## **PROJECT PROPOSAL FORM**

At ADP, we are constantly looking for deserving development projects to fund. Please fill out this Project Proposal Form to the best of your knowledge, and an ADP representative will get in touch with you soon. Please note that, at this time, we are only considering proposals with budgets up to Rs. 15 – 18 lacs.

Fields marked with \* are mandatory. Your application will not be considered if any of these fields is not completed.

1. YOUR INFORMATION		
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E-mail	sukaarfoundation@yahoo.com	
Position/Relation to Project:	Programme Manager	
How did you learn about ADP?		

	2. ORGANIZATION INFORMATION			
Individuals that are not affiliated with any NGO, applying for funding skip to 3				
*Name	Sukaar Foundation			
*Registration	Trust Ac	ct (4052119-2) I	May 16th 2005	
Act				
*Telephone	+92 232	261913		
E-mail	sukaarfo	oundation@yaho	<u>o.com</u>	
Website	www.su	kaarfoundation.c	org	
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Area of			· ·	
Expertise	WASH			
(if applicable)				
*Organization Background: Briefly describe when it was formed, mission statement / nature of work, geographical served, target populations, etc.	Sukaar Foundation, an NGO was established in 2003 as Para (hamlet) Development Committee (PDC) at Mithi city of district Tharparkar. SF took start from savings, internal lending and working for immediate neighborhood problems. From the very start, SF focused on water, sanitation and health/hygiene education issues. It was later registered under Trust Act in 2005. SF's Operational Area includes Tharparkar, Umerkot, Badin, Thatta & Dadu, Jamshoro and Jacobabad. <b>Mission Statement:</b> To strengthen marginalized communities focused on young people through social and technical assistance leading to develop their linkages with local			
*List of	governments/authorities & other like-minded stakeholders in order to ensure their accessibility to improved water, sanitation, health/hygiene education and livelihoods.S.NoNameDesignationEmails			
Officers/	-		Designation	
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		Khushali		
	8	Kesarsingh	Member	
No. of paid	23			
staff No. of	200 \/al	unteers.		
Volunteers	200 00	uniteers.		
*Revenues	Enter to	tal budget amou	nt here	
for past year		-		
*List of major				
funding Sources	<ol> <li>WaterAid Pakistan</li> <li>UNIECF.</li> </ol>			
Cources	2. UNIECF. 3. Oxfam GB			
	4. OPP			
	5. WFP			
	6. IOM 7. IDRF			
*Relevant	7.			
Previous	Since th	ne very inception	of Sukaar Found	lation, it has been the lead NGO to
Experience	intervene in WASH Projects in district Tharparkar. SF has played a major			
(describe why your				VB and OPP in implementing Rain
organization has	Water Harvesting (RWH) projects in Tharparkar since 2005. In its overall			
the requisite skills and	work of Rain Water Harvesting, SF has always addressed the issues relating the water in the Tharparkar by adopting research based approach			
experience to	and has taken different geographical zones/locations in Thar for piloting			
implement the proposed	interventions aimed at ensuring accessibility of water to deprived			
project)	communities of Thar in order to move forward for replication in light of			
	project learnings. SF has introduced following RWH structures throughout its interventions relating to WASH, this also includes introducing indigenous			
	technologies.			
	Chalha Pond (Village Level Circular Ponds)			
	Chonra Pond (Hamlet Level Ponds)			
	Nadi Ponds ( Hamlet Level)     Nadi/ Chaurra Banda with gas membrana film			
	Nadi/ Chounra Ponds with geo-membrane film			

Road-water harvesting Models
Rooftop water harvest Models
Dug-well Recharge Models
Jute-filters
Bio Sand Filters
The projects partnered with WaterAid Pakistan so far have used a holistic
approach to rain water harvesting for easy access to safe drinking water.
Previous experience in developing Rain Water Harvesting Structures
includes; Identification of one village for introducing RWH complete system,
baseline/household survey for collecting the data of household level,
development of Water Security Plan to analyze the water sources, water
needs and consumption of water at village level, site selection for
constructing of RWH structures at village, development of designs of RWH
structures including Circular Pond/Chalho Pond with Pond Sand, Pair of
Nadi Ponds and Bio-Sand Nadi Filter, VDO (Village Development Organization) formation for the supervision and maintenance of RWH
structures, water management and distribution of water at village level,
regular follow-up meetings with VDOs for ensuring the proper usage of
water, maintenance of structures and record keeping, training of VDO
members on technical and operational aspects of RWH structures at village
level, meetings and villagers with male and female WASH groups on the
subject of hygiene, RWH, ODF, SWM, sanitation and personal hygiene.

	3. PROJECT PROPOSAL
*Project Title	Ensuring accessibility of safe drinking water for deprived communities of Thar Desert Sindh.
*Project Location	Village Mau-Akheraj, UC Mithrio Bhatti, District Tharparkar.
*Funding Amount requested	PKR 17, 97, 711 ( Donor's Share)
*Detailed itemized budget supporting the amount above.	The details of the itemized Budget supporting the amount requested above are attached in separate sheets.
Deadline for Funding	May, 15, 2013.
*Project Description Describe the need, target population, scope of work, goals, and monitoring plan	<b>Background &amp; Rationale of the Project</b> District Tharparkar in Sindh province of Pakistan, is mostly comprised on desert, with some of the extended parts to agricultural planes and some to hilly areas. The district has around 1.5 million human population having livelihood dependence on rain-dependant agro-pastoral economy. The poverty rate is near 70% double than other districts of the country. A WFP survey conducted in early 2000 indicates that district is the most food insecure district of the country. The limited ground water is ultimate source of water for people in Tharparkar. The quality of

ground water is saline to brackish with high concentration of various salts and minerals, which are dangerous for human as well as livestock health. The dug-well is believed- and so far practically it is- only sustainable source of groundwater.
<b>Needs</b> Although the tube-wells, hand pumps and wind mills also introduced in Tharparkar by different agencies but such schemes are not yet proved fully successful and most of these schemes are not functional due to various reasons. In this situation, rainwater harvesting is gradually believed as an alternative which might cope-up with the future water needs of Thar. In a normal day, villagers averagely spend around 4-6 hours to fetch 6-7 pots (90-105 litres) of water from dug-well. However during the dry period this time escalates to 8 hours a day. The water with high concentration of salts and minerals is declared not fit for drinking by different health teams. Hence, the regular use of water has caused various health issues like kidney stones and arthritis, flourosis etc. The social life of villagers is also restricted due to lack of adequate water.
This specially affects the women much, who are responsible for carrying water. Women cannot leave their households even for social functions since most of their time is spent fetching water. They remain unable to entertain friends and relations due to water scarcity. At times, both the young boys and girls have to postpone their carrier development activities due to the responsibility of fetching water. Besides being a major work for women, fetching water effects children's education too during dry seasons. Often children also remain necessary part of the water collection, sometimes stretching into the night hours too.
In such event children have to sacrifice daily studies, for which they are reprimanded by their teachers. On other hand if it is looked into environmental context it is found that the ground water table in Tharparkar is depleting gradually which results in reduction of soil moistures that contributes to vanishing of desert vegetation leading to deforestation (however, to know such micro adverse effects a further study on the subject is much needed).
Scope of Work-Rainwater Harvesting
Rainwater Harvesting is one of the rare sources to preserve freshwater in order to solve water problems to meet drinking, domestic, livestock and agricultural needs. It reduces the surface run-off and the risk of erosion in the

soil. Seepage and evaporation losses are the major concerns while working on rainwater harvesting. Therefore it is needed to introduce innovative rainwater harvesting techniques making the rainwater harvesting practices appropriate, low-cost and effective option in order to reduce the seepage and evaporation losses. The rainfall pattern is not uniform in Tharparkar, ranges from 50 mm to 300 mm mostly in the monsoon season from July to September every year. However, eventually Tharparkar also gets pre-monsoon or off-season rains. It has been observed that all the runoff rain water of southern belt of Tharparkar goes waste to Runn-of-Kutch. While in remaining part of Tharparkar the extensive runoff results massive soil erosion leading to deforestation and flooding. In addition, it has also been observed that around half of total rainwater in Thar evaporates due to lack of proper rain-water harvesting practices. About a decade earlier people of Tharparkar were not benefiting much from rainwater harvesting practices until the origination of ground water tank technology in Rajisthan, India. Since last decade more than half of households in Tharparkar have opted to construct small ground water tanks in and around their households where they harvest rain water which lasts for two to three months after rains mainly for their drinking purposes. The traditional practice of rooftop rain water harvesting is also not much older in Thar as traditionally people used to live in huts made of thatched conical roofs. However, since last few decades, people have started constructing flat rooftops with mud and mixture of donkeys/cows' waste/dung. They use flat rooftop harvests around 3000 litres of rainwater. It is also worth to elaborate that the rooftops of Katcha (mudplastered) rooms are muddy; these traditional rooftops make the rainy water unhygienic once it is harvested through these roofs.
In addition, the people in Tharparkar had also benefited from water stored in Tarai, natural depression with puddle-clay for rainwater harvesting where water is collected and stored for couple of months and people get benefit of it. However these open tarais can't store water for longer time due to evaporation and extensive seepage. Water in these tarais gets contaminated quickly as people and animals use the same water at source for drinking, bathing and other purposes.

Furthermore, the development of rapid roads infrastructures in Tharparkar for last seven years has damaged many natural tarais by using puddle-clay for road filling. Moreover, people lack awareness of maintaining safety of harvested rainwater and fall sick by using contaminated water. As the improved RWH models curbs the seepage which may affect the natural groundwater recharge at some extent, rather SF is introducing dug-well recharging system as part of it RWH campaign, in order to promote the groundwater recharge. District government gets huge funds every year but concerned authorities are not sensitized to focus on introducing the rainwater harvesting practices and models. Hence, Sukaar Foundation, working on this major issue of water in Tharparkar, has planned and also working on to introduce pilots of effective and low cost rain-water harvesting techniques/models. In addition, we upgrade the conventional rain water harvesting practices in order to help people to be able to address their domestic water needs.
Village Mau-Akheraj
Village Mau-Akheraj is located about 65 kilometers on eastern side of Mithi city in Taluka Mithi comprising of Meghwar, Rajput, and Bajeer and Faqeer communities.
According to 1998 HH census the village is comprised of an average 161 HHs with a total population of around 930 persons. The livelihood of people is almost dependent on rain-fed agriculture and livestock. The water is main problem of the village. As, the village has four dug wells but all have the brackish water with the contamination of Floride and villagers (particularly women and children) have to fetch groundwater for drinking purposes. Due to very high concentration of Floride in underground water, the problem of flourosis is common in villagers, adversely affecting bones and teeth, which is also highlighted in local and national media.
Although, people in villages have opted to use rainwater for last few years but so far they are hardly able to store water for use up to five months through household level urn shaped underground water tanks/cisterns (one to two cisterns per household) in 30 percent HHs of the village. Total 40 underground water tanks exist with capacity of average 3000 litres each. (The total storage capacity of all tanks is 120,000 litres).
Hence all available water storing tanks (40 small) have

total capacity of 120,000 litres. Rather the total minimum drinking water need for 930 persons of village in a year is around 1,800,000 litres. With available infrastructure for storing 120,000 litres of water, it needs more infrastructure support for storing 1,640,000 litres water. As mentioned earlier the village comprises of 161 households. However, keeping in view the funds available for the proposed project SF plans to build one Chalho Pond (Village level rain water harvesting pond) and 40 pairs of Household Nadi ponds with total capacity of 1650000 to meet drinking water needs of one of the
hamlets (Mau Akheraj Thakar, Bajeer and Faqeer ) of the village for a year.
As part of the initial ground work for building RWH system for one neighborhood of the village Mau-Akheraj a manual catchment will be developed for the Chalho pond, moreover there are government buildings available in village which will help to provide rooftops linked with Chalho pond for getting additional rainwater for harvesting. However, the hamlet level Nadi-Ponds are proposed to be built at household level.
Goals of the pilot project
• To improve availability of clean drinking water to the people of village Mau-Akheraj and help them to prevent from adverse effects of Flourosis by avoiding contaminated groundwater.
<ul> <li>Promote low-cost and effective 'Rainwater Harvesting' technologies, its utilization and management</li> </ul>
<ul> <li>Building capacity in Rainwater Harvesting (RWH) among villagers and local masons</li> </ul>
Scope of work & description of activities
As, the rainwater harvesting practice helps to make available the freshwater in order to solve water problems to meet drinking, domestic, livestock and agricultural needs. It reduces the surface runoff and the risk of erosion in the soil. Seepage and evaporation losses are the major concerns while working on rainwater harvesting. Therefore it is needed to introduce innovative rainwater harvesting techniques making the rainwater harvesting practices an appropriate, low-cost and

effective in order to reduce the seepage and evaporation losses.
Activity # 1
<b>Construction of Village level Chalho Pond</b> A Chalho is an ancient bowl shaped makeshift structure made from mud for collecting water for temporary use in Thar. Building on that shape SF has introduced a flat bottomed bowl shaped large pond in villages Dedhsar, Mokhar, Mory-Ji-Wandh and Bewato with a storage capacity of around 1 million litres of water each. Under this project SF also plans to construct one Chalho Pond in one of the neighborhood of village Mau-Akheraj.
The diameter of upper rim of the proposed Chalho pond measures 80 ft and at the bottom 16 ft with a depth of 12ft. The excavated pit is pressed and levelled and then it is lined with geo-membrane and the joints between the sheets of geo-membrane are plastered with a special water-proof geo-membrane solution. On geo-membrane, brick masonry is done and finally plastered with concrete. The pond will be fenced with a wall with an additional two feet iron fence at the top of the wall. Rainwater from the catchment flows first into a deep soak pit constructed at the front of Chalho pond where debris are deposited as sediments and then when relatively cleaner the water flows through a furrow into the pond. 2 hand pumps will be installed to pump water from the pond. It is estimated that the pond will provide drinking water to villagers for more than six months period in dry spans. (Design and BOQ are attached as annex in separate sheets.
Activity # 2
Household level Nadi-Ponds Small cisterns (underground tanks) have been used in the Thar Desert for many years. The internal shape of the cistern allows it to be constructed using a very thin lining of cement and sand mortar. The cisterns are normally up to 2.4 meters deep and have a capacity of 3,000 litres. These catch the monsoon rains via a small saucer shaped concrete catchment around the cistern and provide enough drinking water for a family for around 3months of the dry season.
Sukaar Foundation has already experimented in Dedhsar, Mokhar, Mory-Ji-Wandh and Bewato villages of district Tharparkar. To increase the capacity of these cisterns and introduced hamlet level Nadi Ponds (each of 30,000 litres capacity) built on the same architect as of these

cisterns. SF found that the cement lining used in catchment and even inside the ponds, keep the water of a good chemical and adequate bacterial quality because of the attention given to cleaning the catchment floor. The inlet holes are sealed until the rains come and only water allowed into the cisterns as the slabs are already been cleaned.
Under this project SF plans to construct a pair of household level Nadi-Ponds with capacity of 8,000 litres each pond (16,000 litres for a pair) for each household with the fenced catchment of 220 sq ft, enough to fill the tank with water during rain. Nadi-pond will be built with cement and sand ratio of 1:3 having size up to 3.5 meters in depth with circular 2 diameters. The Nadi-Pond will have shape like locally made urn called Nadi. Each Nadi- pond is estimated to provide drinking water to a household for around five months.
Nadi-ponds will be built in the backyard of each household. A 75 mm thick concrete-mud mix slab will be laid in the catchment area. The internal shape of the pond is constructed using a very thin lining (around 25mm thickness) of cement and sand. The filling material will be kept soaked for 5 days ensuring strength of the structure. (Design and BOQ are attached as annex in separate sheet
Activity # 3
<b>Training on Constructing Bio-Sand Filter</b> Under this project SF plans to conduct community training on constructing Bio-Sand Filters. As this project also aims to introduce rainwater utilization practices, hence for this purpose bio-sand filters are to be introduced for clean use of rainwater. The bio-sand filter is basically a simple technology that has been used throughout the developing world for over 15 years. It is a simple concrete/pitcher box that, when filled with carefully selected sand and gravel, is capable of removing up to 98% of the harmful bacteria's normally found in water sources. The filter also removes 100% of parasites, and other organic and inorganic pollutants, including many heavy metals. It also reduces the turbidity to less than 5 NTU. It separates different colours from water and gives appropriate taste to water. The filtering process is organic, there are no replaceable parts, and the maintenance is incredibly simple. The filter works on gravity force and there is no regular cost of using the
filter. The filter is also moveable which can be taken from one place to another nearby place. If proper care is taken,

the filter could conceivably last a long time.
Activity # 4
<b>Community Mobilization, Capacity Building &amp;</b> <b>Advocacy</b> Followed by the above infrastructural development in the village, the project would focus on capacity building and advocacy activities in order for improved rainwater harvesting, its utilization, management and further pave the way for long term promotion and sustainability of the project.
In this context, the regular WASH project includes to strengthen the capacities of relevant district administration/government representatives (TMAs/UC secretaries) and local village-based community organization on operating, managing and promoting rainwater harvesting technologies, involving them as primary stakeholders. The WASH project also plans to devise and disseminate a range of sustainable approaches to water management and conservation through the development of Village Water Action Plan in the targeted village which will engage the benefited community in all aspects of ensuring the efficient use of clean stored rainwater and management of structures. The Village Development Organization (VDO) is the major forum of the village that will regularly meet on the every first Friday of month and will take over all the operational and maintenance activities.
<b>Community Involvement.</b> A rapid diagnostic assessment of village is already conducted in addition to have had a consultative dialogue with key VDO members to already construct RWH hamlet pond and further to develop this project proposal. Rather a detailed baseline is in process to be undertaken involving village development organization members of Mau-Akheraj. Moreover, a committee from VDO will be formed to facilitate the work of the project during implementation and later working on water distribution/management and structures maintenance etc. For structures maintenance and repair community will fix and collect water fees from villagers. The fees will be fixed and part of a village RWH framework which VDO will form and shared with SF before completion of the construction work. This all will be monitored regularly part of regular monitoring.
Monitoring: The villagers committee will also monitor the entire project

implementation process in addition SF monitoring team
will keep eye on project implementation monitoring. Later, both community and SF team will monitor the storing, utilization and management of rainwater harvesting, based on a RWH framework which would be developed before the completion of project by the VDO getting technical help from SF team.
Water Testing. Water testing is key component of this project. SF plans to establish a water testing unit at Mithi for regular testing of water for initial few years of its RWH initiative. This unit SF will establish getting help from Water Aid onwards year 2012. SF plans to test RWH on monthly basis. Later on this part of water testing will be integrated with the responsibility of local community and district government.
<b>Experience sharing with key stakeholders.</b> At the completion of this Rainwater Harvesting project (village model), the concerned district administration representatives, elected representatives of area and media personnel will be invited to visit the village where they will be shared about the experience. SF will also organize RWH experience sharing events to share its experiences with relevant stakeholders. Moreover, SF will integrate the sharing of project learning in its different regular programs, events, and publications. The ultimate objective of this activity is to help in ensuring the proactive role of district administration/government and other key stakeholders in taking the rainwater harvesting as a movement in district Tharparkar. (3 events/year, cost will be covered in regular program)
Sustainability. SF has the good network of Village based Community Organizations (Village Development Organization-VDO); these VDOs are trained on water issues of village. A VDO is trained and responsible for the operation and maintenance of water resources and to keep the record of water user and its distribution which leads to a fair system based on democratic and inclusion approach. Community managed RWH system will ensure that communities themselves will bear all the recurrent costs required for village based RWH systems. In this regard VDOs will contribute all the cost required to operate and maintain the systems. SF will work with other stakeholders (Govt. Local NGOs) to provide them other supports i.e replication of rain water models at wider scale at village level. WA shall provide the technical backstopping. Alike, the technical support in

water quality testing and replication of model by government will be encouraged. Knowledge sharing with and learning from INGOs and organizations involved in RWH at regional level will also be part of the external support.
Way forward. SF will keep continue to raise funds to replicate RWH initiate as it is being doing. In addition it will also keep continue on strengthening capacity, sharing its experiences and advocating for wider replication of RWH initiate as it is being done for last three years. So far local NGOs and communities themselves are replicating most of RWH approaches/models introduced by SF. However, SF believes that its' consecutive efforts will ensure the replication of RWH initiative widely within and also beyond Thar.

4. REFERENCES		
Please give as a reference at least two individuals at development organizations that you are currently		
working with or have worked with in the past. References of relatives or colleagues are not appropriate.		
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## 5. TERMS AND CONDITIONS

By submitting this proposal, you agree that you and your organization fully satisfy the following terms to receive funding from ADP:

- 1. No religious mission or agenda, no sponsorship of religious projects of any kind, and no commitment to exclusively helping members of a particular religious background.
- 2. No institutional affiliation with any political parties.
- 3. No ethnic affiliation or commitment to only helping members of a particular ethnic group.
- 4. The organization and its officers have never engaged in any illegal activity or in teaching, propagating or supporting, either directly or indirectly, acts of violence or terrorism.