

## 1. Project Title & Location

### **Project Title: Protecting environment by provision of 2000 Fuel Efficient Stoves (FES)**

**Project Goal :** The goal is to install smokeless stoves with chimneys in a phased manner across the villages of UC Shaikh Bhirkio – Tando Mohammad Khan-Sindh-Pakistan and simultaneously educate the women on how to optimize use of these stoves to safeguard their own health and that of their families.

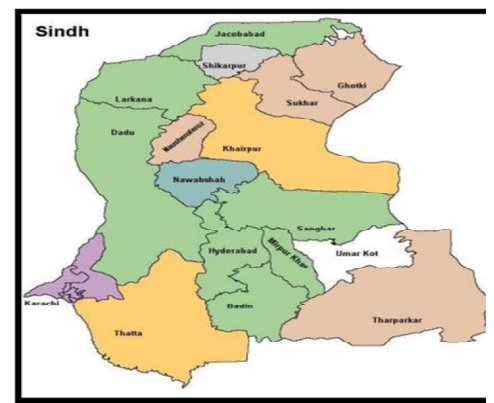
### **Project Location: Introduction of Pakistan**

**Pakistan, Islamic Republic of Pakistan**, is a sovereign country in south Asia. With a population exceeding, it is the sixth most populous country in the world. Located at the crossroads of the strategically important regions of South Asia, Central Asia and Western Asia, Pakistan has a 1,046-kilometre (650 mi) coastline along the Arabian Sea and the Gulf of Oman in South and is bordered by Indian to the east, Afghanistan to the west and north, Iran to the southwest and China in the far northeast. Pakistan was created in 1947 as an independent nation for Muslims from the regions in the East and West of India where there was a Muslim majority. Pakistan is a federal parliamentary republic consisting of four provinces and four federal territories.



### **Introduction of Sindh**

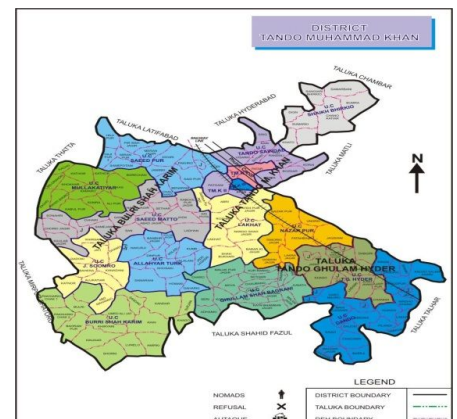
The Province of Sindh is located in the South- Eastern part of the country (between Lat 23-35 and Lat 28- 30 N). Its gross geographical area is 140,914 Sq. km which is 18% of the country. The geographical area is 14 million hectares out of which almost 8.0 million hectare is cultivable, and the remaining area is not available for cultivation. The mighty River Indus flows in the middle of the province. There are seasonal streams which become active in the monsoon season, they emanate from the Khirthar hill range from west of province, which fallout in River Indus and Arabian Sea. The boundaries of Sindh are touched by Arabian Sea in South, India in east, and Punjab in north and Balochistan in west. Administratively Sindh province is divided in 23 districts , 119 Talukas ( Tehsils ) , 1100 Union Councils, 1439 Tapas and 5,871 Dehs (Mauza) having 66,923 human settlements, as per 1998 census.



The province took its name from River Sindh (as per the Greeks). Predominantly, it is an agricultural and pastoral economy. Lately minerals have been identified like petrol, gas, coal granite and cut stone etc. These are being exploited which contribute substantially to the national produce. Besides the province have industries of various kinds which include textile, chemical, cement, steel and others. Most of the industries are located in four cities Karachi, Kotri, Hyderabad and Sukkur. There are two modern sea ports: Karachi Port and Bin Qasim Port both of which are situated in Karachi and serve the entire country including Afghanistan.

### **Introduction of Tando Mohammad Khan**

The town is located at 25°8'N and 68°32'E at an elevation of 11 metres on the right bank of Fuleli canal at distance of 21 miles from Hyderabad. There are 08 Police Stations in District T.M Khan which are PS is one of the districts in the province of Sindh province, Pakistan. It is located in the south of the province. In north of the district, Hyderabad and Tando Allahyar districts are located, Badin district lies on south and east, west boundary is shared by district Thatta and the Indus River flows through Northwest. Tando Mohammad Khan district comprises three Talukas viz. Tando Mohammad Khan, Bulri Shah Karim and Tando. It is located at a distance of 35 km from Hyderabad on the Badin-Hyderabad National Highway. There are four big



sugar mills of the country located in Tando Muhammad Khan. Traditional clothing called "Ajrak" is among the most famous Sindhi culture wearing, designed and prepared in Tando Muhammad Khan. The climate of the area is moderate.

However April, May and June are very hot during the day time. December and January are the coldest months with maximum and minimum temperatures of 30 °C and 10 °C respectively. Rainfall is highly erratic with an average of about 130 mm. The monsoon dominates from July to September.

Approximately 70% of the district population is engaged in agriculture. Phuleli, Pinyari and Akram canal are the main source of water-reservoir for irrigation in this district.

#### **Past losses of Tando Mohammad Khan due to flood and rains**

The recent flood of Sindh 2010 and torrential rains of 2011 badly affected districts Badin, Mirpurkhas, Tando Muhammad Khan, Sanghar, Umerkot, Nawab Shah and Jamshoro in Lower Sindh, Southern and Northern Sindh. Rain multiplied with the poor system of Left Bank Outfall Drain (LBOD) has created havocs in the life of poor communities living in these water locked areas.

The Government of Pakistan reports that more than 5.3 million people was affected, more than 300 people were lost their lives and more than 400 people was injured, with 1.1 million houses damaged or destroyed and over 4.2 million acres of land was flooded with more than 1.59 million acres of crops destroyed.

District Badin, and Tando Mohammad Khan (TMK) are two of the worst affected districts with an affected population of approximately 1.3 million in these two districts. There are 413,363 houses which are damaged with 42 deaths in these two districts.

Most of the communities living in these areas are dependent on agriculture but 367,710 acres of cultivated land was destroyed. All the cash crops like cotton, sugarcane, chili and tomato are perished. More than 3000 cattle heads are perished in Badin and TMK.

Most of the people interviewed and was informed us that almost 40% to 50% of their livestock were died. There are also many poultry farms in the area which are big source of livelihood for poor communities. However most of these were inundated in water. Most of the population was forced to live on the roadsides due to the destruction caused by heavy rains and floods.

**List of the selected villages of UC-Shaikh Bhirkio Tando Mohammad Khan where project has to be implemented**

**2. Project Developer/Executant and Affiliation**  
(with complete address)

Deh-wise list of selected villages				
S. No	Village	Deh:	Households	Approximately Population of Selected Villages
1	Qazi Mazher Hussain (Misri Kolhi)	Abri	25	175
2	Mir Walan Talpur	Abri	81	567
3	Pir Bux Thebo	Abri	25	175
4	Mohammad Somar Thebo	Abri	25	175
5	Ali Mohammad Mallah	Abri	40	280
	<b>Total</b>		<b>196</b>	<b>1372</b>
6	Ali Mohammad Baghrani	Babrki	335	2345
7	Sartyo Rawro ( Umer Raise )	Babrki	48	336
8	Umer Khaskheli	Babarki	50	350
9	Jalal Laghari	Babarki	60	420
10	Kalo Magsi	Babrki	100	700
	<b>Total</b>		<b>593</b>	<b>4151</b>
11	Buhader Khaskheli	Fatehpur	72	504
12	Mohammad Bux Dall ( Mohd.Hassan Dall )	Fatehpur	64	448
13	Muhammad Hasan Hallo	Fatehpur	35	245
14	Rahim Dino Hallo	Fatehpur	30	210
15	Master Muhammad Husaain Khaskhali	Fatehpur	44	308
16	Ali Mohammad Hallo	Fatehpur	80	560
17	Paro Kolhi	Fatehpur	60	420
18	Haji Somar Laghari (Satho Paro)	Fatehpur	85	595
19	Mir Ji Mori (Mohan Patail )	Fatehpur	80	560
20	Naseer Khan Lanjwani	Fatehpur	25	175
21	Khair Mohammad Lanjwani	Fatehpur	17	119
22	Yar Muhammad Samoo	Fatehpur	46	322
23	Khamesoo Khaskhali	Fatehpur	53	371
	<b>Total</b>		<b>691</b>	<b>4837</b>
24	Mohammad Khan Zahoor	Lakhat	28	196
25	Hameed Khaskheli	Lakhat	40	280
26	Haji Mohammad Arbab Samoo	Lakhat	94	658
27	Haji Ismail Samoo	Lakhat	40	280
28	Sultan Mallah	Lakhat	72	504
29	Haji Mosa zahoor	Lakhat	25	175
30	Lahno Khaskhali	Lakhat	25	175
31	Sher Mohammad Dhool	Lakhat	28	196
	<b>Total</b>		<b>352</b>	<b>2464</b>
32	Bahader Zohar	Nango Shah	67	469
33	Raise Mohammad Khan Khoso (Hemo Kolhi )	Nango Shah	24	168
34	Ahmed Magsi	Nango Shah	40	280
35	Dharo Magsi	Nango Shah	37	280
	<b>Total</b>		<b>168</b>	<b>1197</b>
	<b>Total</b>		<b>2000</b>	<b>20496</b>

## Introduction of JDS

**Jerusalem Development Society-Sindh-Pakistan (JDS)** is a non-governmental, non-commercial, non-political and non-religious and non-profit national development organization established in January 2010 by President named Mrs. Noreen Aamir and registered under the society act XXI of 1860 (registration No. 6476) from the Government Department in January 2012 with the crystal clear vision to see the rural society free from the social problems with the participatory approach to make them self-reliant in every walk of life. JDS shares its significant contributions in the process of reducing human suffering and social stigmatization for improving the livelihoods of poverty-stricken and marginalized communities and promoting peace through various development interventions.

At the initial stage, JDS was working on formation of cooperative/saving groups, capacity building such viz. health, saving, leadership, education, organic farming, disaster risk reduction, advocacy etc. in 20 villages of rural Sindh-Pakistan.

From 2011 to 2013 JDS has extended its circle around the 30 villages and 8 districts of Sindh-Pakistan in order to achieve its objective. To deal with a complex syndrome like poverty, JDS applies a holistic approach encouraging innovative interventions through its six core programs viz. (1) Preventive Health Care, (2) Economic Development Program, (3) Formal and Non-formal Education Program, (4) Agriculture and Environment Development Program, (5) Women Empowerment Program and (6) Disaster Risk Reduction Program. JDS has progressed a lot from its inception with learning from experience and through a responsive and inductive process. JDS has a head office at Hyderabad with the 14 paid experienced personnel with 20 volunteers, 4 Field Offices (Tando Mohammad Khan, Mirpurkhas, Sanghar and Sukkur and 1 Regional Office has recently established in Punjab Province.

### List of Board Members

S. No.	Name of Board Member	Designation	Experienced in Sectors
1	Mrs. Noreen W/O Aamir Sohail	President	Education
2	Mr. Azeem S/O Lazar	Vice-President	Education
3	Mr. Inderyas Gill S/O Ghulam Masih	General Secretary	Agriculture and Environment
4	Mr. Aamir Sohail S/O Slammat	Treasurer	Accounts
5	Dr. M. Tarique Arshad S/O M. Younus	Member	Health
6	Mr. Imran S/O Manzoor	Member	Relief and Rehabilitation
7	Mr. Akbar John S/O Yaqoob Masih	Member	Social Work

### Staff of Head Office and Regional Office

S. No.	Name of Staff Members	Designation	Sector	Contact No.
1	Iqbal Memon	Program Manager	All Projects	0300-3069344
2	Nazia Inayat (BA)	Project Manager (PM)	Health Department	0346-2792268
3	Mehtab Salamat (BIT)	Project Manager (PM)	Documentation	0312-3107912
4	Miss. Mahwish (BA)	Project Manager (PM)	Environment and Agriculture Department	0331-3642318
5	Fayyaz Naseem (BA)	Project Manager (PM)	Administration, Security and Relief	0313-4093203
6	Miss. Hina Amrozia (BA)	Project Manager (PM)	Women Empowerment Project	0313-4093203
7	Khawar Naeem (M.Sc)	Project Manager (PM)	Economic Dev. And Formal and Non-Formal Education Deptt.	0343-3665158
8	Mr. Abdul Majid Qasmi (MBA)	Finance Manager (FM)	Finance Department	0333-2631109
9	Kamran Masih (B.A)	Accountant	Finance Department	0333-3316830
10	Mr. Nadeem Shahzad	Reginal Manager	Finance Department	0300-2506311
11	Samina Arshad (F.A)	Social Mobilizer	Health Department	0346-3659856
12	Shanaz Nadeem	Social Mobilizer	Documentation	0307-7894093
13	Arif	Social Mobilizer	Environment and Agriculture Department	0315-7824829
14	Naveed	Social Mobilizer	Administration, Security and Relief	0314-8007304

### List of Volunteers

Name of Volunteers					
1	Pream Peter	6	Zulfiqar Jakhro	11	Mehwish Yaqoob
2	Karoo Jawian	7	Mohan Lal	12	Nanji Wali
3	Danish Ilyas	8	Satram Das	13	Master Parboo
4	Komal Ilyas	9	Naran Das	14	Dayloo Lalje
5	Robert	10	Mosa Khan	15	Emmanuel Peter
				16	Bilram
				17	Saweeta Kumari
				18	Soomari
				19	Geeta Lalji
				20	Saima Yaqoob

**Our Head Office**

Plot No. 60/B, Flat No. 11, 2nd Floor,  
Raies Center Latifabad Unit No. 6,  
Latifabad-Hyderabad,  
Sindh-Pakistan  
P.O. Box #. 1006  
Fax #. 0223-817834  
Phone # 0223-032541  
Mobile # 0345-3544994  
Email: jdspak@gmail.com  
Website: www:jdspk.org

**Regional Office**

Shanti Nagar 72/10-R  
Khanewal Punjab  
Cell # 03002506311

**4 Field Offices**

Hingoro Station Near Masjid-e-Aqsa, Chowk Tando Mohammad Khan  
Cell No. 0333-2730793  
House No.163 Gulshn-e-Ibrahim Colony, Ring Road, Mirpurkhas  
Cell #.0346-3611487  
Padri-Jo-Goth-Sanghar  
Cell #. 0333-2925277  
Sukkur  
0345-3855347

**Core Members of Board**

S. No	Name of Board Member	Designation	Experienced in Sectors	Email
1	Ms. Noureen	President	Education	<a href="mailto:pakistan-president@jdspk.org">pakistan-president@jdspk.org</a>
2	Mr. Azeem S/o Lazar	Vice-President	Education	<a href="mailto:pakistan-vice-president@jdspk.org">pakistan-vice-president@jdspk.org</a>
3	Mr. Inderyas Gill S/o Ghulam Masih	General Secretary	Agriculture and Environment	<a href="mailto:pakistan-general.s@jdspk.org">pakistan-general.s@jdspk.org</a>

**Organizational Memberships**



(relevant to this project; please append detailed curriculum vitae)

**The details of Project Implemented successfully only on Low Cost Fuel Efficient Stoves**

S. N o.	Name of Project	Funding Agency	Project amount (Rs)	Project duration/pr esent status	Outcomes.
1.	Provision of 100 smokeless Stoves with trainings	Cyber Consultant Pakistan	90,000/-	3 months (completed)	Reduced health related issues and reduced plants cutting from the targeted areas
2.	Provision of 60 Smokeless Stoves with health and hygiene trainings and planted trees	Rev. Fr. Augustine – USA	117,000/-	6 months (completed)	Reduced health related issues and reduced plants cutting from the targeted areas
3.	Awareness on health and training on deforestation	Shell	40,000/-	3 months (completed)	Reduced health related issues and reduced plants cutting and controlled de-forestation

JDS has its trained and experienced staff members and has come from different humanitarian organizations with 2 to 05 years experienced in construction of Fuel Efficient Stove as they have worked with **Caritas Pakistan, SEEWA-Pak, Association for Humanitarian Development and sent the team to install FES.** The staff is quite familiar with all standards such as Humanitarian Accountability Partnership (HAP), Sphere; Community Participation, LEGS etc. so we keep in mind all standards when implement the project interventions.

**Addition to this, the organization has a very close relationship with the community by having known their tradition and cultural values and need. JDS has its own equipped head office in Hyderabad to operate the project activities. Before preparation of the project proposal JDS conducted random need assessment in the targeted villages and found the need of FES and Plants. In this project suggestion of inhabitants are incorporated and experienced of staff are also incorporated.**

### 3. Project Duration

*(specific dates will be mentioned in the contract Agreement after approval)*

Proposed Starting Date : Expected from June, 2014 (also depends on the funding availability of

Fund)

Expected Project Duration : 1 year (from June, 2014 to May, 2015)

### 4. Project Summary

First of all, need assessment are conducted in order to identify project with the help of community. All findings of the assessment after listening, interviewing, focus group discussion, transact-walk and also highlights findings of direct observation that how needs are directly has been affecting on the lives of poverty-stricken/marginalized people of the targeted areas and also shared with the targeted community where we intend to implement the project. Community mapping and capacity assessment tools are also used in order to get the crystal clear picture and with the mutual understanding actual needs are documented for the tailoring of the project.

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After documented the needs, the project writer in-conjunction with the targeted community think that how we can address and overcome the problems. In this process JDS urges on the analysis of the stakeholder (both primary and secondary) and also gathers some information on context, causes, effects, duplication issues, course of action, past success, lesson learned, mistakes, history, geography, climate, environment and so on during the meetings with the community.

In addition to this, Season-calendar, Vann-Diagram and Problem-Tree are also prepared during the group discussions in order to obtain exact info from the informants for smooth running project and for minimizing the risk failure of the project on the other hand. After that project are designed with the continuously consultation with the community. We may conclude by saying this that project are designed using the contextual information by an understanding of the wants, needs and desires of a targeted community of the areas where we intended to execute the project.

The women of the area collect large amount of fodder and wood for fuel from the local forest ranges and common lands. It is to keep their kitchen functioning and livestock alive. The area is suffering from shortage of green lands throughout the district. Despite of the shortage of trees there is no alternate of fuel in the area.

A previous study on fuel-efficient stoves resulted in approximately 18% to 35% fuel savings as compared to the traditional stoves and reduced fuel used from 39% to 47% compared to traditional stoves. The data also showed that the improved fuel-efficient stove used an average of about 1.5 kilos of firewood to cook the standard meal, while the traditional stoves used an average of 2.2 kilos. Fuel-efficient stoves help households to consume less fuel leading to savings both in household expenditure as well as time spent in the collection of the fire wood. Time and money saved can then be redirected to meeting other needs of the household. It will help significantly reduce greenhouse gas emissions over its lifetime on the one hand and plantation will promote the agro-forestry. This FES will reduce the pressure fuel wood in the area and promote the tree plantation in the areas as it is compulsory for the beneficiaries to plant at-least 5 plants then he will qualify for the FES.

Whilst designing the project the JDS allows for individual and family plans, allow a villagers to see and find the gaps if they thinks should be removed from the project, allow a villagers to organize free and frank discussions and organize extensive brain storming to think unsympathetically from the multifarious dimensions for thinking on the project that how project is technical, financial and sustainability sound and give them good place to review, add, change or remove intervention if they think not feasible for their village.

The project "Support through Distribution of 1000 Fuel-efficient stoves Promoting Environmental Protection in 36 villages of UC named Shaikh Bhirkio will adopt participatory approaches of development involving the community and other stakeholders to achieve desired objectives of the project. The concept of the project is to provide warmth to the communities of UC Shaikh Bhirkio and will reduce work load on communities for fetching fire wood and will conserve the forest which is rapidly being used up for the fuel purposes.



The objectives of the project will include (1) to form and enhance the role of 50 Village Development Committees (VDCs) in safeguarding the global environment and contribute their part in village advancement (2) To increase community awareness of the consequences of deforestation and the need to conserve forests with the help of 50 trainings (3) To improve health by reducing the volume of harmful smoke produced by tradition stoves in the targeted villages with the provision of 2000 low cost fuel efficient stoves (4) Ensure project quality and impact of intervention. The Total budget of the project is Rupees 731,000/-

### **APPLICANT:**

Name of Organization seeking award : **Jerusalem Development Society (JDS)**

Established : **2011-2012**

Number of Members : **14**

Mailing Address (Email) : **Plot No. 226/A, Unit No. 6, Main Air Port Road, Opposite**  
**Intermediate Board Office, Latifabad-Hyderabad, Sindh-Pakistan.**

Main Postal Address : **As Above**

Post Box No. : **1006**

Alternate Address : **As Above**

Telephone & Fax : **Phone: 0223-032541**  
**Fax No. 0223-817834**  
**Mobile No. 0347-3050385**

Email : [jdspak@gmail.com](mailto:jdspak@gmail.com)

Website : [www.jdspk.org](http://www.jdspk.org)

### **Principal Officer (s):**

#### **Staff of Head Office and Regional Office**

S. No.	Name of Staff Members	Designation	Sector	Contact No.
1	Iqbal Memon	Program Manager	All Projects	0300-3069344
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### **Core Members of Board**

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1	Mrs. Noreen W/O Aamir Sohail	President	Education	<a href="mailto:pakistan-president@jdsdpk.org">pakistan-president@jdsdpk.org</a>
2	Mr. Azeem S/o Lazar	Vice-President	Education	<a href="mailto:pakistan-vice-president@jdsdpk.org">pakistan-vice-president@jdsdpk.org</a>
3	Mr. Inderyas Gill S/o Ghulam Masih	General Secretary	Agriculture and Environment	<a href="mailto:pakistan-general.s@jdsdpk.org">pakistan-general.s@jdsdpk.org</a>

### **INFORMATION REGARDING ONGOING PROGRAMMES/ PROJECTS**

Sr. No.	Name of Project	Funding Agency	Project amount (Rs)	Project duration/present status	Location
1.	100 smokeless stoves and training on health awareness in targeted areas	Advance Telecom-Pakistan	80,000/-	1 year	Kotri, Sikandarabad – Hyderabad
2.	Provision of 30 Water Filters along with trainings	Nestle-Pakistan	30,000/-	3 months	Kotri, Sikandarabad – Hyderabad
3.	Awareness on HIV/AIDS in schools	Surgical Instruments Company	10,000/-	3 months	Hyderabad
4.	Free medical Camp	Salvation Army-Sindh-Pakistan	In-Kind	6 months	5 villages of Matiyari-Sindh-Pakistan
5	Awareness Program on Hepatitis	Aftab-Surgical – Pakistan	In-Kind	3 Months	Goth Nazeer Shro – Thatta-Sindh
6	WASH Awareness programs	Aamir Traders and Aftab Surgical	In-Kind	3 months	Govt. Middle School UC Tando Hafiz Shah Thatta
7	Training on Candle and Surf making	Doctor Association-Pakistan	30,000/-	3 months	Major Liaquat goth, District Hyderabad
8	Kitchen Gardening Kits distribution to 100	Welcome Nursery Hyderabad	36,000/-	1 month	UC- Shaikh Bhirkio

**Thematic/Focal Areas** : **Climate Change**

Proposed Starting Date : **June, 2014**

Expected Project Duration : **1 year**

#### **Finance and Bank Details:**

Estimated total project cost : **Rs. 731,000**

Account title : **Jerusalem Development Society-Pakistan**

Account number : **1021740050**

Bank Name and Address	:	<b><u>Soneri Bank Limited Latifabad Branch Hyderabad Plot</u></b>
		<b><u>No: 3/H, Ghori Dream City</u></b>
Branch Name	:	<b><u>Latifabad Branch Hyderabad (0059)</u></b>
Branch ID	:	<b><u>HYD</u></b>
Swift Code	:	<b><u>SONEPAKKAHYD</u></b>

## 5. Project Aims and Objectives

### **Project Objectives**

- 1) To form and enhance the role of 50 Village Development Committees (VDCs) in safeguarding the global environment and contribute their part in village advancement by the end of July, 2014.
- 2) To increase community awareness of the consequences of deforestation and the need to conserve forests with the help of 50 trainings by the end of October, 2014.
- 3) To improve health by reducing the volume of harmful smoke produced by tradition stoves in the targeted villages with the provision of 2000 low cost fuel efficient stoves by the end of May, 2015.
- 4) Ensure intervention (soft and hard) quality, monitoring, evaluation, lesson learned and impact assessment by the end of May, 2015

## 6. Main Focus of the Project

*(e.g. Forests, Freshwater, Oceans & Coasts, Deserts, Environmental Education & Awareness, Pollution, Species, Soil, Sustainable Resource Use/Development Objectives)*

The project of fuel efficient stoves is linked and focuses on local **forest** of the targeted areas, **environmental education & awareness, smoke pollution and sustainable resource use.**

## 7. Background and Justification

*(this will include location map and initial photographs of the project area, a literature survey specifying the previous work done in the project area by individuals and/or institutions, and justification for the project in terms of its priority in the context of national environmental issues)*

In view of the challenges mentioned, the proposed project seeks to provide a solution in the form of an improved cooking stove that offers the following incentives: Reduces cooking time so cooks can take care of other activities, produces less smoke, minimizing harmful emissions from the kitchen and cooking places, facilitates better hygiene and cooking practices, consumes less fuel wood as compared to the existing stoves, people spend less time gathering wood and use the time in other activity for development of their villages, cooks are more comfortable and cooking is a more pleasant activity.

The social and environmental impacts of improved cooking stoves are indisputable. They reduce workloads involved in fuel collection, and by reducing indoor air pollution, they can reduce the risk of respiratory diseases, especially for women and children. Improved cooking stoves also contribute to environmental protection by reducing biomass consumption and hence greenhouse gas emissions, mainly CO<sub>2</sub>, when the combusted biomass originates from non-renewable stocks.

These stoves not only benefit the environment, but also reduce the cost of fuel, as less is required and produce less smoke than traditional stoves, improving the health of those within the household. Smoke is harmful, causing health problems such as coughing, eye irritations, asthma, and respiratory infections. Many people, mainly women and children, die prematurely each year from respiratory diseases caused by pollution from fires for cooking and heating homes. The promotion of cleaner, more efficient technologies is thought to have the potential of saving millions of lives. Mothers and children will be exposed to fewer hazardous air pollutants through reduced emissions of carbon monoxide and fine

particulate matter. Air pollution from cooking with solid fuel is a key risk factor for childhood pneumonia as well as many other respiratory, cardiovascular, and ocular diseases.

A previous study on fuel-efficient stoves resulted in approximately 18% to 35% fuel savings as compared to the traditional stoves and reduced fuel used from 39% to 47% compared to traditional stoves. The data also showed that the improved fuel-efficient stove used an average of about 1.5 kilos of firewood to cook the standard meal, while the traditional stoves used an average of 2.2 kilos. Fuel-efficient stoves help households to consume less fuel leading to savings both in household expenditure as well as time spent in the collection of the fire wood. Time and money saved can then be redirected to meeting other needs of the household. It will help significantly reduce greenhouse gas emissions over its lifetime on the one hand and plantation will promote the agro-forestry.

## **8. Describe three main points that you feel make your Project special**

### **Innovative:**

The Fuel Efficient Stoves (FES) will construct entirely with local materials, and require little technical expertise for install, use and maintenance. It consists of simple design, less financial support, no teacher needed once constructed and no industrial manufacturing are needed.

### **Sustainability:**

Sustainability include human, economic, social, and environmental interconnected in this project. Good health by providing good environment, trainings on FES will be carrying during project and even after phase-out transferring generation to generation and village to village and demoting use of traditional stoves. Inhabitants will have enough skills and knowledge to sustain their own way of life. Regarding economic, have their own FES will give them continue benefits and free life from diseases. This is easy to repair and maintenance. After using of this FES ratio of health related disease will be decreased and they will be able to save their money.

The trainings will make them aware about health and maintenance and bring them close to each other, create interfaith harmony and trust among one another and replicate the FES nearby. The Village Development Committees will conduct regular meeting and maintain minutes and help during implementation of the project. This activity will deplete dependency and social sustainability will take place.

As far as environmental sustainability is concerned, all local and hand-made materials will be taken from the local markets, which is easily available at everywhere, no manufacturing products are required in this project, no side effects are involve in this project as we have kept consideration **DO NO HARM** when project was preparing.

**Feasibility:** Villages are already organized by JDS and has high interested for this intervention. This intervention is consists of local material and can buy from any market at any time and season. This FSL has many benefits; such as save money, time, health, etc. The filters are constructed entirely with local materials, and require little technical expertise for use or maintenance. JDS has experienced staff members in this project and have already installed 200 Nadi filters in different target villages.

Addition to this, the organization has a very close relationship with the community by having known their tradition and cultural values and need. Materials are easily available in the market of Matli, Mirpurkhas and Hyderabad. JDS has its equipped office in Hyderabad to operate the project activities. Before preparation of the project proposal JDS conducted random survey in the targeted villages and found the need of FES and on the basis of this project is designed. In this project suggestion of inhabitants are incorporated and experienced of staff are also incorporated in order to build the effectiveness. Due to this it is a very sure that the designed project will undoubtedly bring positive change in the targeted community.

It is quite noteworthy information that JDS will follow the Humanitarian and Partnership (HAP) and standards of Spare in order to bring the desired change. In the last but not the least, this project is also contributing in the millennium development goal of Pakistan no. 7.

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## **9. Detailed Project Activities**

**Log-frame of Fuel Efficient Stoves For  
2000 Households of UC-Shaikh Bhirkio-Tando Mohammad Khan-Sindh-Pakistan**

<b><u>Description</u></b>	<b><u>Indicators</u></b>	<b><u>Sources of verification</u></b>
<b><u>Overall Goal:</u></b> The goal is to install smokeless stoves with chimneys in a phased manner across the villages of UC Shaikh Bhirkio – Tando Mohammad Khan-Sindh-Pakistan and simultaneously educate the women on how to optimize use of these stoves to safeguard their own health and that of their families.		<b><u>Annual Report and Statistic data</u></b>
<b><u>Program Objective</u></b>  The health condition of targeted communities is improved through better access to smokeless low cost fuel efficient stoves	Approximately 2000 people from 35 targeted villages have access to smokeless fuel efficient stoves  Approximately 2000 rural inhabitants increased their awareness on fuel efficient stoves, basic health and global warming and changed behaviors/practices  Approximately 28000 thousand plants are planted by inhabitants of the villagers to protect their environment	Statistic data  Monthly reports, community feed-backs from the targeted villages on trainings and VDC meetings minutes, pictures, travelling track and activities tracking sheet.  Planted trees in the targeted villages, bills, pictures of plants and others.  Mid-Term Review, Monitoring and Evaluation report
<b><u>Expected Results No. 1</u></b>	<b><u>Indicators</u></b>	<b><u>Source of Verification</u></b>
Formed 50 Village Development Committees (VDCs) in safeguarding and involved in protecting the global environment and contributing their part in village advancement	50 VDCs are formed and functioning for the development of the villages by the end of March, 2014	Statistic data of the villages  List of members of Village Development Committees (VDCs).  Minutes register of the meetings and pictures
<b><u>Expected Results No. 2</u></b>	<b><u>Indicators</u></b>	<b><u>Source of Verification</u></b>
Increased awareness level of communities involved in installation of fuel efficient stoves, its maintenance and replicating the same stoves and knowledge in the nearby villages and demoting the practices of traditional smoky stoves.	Approximately 2000 beneficiaries/inhabitants of the villages increased their knowledge and changed behaviors by the end of 2014.	Statistic data  Monthly reports, community feed-backs from the targeted villages  Pictures, travelling track and activities tracking sheet.  Monitoring and Evaluation report
<b><u>Expected Results No. 3</u></b>	<b><u>Indicators</u></b>	<b><u>Source of Verification</u></b>
Health of the targeted villages improved by reducing the volume of harmful smoke produced by tradition stoves and utilizing their save time in other	Health of the targeted community has improved and morbidity ratio approximately 75 % reduced by the end of 2014.	Statistic data of govt. and other humanitarian organizations  Community feed reports  Complaint and suggestions received through complaints

income generating activity		boxes of Humanitarian Accountability Partnerships (HAP)
<b>Expected Results No. 4</b>	<b>Indicators</b>	<b>Source of Verification</b>
Quality product received by the targeted villages and communities are involved in all stages of project	2000 HHs received quality of products and community participated in each interventions	Complaint and suggestions received through complaints boxes of Humanitarian Accountability Partnerships (HAP)  Quality checking formats  Mid-term review, monitoring and evaluation report.

### **Project Strategy:**

The project will quite beneficial for the targeted beneficiaries, especially for the children, women disabled persons, older and dependents people of the villages. The project consists of total 4 core interventions such as Village Development Committee (VDC), Training on how to make fuel efficient stoves, distribution of plants and training on plantation. The trainings will build the capacity of targeted community regarding smokeless stoves, plantation and maintenance of stoves and caused health problems and which brings them in fix.

With the help of this training they will be able to install and maintenance of the smokeless stoves in future. Firstly, that JDS will have to work to make them aware then the community will replicate this in other villages. They will have their own low cost smoke less stoves in their houses with skills how to make and maintain in case of breakages. Formation of the VDC in the targeted villages will help during the project implementations and will work independently after the phase out from the villages.

**Implementation:** In this regard, first and foremost Village Development Committees (VDC) will form in the targeted villages and this VDC helps in all stages of implementation such as beneficiaries selection, identification of location for intervention on the other hand accountability officer (AO) also visit weekly and conduct meeting with VDC in order to find-out the gaps, issues and solve them with the help of members of VDC.

The suggestion and complaints boxes are also installed in the targeted villages before the starting of the project where member of VDC and targeted community put their suggestion and complaints. These boxes are locked by AO and uked by AO in the presence of targeted community on weekly basis and reply the written suggestion and complaints within the fifteen days to the concerned beneficiaries. Additions to this, telephone number of AO are also given to the targeted community for their concerned.

JDS will involve community in each and every stages of implementation of the project interventions. To manage and support the project, JDS will recruit a dedicated Quality and Accountability Officer (QAO) who will monitor project activities on the ground. The QAO will pay thrice a month to project implementation areas. Use developed appropriate, standardized monitoring templates in order to record progress. He will start from the inception of the project interventions means from the Purchase Request (PR) and keep an eye on input, output, process, outcome, impact and reach against activities.

JDS will make use of the Quality and Accountability Officer (QAO) to work closely with the implementation teams and to document the challenges and issues faced during project implementation. Strategies will be developed for overcoming these issues and to utilize any transferrable learning into new Programme interventions.

The QAO team will also document all other project-related information, including monthly, quarterly and project reports. A monitoring and evaluation plan has been developed for this project, which details individual monitoring, review and evaluation activities and tools will be provided on the request of SGP while Accountant will prepare financial report after the verification of the activities with Quality Assurance Officer.

Material will be developed of each activity, selection criteria and names of the selected beneficiaries will be pasted on the each level in order to maintain transparency in the project and avoid for any duplication issues. All HAP and Sphere standards will be followed while the project implementation.

Mid-term review will be conducted and report of the same will be shared with the staff members and other relevant stakeholders. The organizations will conduct the learning events in the end of the project and report of the same will be circulated for betterment of the future project.

Some awareness program will be delivered through the radio in order to spread the awareness on smokeless stoves and plantation with the help or permission from the donors.

#### **Capacity Enhancement:**

With the help of this training they will be able to install and maintenance of the smokeless stoves in future. Firstly, that JDS will have to work to make them aware then the community will replicate this in other villages. They will have their own low cost smoke less stoves in their houses with skills how to make and maintain in case of breakages. Formation of the VDC in the targeted villages will help during the project implementations and will work independently after the phase out from the villages.

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## **10. Expected Achievements/Results/Outputs**

#### **Impact on Health and Safety:**

Smoke is harmful, causing health problems such as coughing, eye irritations, asthma, and respiratory infections. Many people, mainly women and children, die prematurely each year from respiratory diseases caused by pollution from fires for cooking and heating homes. The promotion of cleaner, more efficient technologies is thought to have the potential of saving millions of lives.

#### **Economic Impact:**

A previous study on fuel-efficient stoves resulted in approximately 18% to 35% fuel savings as compared to the traditional stoves and reduced fuel used from 39% to 47% compared to traditional stoves. The data also showed that the improved fuel-efficient stove used an average of about 1.5 kilos of firewood to cook the standard meal, while the traditional stoves used an average of 2.2 kilos. Fuel-efficient stoves help households to consume less fuel leading to savings both in household expenditure as well as time spent in the collection of the fire wood. Time and money saved can then be redirected to meeting other needs of the household.

#### **Air quality:**

Mothers and children will be exposed to fewer hazardous air pollutants through reduced emissions of carbon monoxide and fine particulate matter. Air pollution from cooking with solid fuel is a key risk factor for childhood pneumonia as well as many other respiratory, cardiovascular, and ocular diseases.

#### **Environmental:**

It will help significantly reduce greenhouse gas emissions over its lifetime on the one hand and plantation will promote the agro-forestry.

#### **Social:**

Considerably less time will need to be spent collecting wood fuel for the family thereby reducing the work burden on rural families and presenting more time for the citizens to engage in other activities that will lead to economic development. The amount of indoor pollutants from the burning of biomass in the home will be reduced. Less carbon dioxide, carbon monoxide and particulates will be emitted, hence less pollution related ailments.

#### **Economic:**

During project implementation, it will help develop a section of the rural economy during the installation, maintenance, and monitoring phases. Costs incurred in the purchase of wood will be reduced through. The proposed projects will in the long-term deliver a secure and simple contribution to sustainable development in the project area that, without carbon finance, would not exist.

## **11. Evaluation**

An evaluation of this program will be conducted in the end of the project JDSs with the help of standard evaluation terms of reference. The evaluator selected will be external to the organization. They will be supported by locally-recruited monitors who will support the evaluation consultant in field visits to communities. JDSs office will also investigate the potential to include representatives from SGP in the evaluation team, for learning purposes. The evaluation will organize with the mutual understanding of SGP.

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## **12. Names & Addresses of Two Referees who are familiar with the work of the Project Executant**

2 REFERENCES	
Familiar with the work of Organization	
Name	Dr. Saika Minhas
Organization	Benazir Bhutto Shaheed Youth Development Program (BBSYDP)
Position	Trainer
Telephone	+92-0336-6357568
E-mail	<a href="mailto:saikarajput@yahoo.com">saikarajput@yahoo.com</a>
Name	Mr. Matthew Walji
Organization	Society for Environment and Health Awareness in Rural Areas (SEHARA)
Position	Chairman
Telephone	<b>+92-03473302654/03332501887</b>
E-mail	<a href="mailto:seharasindh@yahoo.com">seharasindh@yahoo.com</a>



### 13. Project Work Plan ( June, 2014 to May, 2015)

Activities	Sub-activities	Indicators	6	7	8	9	10	11	12	1	2	3	4	5
<b>Objective 1: To form and enhance the role of 50 Village Development Committees (VDCs) in safeguarding the global environment and contribute their part in village advancement by the end of February, 2014.</b>														
Selection and Formation of 50 VDC	Formation of team, orientation and collection of data as ground reality for comparison at the end of project.	By the end of January the project team has access to baseline report												
Registration of the beneficiaries with the help of VDC	Meetings with inhabitants of the target villages and with the help of them members of VDC will be selected and responsibilities will be given.	50 Village Develop Committee are formed and functioning as per plan by the end of July, 2014												
	Organize meeting with villagers and collect data with the help of VDC members and recommendation	2000 beneficiaries are selected with the help of VDC by the end of July, 2014												
<b>Objective 2: To increase community awareness of the consequences of deforestation and the need to conserve forests with the help of 50 trainings by the end of March 2014.</b>														
Organize 50 Training on Smokeless/health Stoves/deforestation	Arrangement of trainer/facilitator to conduct training on construction of fuel efficient stove	Facilitator hired and manual are prepared												
Selection of 100 Trainer to Trainer (TOT)	Inform community for training and arrangement of suitable place for training	100 TOT are selected and made aware of construction of FES and its important by the end of October, 2014												
	Printing of informative material and Banner for the trainings	1000 Informative are printed and 10 Banners are printed by the end of August, 2014												
<b>Objective 3: To improve health by reducing the volume of harmful smoke produced by tradition stoves in the targeted villages with the provision of 2000 low cost fuel efficient stoves by the end of November, 2014.</b>														
Construction of 2000 Fuel Efficient Stoves (FES)	Prepare purchase request for purchasing 2000 sets of pips for FES.	Required 2000 sets of pips are dumped in the targeted villages for subsequent distribution by the end of October, 2014												
	Arrange labor for loading and unloading pips	Required material loaded and unloaded at the selected destination by the end of October, 2014												
	Distribution of pipes with the help of VDC members	2000 sets of pips for the construction of FES are distributed to selected HHs by the end of October, 2014												
	Construction/installation of 2000 fuel efficient Stoves	250 fuel efficient stoves are being constructed every month.												
<b>Objective 4: Ensure project quality and impact of intervention by the end of 2014</b>														
Monitoring Visits	Pay 24 monitoring visits of the targeted villages during implementation of the project activities	Visited conducted on daily basis												
	Conduct detailed Baseline Survey and													
	Conduct midterm Review and share the report to the													



**Proposed Budget of 2000 Fuel Efficient Stoves for 2000 Household  
of UC Shaikh Bhirkio - Tando Mohammad Khan - Sindh - Pakistan**

S. No.	Code	Main Heads	Details	Unit Cost	Quantity	Amount Required
<b>1</b>	<b>PSC</b>	<b>Project Staff Costs</b>				
1.1			Project Manager (part time)	4000	12	48000
1.2			Community Facilitator (part time)	4000	12	48000
<b>2</b>	<b>C</b>	<b>Consultancy</b>	<b>Total</b>			<b>96,000</b>
2.1			Consultant for Baseline Survey	5000	1	5000
2.2			Accountant	5000	1	5000
<b>3</b>	<b>PAP</b>	<b>Printing and Publication</b>	<b>Total</b>			<b>10,000</b>
3.1			Material on Environment Awareness	1	5000	5000
3.2			Registers for VDC	200	50	10000
<b>4</b>	<b>ORC</b>	<b>Office Running Cost</b>	<b>Total</b>			<b>15,000</b>
4.1			Office Rent	3000	12	36000
<b>5</b>	<b>FCA</b>	<b>Field Cost/ (Activities)</b>	<b>Total</b>			<b>36,000</b>
5.1			2000 sets of Pipes for Fuel Efficient Stoves	300	1000	300,000
5.2			Loading and unloading charges of trucks materials	150	20	3,000
5.3			Transportation charges of Truck 1	2000	2	4,000
5.4			Staff Travelling (monitoring visits of project manager)	2000	24	48,000
5.5			Travelling of Community Facilitator for 12 months	2000	12	24,000
5.6			Facilitator charges of facilitator to conduct 25 trainings on fuel efficient stoves	3000	50	150,000
5.7			Charges to conduct end-line survey and report	5000	1	5000
<b>6</b>	<b>FE</b>	<b>Field Equipment</b>	<b>Total</b>			<b>534,000</b>
6.1			Camera purchasing	20000	1	20000
<b>7</b>	<b>PC</b>	<b>Project Contingencies</b>	<b>Total</b>			<b>20,000</b>
7.1			Contingencies	20,000	1	20,000
7.2			<b>Total</b>			<b>20,000</b>
			<b>Grand Total</b>			<b>PKR. 731,000/-</b>