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In the framework of the solar electrification of remote villages of Balochistan and Sindh undertaken by the Alternative Energy Development Board, a socio-economic and technical feasibility study needs to be conducted in order to design water supply schemes, and propose a system for community involvement in construction and operation and maintenance. At present sanction of Rs. 387,000/- has been made in the PC-1 for provision of water supply system. With the given situation of ground water levels in the province of Balochistan and Sind and the cost involved in the boring and pemping of water this amount is very little. Therefore the present arrangements of water supply system in the villages would required to be modified and supplemented in order to make it convenient for the people to draw and fetch water form the source to their homes. For this purpose it is envisaged that a unique solution is required to be found in case of each village. Therefore a feasibility study needs to be conducted for 100% villages.

**Objective**

3. The objective if this feasibility study is:
  - To collect socio-economic and technical information to identify the possibility of setting up water supply systems.
  - If feasibility has been judged positive:
    - o To undertake a dialogue with communities to identify water needs and means of collaboration; and
    - o To design in a participatory manner proposed water supply system.

The survey will take place in 400 villages (divided in four clusters: 3 in Balochistan and 1 in Sindh). One bidder can bid for one or several clusters and 30 to 100 villages per cluster.

3. It is therefore requested that permission may please be granted
  - (a) for the conduct of feasibility study and
  - (b) to publish the tender document placed opposite

(Qamaruddin)  
Air Cdre (Rtd)  
Snr O/ic Projects for Balochistan

Dated: June, 2006

**Secretay/Member Technical**

**Chairman AEDB**

**Dated:**

# **TENDER DOCUMENT**

**Socio-economic and technical feasibility for  
designing water supply schemes in villages of  
Balochistan and Sindh**

## **TENDER NOTICE**

1. For undertaking a socioeconomic and technical feasibility study including design, tenders are invited from national firms/NGOs for following:-
  - o To collect socio-economic and technical information to identify the feasibility of setting up water supply systems.
  - o To undertake a dialogue with communities to identify water needs and means of collaboration
  - o To design in a participatory manner proposed water supply systems energized with solar and/or mechanical energy
2. Registration and tender documents containing details of scope of work and other terms/conditions may be obtained from Alternative Energy Development Board office in Islamabad, Quetta or Karachi on any working day at a price of Rs 200. These documents can also be downloaded from AEDB official website ([www.aedb.org](http://www.aedb.org)) and Public Procurement Regulatory Authority (PPRA) official website ([www.ppra.org.pk](http://www.ppra.org.pk)).
3. The tenders should reach AEDB Office, Room 342, Prime Minister's Secretariat, Islamabad by 15 September 2006 at 1:00 pm accompanying a Demand Draft equal to 2% of the bid price (refundable).
4. The AEDB reserves the right to reject any or all Tenders, without assigning any reason. Decision of the Board will be binding and final in all matters.
5. Proposals will be opened on 15 September 2006 at 1:30 pm in Conference Room of AEDB in the presence of the bidders who choose to be present.
6. The Bid should be valid for a period of 6 months from the date of the opening of the tender.

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AEDB,  
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# **INTRODUCTION**

## **General.**

In the framework of the solar electrification of remote villages of Balochistan and Sindh undertaken by the Alternative Energy Development Board, a socio-economic and technical feasibility study shall be conducted in order to design water supply schemes, and propose a system for community involvement in construction and operation and maintenance.

## **Objective**

The objective if this feasibility study is:

- To collect socio-economic and technical information to identify the possibility of setting up water supply systems.
- If feasibility has been judged positive:
  - o To undertake a dialogue with communities to identify water needs and means of collaboration; and
  - o To design in a participatory manner proposed water supply system.

The survey will take place in 400 villages (divided in four clusters: 3 in Balochistan and 1 in Sindh). One bidder can bid for one or several clusters and 30 to 100 villages per cluster.

# **TERMS AND CONDITIONS**

- 1 The costs related to preparation of tender proposals and all related documents will be solely borne by bidders.
- 2 Two copies (1 original clearly indicated (ORIGINAL) and 1 additional copy clearly indicated (COPY)) have to be submitted. The original will be used as reference in case of discrepancy.
- 3 All documentation is to be provided in English.
- 4 2 % of the bid price will be submitted as Bid Security along with the offer in the form of bank guarantee or bank draft / pay-order.
- 5 Documents indicating conformance of firm/NGO to all other legal requirements for government procurement like payment of professional tax and sales tax must be attached with the technical offer.
- 6 Details of qualification and experience of existing staff (technical and administrative) and similar projects/jobs undertaken previously must be listed in the offer.
- 7 **The scope of works includes but is not limited to:**
  - a **collect socio-economic and technical information to identify the possibility of setting up water supply systems**
    - i Existing sources of domestic water
      - (1) Existing sources of drinking water and reliability
      - (2) Distance between existing domestic water sources and village; Time spent per day in fetching water
      - (3) Quantity of drinking water available as of now
      - (4) Have some drinking water sources dried up in the past? (period, frequency...)
      - (5) Number of tube wells and location (in km from the village)
      - (6) Washing point (male and female)
      - (7) Washing location for clothes and cooking utensils
      - (8) Quality of water (as of now and potential future source)
      - (9) Depth of water table and seasonal variations
      - (10) If well exist (in the village or surrounding) : Recovery flow rate, drawdown
    - ii Population
      - (1) Total population
      - (2) Livestock
      - (3) Irrigated agriculture (with irrigation methods)
    - iii Health and hygiene practices
      - (1) Hand washing
      - (2) Bathing
      - (3) Cooking practices
    - iv Sanitation
      - (1) Existing sanitation systems if any
    - v Waste water
      - (1) Disposal of waste water
      - (2) Use of wastewater if any (irrigation, washing, livestock)...
      - (3) Orchards
    - vi Community
      - (1) Presence of a school, operating or not, (girls and boys, co-education)
      - (2) Presence of a CBO/NGO in the village
      - (3) Previous development projects undertaken in the village, the organization involved and the issues
      - (4) Presence of technicians in the village
      - (5) Leaders of the community
      - (6) Level of cohesion in the community

- b Initiate and conduct a dialogue with communities in order to design a water supply scheme and an appropriate management system. The design shall include the following elements:**
- i Proposed water supply scheme design with estimated costs
    - (1) Technical design
    - (2) Mapping
    - (3) Estimated costs
    - (4) Distance of water points from the farthest house
    - (5) Ownership of land on which water points are if any, results of negotiations
    - (6) Rules to be established for using water scheme acceptable to community
    - (7) Additional structures: washing point...
    - (8) Quality of water and filtering/cleaning system if necessary
  - ii Proposed waste water management system with estimated costs
  - iii Proposed improved sanitation system with estimated costs
  - iv Proposed participation of the community
    - (1) Work/ raw material/ cash/other
    - (2) Equal participation of all members?
  - v Proposed O&M system
    - (1) Estimated costs
    - (2) Estimated O&M activities
    - (3) Availability of spares in the local market
    - (4) Participation of communities, task sharing
- c Submit to AEDB a technical and managerial design for each village that has been approved formally by the targeted communities
- d Provide a final design taking into account the remarks and comments of the AEDB.
- 8 The technical design for water supply schemes shall adopt one of the following technologies:
- a Water drawn by pumping from an existing pond to be equipped with sand and gravel filter. Pumps can be either solar operated pumps or hand pumps
  - b Water drawn from an existing dug well through a solar driven pump or a hand pump
  - c Water drawn from a new well (maximum boring depth of 400 feet, maximum depth of pumping 350 feet) and pumped out through a solar operated pump or a hand pump; or
  - d Water brought from an existing tube well to the village through solar operated pump (the agreement of the tubewell owner is mandatory in this case).
- 9 If solar pumping is recommended, the design shall preferably use DC operated donkey pumps in order to reduce costs, increase efficiency and facilitate operation and maintenance.
- 10 If digging of well is recommended, the design shall cater for a realistic drop of water table in the next 15 years depending on local conditions.
- 11 Energy efficiency shall be optimized in the design.
- 12 The minimum quantity of water to be provided is 25 liters per person and per day (a reserve of 50% of the total volume has to be catered for population growth).
- 13 Quality of water shall fulfill WHO requirements and/or Pakistani Standards.
- 14 Water points shall be at less than ½ km and 20mn walking distance from all houses.
- 15 The contractor will submit the final draft report by latest 28 February 2007.
- 16 Payment to contractor will be made in Pak Rupees as per government procurement procedures.
- 17 Payment of contractor shall be made as per schedule given below.
- a 20% of payment shall be made as mobilization advance on signing of the contract against bank guarantee.
  - b 60% of payment of each batch (consisting of at least 10 villages) shall be made on submission and acceptance by AEDB of feasibility reports for batch.
  - c 20% of payment shall be made on submission and acceptance by AEDB of the final report.

- 18 Qualification and evaluation criteria are given in Annexe II.
- 19 Separate proposals shall be submitted to the AEDB for the following clusters (each consisting of 100 villages):
  - a For Northern Balochistan
  - b For Central Balochistan
  - c For Southern Balochistan
  - d For Rural Sindh
- 20 A bidder may submit an offer ranging from 30 to 100 villages in one or several of the above mentioned areas.
  - a In case the number of villages bid for is less than 100, the selection of villages will be mutually agreed between the bidder and AEDB amongst the list of villages given in Annexe 1. Cluster approach and even degree of difficulty in execution will be duly considered.
  - b The distribution of batches of villages amongst bidders will be at the discretion of AEDB. However, each batch will be not less than 30 villages.
- 21 Proposals for each area will be quoted separately; separate contracts will be awarded for the four different regions.
- 22 Interested parties may contact AEDB for any clarification before submission of bids.

**ANNEXES**

**ANNEXE I**  
**LIST OF VILLAGES**

**BALUCHISTAN NORTHERN REGION****LORALAI****DISTRICT HEAD QUARTER LORALAI**

S.No	Name of Villages	TEHSIL	SUB TEHSIL	UNION COUNCIL	No of Houses	Population
1	Killi Aslam Banhar	Duki		Whavi	20	260
2	Killi Shahnawaz Banhar	Duki		Whavi	20	260
3	Killi Paind Banhar	Duki		Whavi	20	260
4	Killi Manzoor Banhar	Duki		Whavi	20	260
5	Killi Shab Wah,	Duki		Sherqi Luni	20	260
6	Killi Nazim Machli	Duki		Ghaibi Luni	20	20
7	Killi Jungal Alamzaib Luni	Duki		Sherqi Luni	20	160
8	Killi Abdul Majeed S/O Mohd Afzal Dargai Khudazai	Bori		Lahore	25	180
9	Killi Nimki Wahid Luni	Duki		Ghaibi Luni	20	160
10	Killi Narani Aghbarg (Hinda)	Bori		Toor Thana	20	160
11	Killi Mullah Shaboo	Duki		Lakhi	20	160
12	Killi Abdul Wahid S/O Mohammad Azim Martat	Bori		Lahore	20	90
13	Killi Zinda Rod (Dost Muhammad)	Duki		Sherqi Luni	20	160
14	Kili (Khurshid Diwana)	Duki		Lakhi	20	160
15	Killi Mohammad Khan Jadid Kariz	Bori		Cheena Alizai	20	100
16	Killi Khudaidad Khan Banher	Duki		Whavi	20	160
17	Killi Bakhtiar Khan	Duki		Sherqi Luni	20	160
18	Killi Sheraq	Duki		Lakhi	20	160
19	Killi Jalal Khan	Duki		Sherqi Luni	20	160
20	Killi Ghazi Khan Bahnhar	Duki		Whavi	20	160
21	Killi Talio Kalam Malik	Duki		Lakhi	20	160
22	Killi Wali Dad Miragan	Duki		Sherqi Luni	20	160
23	Killi Umar Babogan	Duki		Sherqi Luni	19	200

24	Killi Musa Khan Sermalak	Bori		Cheena Alizai	18	100
25	Killi Karam Khan Hasni Bani Kot	Duki		Thal	15	165
26	Killi Akbar Machli	Duki		Sherqi Luni	15	155
27	Killi Ali Mohammad Sadazai	Duki		Lakhi	15	95
28	Killi Pir Mohamamd Faqirzai	Duki		Sherqi Luni	36	96
29	Halqa Palwas Kalan Mohammad Ishaq	Duki		Sherqi Luni	35	96
30	Killi Jalab Rod Mohammad Ali	Duki		Whavi	35	96
31	Killi Munir Ahmed Machi	Duki		Sherqi Luni	35	96
32	Killi Raz Mohammad Takari	Duki		Gharbi Luni	20	95
33	Killi Malik Haji Parah Alekzai	Duki		Lakhi	20	80
34	Killi Abdul Malik Issazai	Duki		Thal	15	102
35	Killi Sardar Shar Thal	Duki		Thal	25	90
36	Zara Nali Haji Khan Gul	Bori		Makhtar	20	80
37	Killi Fateh Mohammad Talow Daman	Duki		Lakhi	25	82
38	Killi Zamal ud Din Tor Khazai	Bori		Saddder Bori	20	120
39	Killi Haider Khan Sangori	Duki		Lakhi	20	96
40	Killi Landi Hassan Khan.	Duki		Sherqi Luni	20	83

**DISTRICT ZHOB**  
**DISTRICT HEAD QUARTER ZHOB**

S.No		Tehsil	Sub - Tehsil	Union Council	No of Houses	Population
1.	Mir Ali Khail	Zhob	Zhob	Wala Akra	50	400
2	Babaker Khail	Sambaza	Zhob	Gustoi	50	400
3	Ghashoi	Sambaza	Zhob	Gustoi	50	400
4	Saroki	Sambaza	Zhob	Gustoi	50	400
5	Aowzod Ghouzai	Sambaza	Zhob	Gustoi	50	400
6	Aowzad Kobak	Sambaza	Zhob	Gustoi	50	400
7	Babai Darkhanda	Sambaza	Zhob	Gustoi	50	400
8	Saqi Khail	Sambaza	Zhob	Gustoi	50	400
9	Toni Babar	Sambaza	Zhob	Gustoi	50	400
10	Samzai Malian	Sambaza	Zhob	Gustoi	50	400
11	Malima	Sambaza	Zhob	Wala Akra	50	400
12	Jan Bakhta	Sambaza	Zhob	Wala Akra	50	400
13	Kili Boi Nargasi	Sambaza	Zhob	Wala Akra	50	400
14	Killi Mohammad Afzal	Sambaza	Zhob	Wala Akra	50	400
15	Killi Mir Ali Khail	Sambaza	Zhob	Wala Akra	50	400
16	Killi Ajab Khan	Sambaza	Zhob	Wala Akra	50	400
17	Gada Khail	Sambaza	Zhob	Wala Akra	50	400
18	Killi Gull Mohammad	Sambaza	Zhob	Wala Akra	50	400
19	Killi Rasizai Abdulaziz	Sambaza	Zhob	Shabzai	50	400
20	Killi Gamer Utmakhail	Sambaza	Zhob	Shabzai	50	400
21	Kakshi	Sambaza	Zhob	Tangsor	50	400
22	Ali Zai	Sambaza	Zhob	Tangsor	50	400
23	Zikriazai	Sambaza	Zhob	Tangsor	50	400
24	Paindawala	Sambaza	Zhob	Tangsor	50	400
25	Aidenzai	Sambaza	Zhob	Tangsor	50	400

26	Market Zai	Sambaza	Zhob	Tangsor	50	400
27	Zakozai	Sambaza	Zhob	Tangsor	50	400
28	Zarozai	Sambaza	Zhob	Tangsor	50	400
29	Nastar Kach	Sambaza	Zhob	Shabzai	50	400
30	Shinkach	Sambaza	Zhob	Shabzai	50	400
31	Killi Tazak	Sambaza	Zhob	Shabzai	50	400
32	Toora Kibzai	Sambaza	Zhob	Barak Wala	50	400
33	Makkaband	Sambaza	Zhob	Laka Bard	50	400
34	Dabri	Sambaza	Zhob	Laka Bard	50	400
35	Killi Haji Rода Sardad	Sambaza	Zhob	Laka Bard	50	400
36	Haidar Zai	Sambaza	Zhob	Laka Bard	50	400
37	Khojal zai	Sambaza	Zhob	Meena Bazar	50	400
38	Barkwala	Sambaza	Zhob	Barak Wala	50	400
39	Bira	Sambaza	Zhob	Barak Wala	50	400
40	Zarbore	Sambaza	Zhob	Murgha	50	400

**DISTRICT KILLA SAIFULLAH**  
**DISTRICT HEAD QUARTER KILLA SAIFULLAH**

S.No		Tehsil	Sub - Tehsil	Union Council	No of Houses	Population
1.	Mir Ali Khail	Zhob	Zhob	Wala Akra	50	400
2	Babaker Khail	Sambaza	Zhob	Gustoi	50	400
3	Ghashoi	Sambaza	Zhob	Gustoi	50	400
4	Saroki	Sambaza	Zhob	Gustoi	50	400
5	Aowzod Ghouzai	Sambaza	Zhob	Gustoi	50	400
6	Aowzad Kobak	Sambaza	Zhob	Gustoi	50	400
7	Babai Darkhanda	Sambaza	Zhob	Gustoi	50	400
8	Saqi Khail	Sambaza	Zhob	Gustoi	50	400
9	Toni Babar	Sambaza	Zhob	Gustoi	50	400
10	Samzai Malian	Sambaza	Zhob	Gustoi	50	400
11	Malima	Sambaza	Zhob	Wala Akra	50	400
12	Jan Bakhta	Sambaza	Zhob	Wala Akra	50	400
13	Kili Boi Nargasi	Sambaza	Zhob	Wala Akra	50	400
14	Killi Mohammad Afzal	Sambaza	Zhob	Wala Akra	50	400
15	Killi Mir Ali Khail	Sambaza	Zhob	Wala Akra	50	400
16	Killi Ajab Khan	Sambaza	Zhob	Wala Akra	50	400
17	Gada Khail	Sambaza	Zhob	Wala Akra	50	400
18	Killi Gull Mohammad	Sambaza	Zhob	Wala Akra	50	400
19	Killi Rasizai Abdulaziz	Sambaza	Zhob	Shabzai	50	400
20	Killi Gamer Utmakhail	Sambaza	Zhob	Shabzai	50	400
21	Kakshi	Sambaza	Zhob	Tangsor	50	400
22	Ali Zai	Sambaza	Zhob	Tangsor	50	400
23	Zikriazai	Sambaza	Zhob	Tangsor	50	400
24	Paindawala	Sambaza	Zhob	Tangsor	50	400
25	Aidenzai	Sambaza	Zhob	Tangsor	50	400

26	Market Zai	Sambaza	Zhob	Tangsor	50	400
27	Zakozai	Sambaza	Zhob	Tangsor	50	400
28	Zarozai	Sambaza	Zhob	Tangsor	50	400
29	Nastar Kach	Sambaza	Zhob	Shabzai	50	400
30	Shinkach	Sambaza	Zhob	Shabzai	50	400
31	Killi Tazak	Sambaza	Zhob	Shabzai	50	400
32	Toora Kibzai	Sambaza	Zhob	Barak Wala	50	400
33	Makkaband	Sambaza	Zhob	Laka Bard	50	400
34	Dabri	Sambaza	Zhob	Laka Bard	50	400
35	Killi Haji Rooda Sardad	Sambaza	Zhob	Laka Bard	50	400
36	Haidar Zai	Sambaza	Zhob	Laka Bard	50	400
37	Khojal zai	Sambaza	Zhob	Meena Bazar	50	400
38	Barkwala	Sambaza	Zhob	Barak Wala	50	400
39	Bira	Sambaza	Zhob	Barak Wala	50	400
40	Zarbore	Sambaza	Zhob	Murgha	50	400

<b>Northern Region</b>	<b>No. of Villages</b>	<b>No. of Houses</b>	<b>Population</b>
Loralai	40	853	5697
Zhob	40	2000	16000
Killa Saifullah	40	1359	10950
<b>Total</b>	<b>120</b>	<b>4212</b>	<b>32647</b>

**BALUCHISTAN SOUTHERN REGION****DISTRICT AWARAN****DISTRICT HEAD QUARTER AWARAN**

S.No	NAME OF VILLAGES	TEHSIL	SUB TEHSIL	UNION COUNCIL	No of Houses	Population
1	Gishkore				200	2000
2	Mallar (Sari)				100	1945
3	Charee Mallar				130	2000
4	Sham Marrah				80	1500
5	Gushanag				70	1300
6	Pao				60	1000
7	Durashki				70	900
8	Korak				90	1500
9	Shandee				100	2000
10	Kooto				90	500
11	Joree				50	600
12	Nondrah				100	1500
13	Haji Shaheer				105	2000
14	Goko				90	900
15	Arrah				80	800
16	Jabree				150	2300
17	Nikjo				170	2600
18	Manguli				70	700
19	Tunk				60	90-0
20	Maskee				50	600
21	Bundkee				60	500
22	Ronjan				200	1000
23	Jando Junubi				50	300
24	Jummah Zai				50	300

25	Durawal				80	480
26	Nagi				60	360
27	Lanti Dan				100	600
28	Khodeeg				50	300
29	Juhi				30	180
30	Baz Waja				100	600
31	Julagoo				90	540
32	Baz Dasht				70	420
33	Gano				50	300
34	Hore				691	4146
35	Gari				290	1740
36	Rikchai				736	4416
37	Kinchi				297	1782
38	Shamrah				730	4380
39	Chamber				156	936
40	Tanzala				266	1596

**DISTRICT KALAT**  
**DISTRICT HEAD QUARTER KALAT**

	NAME OF VILLAGES	TEHSIL	SUB TEHSIL	UNION COUNCIL	No of Houses	Population
1	Killi Gazg	Gazg			31	289
2	Robdr	Johan			43	315
3	Lope	Johan			162	900-
4	Lond	Johan			281	1278
5	Takht	Johan			20	138
6	Raig Wash	Johan			13	126
7	Doraj Cholak				40	231
8	Doraj Shadani	Johan			109	1005
9	Doraj Khlachari	Johan			110	620
10	Johan Shehr	Johan			15	127
11	Khaisar	Johan			110	442
12	Shekhari	Kalat			11	91
13	Mor Gand	Kalat			30	298
14	Bolkha	Kalat			10	150
15	Langari Moulvi Ameer Hamza	Kalat			20	300
16	Langari Mohammad Yaqoob	Kalat			10	150
17	Neemargh Kamand Killi Abdul Ghafoor	Kalat			19	80
18	Neemargh Kmand Killi Mohammad Qasim				25	400
19	Killi Mohammad Waris Neemarcgh	Kalat			35	250
20	Killi Ameri	Kalat			35	265
21	Killi Kadiach	Kalat			22	306
22	Killi Gajan Kohak				27	447
23	Killi Kund Kohak				112	876
24	Killi Bambka				23	257
25	Killi Gorani				21	150

26	Killi Moulvi Abdul Samad				87	585
27	Killi Nechari - 2				19	134
28	Parod Killi Mohammad Shafee Mohammad	Kalat			13	99
29	Karaiz Yousfi	Kalat			77	332
30	Killi Golk	Kalat			19	198
31	Killi Halant Killi Abdul Raheem	Kalat			12	66
32	Killi Khatonki Kalat	Kalat			9	112
33	Kharian				13	175
34	Kangrod				7	41
35	Ghashan				99	513
36	Mazdoni				76	398
37	Horgand				23	265
38	Mohammad Sher				21	168
39	Mortain				3	15
40	Shaki				87	348

**DISTRICT LASBELA**  
**DISTRICT HEAD QUARTER LASBELA**

S.No	NAME OF VILLAGES	TEHSIL	SUB TEHSIL	UNION COUNCIL	No of Houses	Population
1	Essa Chatoo Dureji				29	300
2	Mkho Ghulamani Dureji				50	500
3	Dahed Dureji				195	2000
4	Lala kashani Dureji				60	600
5	Sawali Ghulmani Gahdat Dureji				198	1000
6	Ghulam Hussain Chatoo				45	500
7	Haji Khuda Dana Ghulamani Dureji				48	500
8	Mohammad Hassan Chata Goth Dureji				32	300
9	Mohammad Wasim Chata Dureji				52	500
10	Baloch Chata Dureji				50	500
11	Ismail Mardoj Goth Dureji				100	1000
12	Rehman Shaikh Amadi Dureji				50	500
13	ghulam Hassan mardoj Dureji				30	300
14	Noor mohammad Mardoj Dureji				20	200
15	Usman Chata Dureji				20	200
16	Mohammad Ali Chata Dureji				50	500
17	Wali Mohammad Shaikh Amadi Dureji				50	500
18	Soor Dureji				50	500
19	Radh pat Dureji				48	500
20	Werap Usman Gorani Dureji				99	1000
21	Ahmed Sapad Warat Dureji				40	400
22	Janoo Gar Knari War4at Dureji				50	500
23	Tarki Azim Mohammad Gar Dureji				95	1000
24	Gada Chatoo Warap Dureji				45	500
25	Din Mohammad Shapad Dureji				20	250

26	New Sahgpad Dureji				52	500
27	Qadir Bux SahpadDureji				28	300
28	Shafi Mohammad Shapad Dureji				40	400
29	Najag Somar Sahpad Dureji				28	280
30	Abdul Karim Shapad Dureji				55	400
31	Wali Mohammad Sahpad Dureji				35	200
32	Karim Bux Sahpad Dureji				20	500
33	Janoo Goth Abad Jani Dureji				50	600
34	Noor Mohammad Ghulamani Goth Dureji				58	580
35	Dureji Shaheed				70	700
36	Killi Mirkani Dureji				20	200
37	Naseer Mirkani Dureji				20	150
38	Hassan Mirkani Dureji				15	100
39	Jamki Dureji				30	200
40	Hab Mehtri Dureji				20	300

<b>Southern Region</b>	<b>No. of Villages</b>	<b>Population</b>
Awaran	6071	51521
Kalat	1899	12040
Lasbela	2067	19960
<b>Total</b>	<b>10037</b>	<b>83521</b>

**BALUCHISTAN CENTRAL REGION****DISTRICT CHAGI****DISTRICT HEAD QUARTER CHAGI**

S.No	Name of Villages	TEHSIL	SUB TEHSIL	UNION COUNCIL	No of Houses	Population
1	Killi Naik Mohammad Nawar				30	180
2	Mohammad Bux				10	60
3	Killi Madad Khan Nawar				18	108
4	Killi Mohammad Hasan Nawar				15	90
5	Killi Ghulam Mohamamd Krodak				10	60
6	Killi sher Mohammd mazazai				18	108
7	Killi Sher Khan Krorak				20	120
8	Killi Madad Khan Nawar				18	18
9	Kili Naza Mohammad Karodak				10	10
10	Killi Gul Muhammad				17	17
11	Killi Haji Waris				12	12
12	Killi Baran Shatur Koh				8	48
13	Killi Shaikhi Bahadur				11	66
14	Killi Mastak Shah Baig				30	180
15	Killi Hawaldar Essa				16	100
16	Killi Malik Zangi Khan				8	48
17	Killi Peeran Nadir Khan				16	100
18	Killi Kartaka Baiduk				13	79
19	Killi Sehrzai				19	114
20	Killi Malik Khudai Nazar				18	110
21	Killi Haji Abdul Hakeem				5	30
22	Killi Wash Aab				18	110
23	Killi Abdullah				35	214
24	Killi Haji Dildar				30	180

25	Killi Qadir Bux				20	120
26	Kili Malik Hazar Chalghari				26	156
27	Kili Mustafa Chalghari				32	202
28	Killi Haji Izzat Soran				38	228
29	Kili Haji Mohammad Aslam				40	240
30	Killi Mohammad Noore				8	48
31	Killi Ismail				30	180
32	Killi Mohammad Hassan Soran				12	72
33	Killi Haji Din Mohammad Sorap				20	120
34	Killi Khargoshan				18	108
35	Killi Malik Pir Dar Posti				18	108
36	Kli Mulla Mohammad Murad				18	108
37	Killi Malik Hazar				20	120
38	Killi Mustafa Changezi				32	202
39	Killi Haji Mohammad Aslam				40	240
40	Killi Mohammad Anwar				8	48

**DISTRICT BOLAN**  
**DISTRICT HEAD QUARTER BOLAN**

S.No	Name of Villages	TEHSIL	SUB TEHSIL	UNION COUNCIL	No of Houses	Population
1	Thal Kot mangle				40	400
2	Sibri				30	300
3	Shah Bandhar				20	200
4	Meahar Ghar				25	200
5	Gola Near Khail				40	500
6	Quamber				20	160
7	Rindra Qadir Khan				30	200
8	Bhadur Maken				40	300
9	Gadi Madad				35	250
10	Dendar Zai				30	220
11	Peer Pehlwan Shahi				20	150
12	Bhadur Mohammad Akber				15	100
13	Goth Noor Mohammad				50	400
14	Yek Kharrasi				30	200
15	Blachani / Derkhan				40	400
16	Basti Dada Khan Sydzai				10	60
17	Gamon Risani / Goth Khand Mohamamd				30	20
18	Muchh - Shabkoore				20	150
19	New Basti Wandh				10	50
20	Muhammad Dour Bungulzai				40	250
21	Merow Bungulzai				30	200
22	kothi Kalhori				18	130
23	Bast Badozai ? Maibi / M. Sherib				10	80
24	Railway Station Landay				30	200
25	Dumberi				20	150

26	Allah Abad Bungulzai				20	150
27	Mohammad Pour Risani / Ayoub				30	200
28	Pour Lasari				10	70
29	Lovang Khan				8	60
30	Khara MusaKhan				72	400
31	Khara Marooi				61	372
32	Raky Zai				37	249
33	Goth Abdul Rahman				19	207
34	Shahjhan				41	300
35	Abdul Qadir Zai				16	180
36	Lovelai Chandia				22	215
37	Baduzai				87	317
38	Srani No. 1				110	320
39	Suryani No. 2				96	280
40	Hafiz Guri				52	211

**DISTRICT KILLA ABDULLAH**  
**DISTRICT HEAD QUARTER KILLAH ABDULLAH**

S.No	Name of Villages	Tehsil	Sub Tehsil	Union Council	No of Houses	Population
1	Killi M. Rahim S/O Amir Mohammad				30	280
2	Killi Wadad Zara Band				40	300
3	Killi Atta Mohmmad Ghaibzai				35	285
4	Killi Ja Haji Aaro				30	240
5	Killi Hussain				30	240
6	Killi Karam Khan				25	200
7	Killi Abdul Qadir S/O Jan Aranbi Musazai				30	240
8	Kili Abdul Ghafoor S/O Gulab Bakerzai				25	200
9	Kili Gull Baran Abatoo Chaman				30	240
10	Killi Grango Naib				25	200
11	Killi Abdul Khaliq				20	180
12	Killi Zafran Abatoo Chaman				25	200
13	Killi Naza Mohammad Hamedzai				20	160
14	Killi Shah Gul Khugu Gulistan				25	200
15	Killi Toti Grang Pur Purana Chaman				25	200

**Summary of Villages**

**A**

Central Region	No. of Villages	No. of Houses	Population
Chagi	40	785	4,462
Bolan	40	1,364	8,801
Killa Abdullah	40	415	3,365
<b>Total</b>	<b>120</b>	<b>2,564</b>	<b>16,628</b>

**B**

Northern Region	No. of Villages	No. of Houses	Population
Loralai	40	853	5697
Zhob	40	2000	16000
Killa Saifullah	40	1359	10950
<b>Total</b>	<b>120</b>	<b>4212</b>	<b>32647</b>

**C**

Southern Region	No. of Villages	No. of Houses	Population
Awaran	40	6,071	51,521
Kalat	40	1,899	12,040
Lasbela	40	2,067	19,960
<b>Total</b>	<b>120</b>	<b>10,037</b>	<b>83,521</b>

<b>G. Total A + B + C</b>	<b>360</b>	<b>16,813</b>	<b>132,796</b>
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# PROVINCE OF SIND

District Tharparkar						
Proposed Solar Energy Villages List						
	Taluka	Name of Uc	S.NO	Name of Village	No of H.H	Population
	Chachro	Chachro	1	Bhadasandha	136	990
	Chachro	Chachro	2	Laplo	116	850
	Chachro	Chachro	3	Chachi	127	925
	Chachro	Chachro	4	Khohano	81	590
	Chachro	M Charan	5	Nakrayo	81	591
	Chachro	Chachro	6	Ranchi Jo Tar	80	450
	Chachro	M Charan	7	Mithrio Charan	318	2,325
	Chachro	M Charan	8	Mithrio Suthar	210	1,535
	Chachro	Chachro	9	Dabhi Juneja	84	610
	Chachro	Saranghiar	10	Charnore	255	1,913
	Chachro	Veejhiar	11	Bhagtani	45	330
	Chachro	Veejhiar	12	Hanjital	85	620
	Chachro	Veejhiar	13	Uge Jo Par	18	130
	Chachro	Veejhiar	14	Jhamirisar	53	390
	Chachro	Kantio	15	Mevo Rind	55	401
	Chachro	Chelhar	16	Mehar	164	1,197
	Chachro	Chelhar	17	Janjhyar	139	1,013
	Chachro	M Charan	18	Chapar DinShah	227	1,658
	Chachro	M Charan	19	Rohiraro	54	395
	Nangar Parkar	Veerawah	20	Sakri	33	244
	Nangar Parkar	Veerawah	21	Dano Dandhal	102	746
	Nangar Parkar	Veerawah	22	Bhalwa	137	1,000
	Nangar Parkar	Veerawah	23	Qabool Ji Dhani	41	296
	Nangar Parkar	Veerawah	24	Chanesar Ji Dhani	62	456
	Nangar Parkar	Piloo	25	Soondar	271	1,831
	Nangar Parkar	Piloo	26	Dabhi Bheel	65	460
	Nangar Parkar	Piloo	27	Gori	133	1,058
	Nangar Parkar	Piloo	28	Chabhiriko	47	322
	Nangar Parkar	Piloo	29	Arniaro	97	630
	Nangar Parkar	Piloo	30	Antri	27	190
	Nangar Parkar	Nangarparkar	31	Bhodesar	80	600
	Nangar Parkar	Nangarparkar	32	Goongri	22	163

Nangar Parkar	Nangarparkar	33	Choncha	49	355
Nangar Parkar	Nangarparkar	34	Kubri	53	389
Nangar Parkar	Nangarparkar	35	Kot Bandho	65	473
Mithi	Manjthi	36	Okiraro	82	600
Mithi	Manjthi	37	Dharm	164	1,200
Mithi	Manjthi	38	Godhangari	116	850
Mithi	Manjthi	39	Dongh	62	450
Mithi	Manjthi	40	Chabhrial	82	600
Mithi	Manjthi	41	Mandhakar	41	300
Mithi	Manjthi	42	Sooja Veri	48	350
Mithi	Manjthi	43	Sonyath	38	375
Mithi	Islamkot	44	Mithrio Soomra	106	773
Mithi	Islamkot	45	Borli Mose Pota	152	1,106
Mithi	Kehri	46	Kehri	114	730
Mithi	Kehri	47	Morano	80	500
Mithi	Kehri	48	Jhanpo	70	500
Mithi	Kehri	49	Kattan	115	800
Mithi	Kehri	50	Kuran	60	420
Mithi	Kehri	51	Gorano	185	1,073
Mithi	Kehri	52	Gawaran	140	910
Mithi	Kehri	53	Pilooro	90	650
Mithi	M Bhatti	54	Mithrio Dal	137	100
Mithi	M Bhatti	55	Mukhi Jo Tar	41	300
Mithi	M Bhatti	56	Depiar	88	645
Mithi	M Bhatti	57	Tabho Meghwar	58	425
Mithi	M Bhatti	58	Godhyar	162	1,180
Mithi	M Bhatti	59	Rangelo	33	240
Mithi	M Bhatti	60	Kheknio	57	415
Mithi	M Bhatti	61	Veesaser	115	840
Mithi	M Bhatti	62	Akheraj	89	650
Mithi	Bhakuo	63	Nakino	166	1,210
Mithi	Bhakuo	64	Chownhar	129	940
Mithi	Bhakuo	65	Hothi Jo Tar	103	750
Mithi	Bhakuo	66	Senhar Nanger	142	1,035
Mithi	Bhakuo	67	Somji je Dhani	18	130
Mithi	Bhakuo	68	Monghat	101	740
Mithi	Bhakuo	69	Bapuhar	222	1,620
Diplo	Jhirimirio	70	Verhar	121	885
Diplo	Jhirimirio	71	Dedhsarh	77	559
Diplo	Jhirimirio	72	Gangolus	63	459
Diplo	Jhirimirio	73	Aklo	63	459
Diplo	Jhirimirio	74	Kounralio	59	428
Diplo	Jhirimirio	75	Jhirimiyo Parha	14	102
Diplo	Jhirimirio	76	Konral	98	715
Diplo	Jhirimirio	77	Jhimiriyo Thakur	38	278
Diplo	Jhirimirio	78	Jhimiriyo Bheel	102	742
Diplo	Jhirimirio	79	Nerhori	40	295
Diplo	Jhirimirio	80	Jaga Veri	91	667
Diplo	Jhirimirio	81	Lakooro	16	119
Diplo	Jhirimirio	82	Lakooro Sungal	17	126
Diplo	Jhirimirio	83	Ladki	21	152
Diplo	Jhirimirio	84	Rohal	72	527
Diplo	Jhirimirio	85	Chahee Chapro	154	1,123
Diplo	Saro	86	Dondri	30	219
Diplo	Saro	87	Dondio	35	257

	Diplo	Saro	88	Pabuhar	59	429
	Diplo	Saro	89	Balihari	55	402
	Diplo	Saro	90	Talo Tamachi	93	677
	Diplo	Saro	91	Oermoon	43	314
	Diplo	Saro	92	Kaharyari	38	274
	Diplo	Saro	93	Dohar	95	691
	Diplo	Saro	94	Bitri	16	114
	Diplo	Saro	95	Padmori	38	276
	Diplo	Saro	96	Mehro Khawaria	35	257
	Diplo	Saro	97	Soondook	58	421
	Diplo	Saro	98	Pharharo Nohri	39	285
	Diplo	Saro	99	Sodhoi	100	729
	Diplo	Saro	100	Amernoo	116	848

## **ANNEXE II**

# **Qualification criteria**

1. The Bid security shall be submitted in order for the bidder to qualify for evaluation of proposal.

## **Evaluation criteria**

2. Bidders fulfilling the following criteria will be given preference
  - a. Previous experience of conducting participatory water supply system design in rural Balochistan and/or Sindh
  - b. Availability of qualified human resources native from the locations where the work will be conducted