved.
24. Plantation will be the house holder's responsibility.
25. Electrification is included, two fans, eight energy saver, and electric panel.
26. Smokeless, double cell, energy efficient Stove will be provided in kitchen with water warming facility.
27. Asbestos sheet roof are proposed in verandah and Kitchen, Bath, W.C, Roof.
28. No flooring has been proposed in courtyard
29. All houses will be numbered district and Taluka wise and proper record of the beneficiary will be provided to PHC with details before start of construction work

ANNEX – B: TERMS OF REFERENCE FOR PROJECT STAFF

Terms of Reference (TORs) for the project staff are give in this Annex:

1. TORs FOR THE POSITION OF CHIEF TECHNICAL ADVISOR

Duty Station:	Hyderabad
Duration:	Nine Months

Background:

Government of Sindh through its Peoples Housing Cell invited expression of interest from UNDP GEF SGP to replicate energy efficient low cost model house in three districts of Sindh. Finally GOS agreed upon the proposal submitted by UNDP GEF SGP to replicate 500 energy efficient houses in the rural areas of three districts of Sindh, Thatta, Badin and Karachi. The Chief Technology Advisor will serve as one of the core staff member to provide technical support and assistance in all aspects of the technical aspects of the project and lead the technical team of the project. The incumbent will work under the supervision of the PM/NC GEF SGP and in collaboration of the project staff carry out the following specific tasks:

- Lead and manage the engineering work of the project in accordance with the approved technical drawings of the house.
- Closely supervise the quality and procurement of construction material.
- Provide close and regular technical backstopping to all project components.
- Coordinate the technical activities of all project components.
- Prepare and update construction work plan.
- Closely monitor the masonry work and ensure that the material is used as per approved technical specification approved by UNDP and GOS .
- Give briefings to UNDP and GOS on the progress of the project.
- Lead the technical field staff.
- Participate in various meetings on the project
- Act as a liaison between UNDP GEF SGP secretariat and field offices.
- Assist the implementing agency in the finalization of planned outputs in the form of reports and technical papers.

Qualifications and Experience.

The incumbent should hold an advance degree in civil engineering. Significant experience (at least 15 years) in construction of the physical infrastructure project at community level/ project development, management, monitoring and evaluation is required, especially, dealing with environment friendly technologies. Prior experience with capacity / institutions building programmes / projects will be highly desirable. Should be fluent in English, Urdu and Sindhi with excellent reporting writing skills.

2. TORs FOR THE POSITION OF PROJECT MANAGER

Duty Station: Hyderabad
Duration: Nine Months

Background:

Government of Sindh through its Peoples Housing Cell invited expression of interest from UNDP GEF SGP to replicate energy efficient low cost model house in three districts of Sindh. The GOS now agreed upon the proposal submitted by UNDP GEF SGP to replicate 500 energy efficient houses in the rural areas of three districts of Sindh including Thatta, Badin and Karachi. The Project Manager will serve as one of the core staff member to lead the project staff and coordinate with the donor and provide managerial assistance to the project team. The incumbent will report to the NSC of GEF SGP, of which the PD is a member. The specific TORs of the position are:

- Coordinate with the PHC/GOS
- Closely supervise the quality construction work
- Coordinate with the project team.
- Give briefings to UNDP and GOS on the progress of the project.
- Coordinate and organize meeting of the NSC particularly for the project
- Participate in various meetings on the project
- Assist the implementing agency in the finalisation of planned outputs in the form of reports and technical papers.
- Conduct meetings with the project beneficiaries and assess the level of their satisfaction
- Evaluation of the project activities
- Submission of the progress reports to the donor/PHC

Qualifications and Experience.

The incumbent should have experience (at least 10 years) in project management specially in execution and implementation of infrastructure project at community level/ project development, management, monitoring and evaluation is required, especially, dealing with environment friendly technologies. Prior experience with capacity / institutions building programmes / projects will be highly desirable. Should be fluent in English, Urdu and Sindhi with excellent report writing skills

2. TORs FOR THE POSITION OF ASSISTANT PROJECT MANAGER

Duty Station: Hyderabad
Duration: Nine Months

Background:

Government of Sindh through its Peoples Housing Cell invited expression of interest from UNDP GEF SGP to replicate energy efficient low cost model house in three districts of Sindh. Finally GOS agreed upon the proposal submitted by UNDP GEF SGP to replicate 500 energy efficient houses in the rural areas of three districts of Sindh, Thatta, Badin and Karachi. The Assistant Project Manager will serve as one of the core staff member to assist the PM in implementation of the project, coordinate with the partner NGOs and provide administrative assistance and managerial assistance to the project team. The incumbent will report to the PM. The specific TORs of the position are:

- Prepare quarterly work plan in consultation with the Chief Technical Advisor and the Project Manager
- Prepare progress reports of the projects in consultation with CTA and PM
- Coordinate with the project team.
- Monitor the procurement of the project
- Check the books of the project
- Prepare disbursement schedules
- Review progress reports of the NGOs
- Process payments of NGOs
- Overall administration of the field offices, established for the project
- Give briefings to UNDP and GOS on the progress of the project
- Coordinate and organize meeting of the NSC particularly for the project
- Participate in various meetings on the project
- Assist the PM and CTA in the finalization of planned outputs in the form of reports and technical papers.
- Conduct field visits to assess the work progress
- Evaluation of the project activities
- Submission of the progress reports to the donor/PHC

Qualifications and Experience.

The incumbent should have experience (at least 5 years) in project management and dealing with community based and infrastructure projects, monitoring, and evaluation. Prior experience of working on energy efficiency will be an asset. Prior experience with capacity / institutions building programmes / projects will be highly desirable. Should be fluent in English, Urdu and Sindhi with excellent report writing skills.

2. TORs FOR THE POSITION OF ACCOUNTS OFFICER

Duty Stations: Hyderabad
Duration: Nine Months

Background

Government of Sindh through its Peoples Housing Cell invited expression of interest from UNDP GEF SGP to replicate energy efficient low cost model house in three districts of Sindh. Finally GOS agreed upon the proposal submitted by UNDP GEF SGP to replicate 500 energy efficient houses in the rural areas of three districts of Sindh, Thatta, Badin and Karachi. The incumbent will work under the supervision of the PM and in collaboration with the staff of the GEF SGP secretariat and field offices carry out the following specific tasks:

- Provide administrative support functions in relation to staff, office premises, furniture, equipment, vehicles, maintenance and transportation in accordance with UNDP guidelines.
- Develop and operate proper accounting systems consistent with UNDP projects/programmes and practices.
- Develop procedures for disbursement of salaries, per diems, travel claims, operating expenses, leave record etc.
- Monitor the project accounts and expenses of the NGOs and field offices consultation with the PM and APM
- Review the financial statements of the project, submitted by the NGOs and ensure timely records and adoption of required procedures for the project.
- Maintain all files relating to administration and finance.
- Maintain service agreements for security, equipment and vehicles.
- Undertake any work from time to time assigned by PM for purposes of the project

Qualifications and Experience

The incumbent should hold an advance degree in Finance and Accounting, At least 7 years experience working in similar environment. The candidates are required to have good understanding of the financial management, accounting procedures and ability to analyze and prepare financial and narrative reports. The computer literacy is a must.