



District Badin, Sindh

Vol: 04- District Badin

SOJHRO

سو جھرو

**Bringing the Dawn Indoors:
Shaping Sindh's Solar Revolution.**

S – Sindh ,
O – Off/On Grid,
J – Journey of Light,
H – Homes ,
R – Roshan Resilience,
O – Overcoming the Darkness



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روشن سنڌ، خوشحال گهر — 275,000 مفت سولر هوم سسٽم

سنڌ حڪومت جو سولر توانائي منصوبو



سنڌ جي 30 ضلعن ۾ غريب گهرن
کي 275,000 سولر هوم سسٽم
(SHS) ڪٽس جي فراهمي

132,000 آف گرڊ سولر هوم سسٽم

انهن غريب گهرن لاءِ جيڪي ذريعي ۾ آف گرڊ علائقن ۾ رهن ٿا، جتي قومي بجلي
جو نظام موجود ناهي، ۽ جن جو BISP PMT اسڪيم 0 کان 20 آهي.

143,000 آن گرڊ سولر هوم سسٽم

انهن بجلي استعمال ڪندڙن لاءِ جيڪي قومي گرڊ سان ڳنڍيل آهن
ماهرار 0 کان 100 بولٽ بجلي استعمال ڪن ٿا.

توانائي تائين رسائي کي بهتر بنائڻ، بجلي جي خرچن ۾ گهٽتائي آڻڻ
صاف ۽ قابل تجديد توانائي جي استعمال کي هٿي ڏيڻ

03313289888 | 03001771193

توانائي کاتو حڪومت سنڌ

عملدرآمد ڪندڙ: سنڌ رورل سپورٽ آرگنائيزيشن (سرسا)



SOLAR HOME SYSTEMS INITIATIVE

POWERING HOMES, EMPOWERING LIVES

The Solar Home Systems Initiative aims to provide reliable, affordable, and sustainable energy solutions to households through both on-grid and off-grid solar technologies, particularly targeting beneficiaries all across Sindh with a clear process of selection.



TARGETING 275,000 HOUSEHOLDS ACROSS SINDH

Project Brief: Solar Home Systems (On-Grid & Off-Grid) Initiative – Sindh

Background

Access to affordable, reliable, and sustainable energy remains a major challenge for many vulnerable households across Sindh, particularly in rural and underserved areas. To address this challenge, the Government of Sindh Energy Department has initiated Solar Home Systems (SHS) to provide clean energy solutions to poor and low-income households through both on-grid and off-grid areas. The initiative aims to improve household energy security, reduce dependence on conventional and costly energy sources, enhance livelihoods, and contribute towards climate resilience and environmental sustainability.

Under the initiative, a total of 275,000 Solar Home Systems will be distributed and installed across Sindh (30 Districts) through a transparent beneficiary selection and technology-based implementation mechanism.



Project Categories and Target Beneficiaries

Category	Target	Eligibility Criteria
Off-Grid & BISP PMT 0-20	132,000 households	- Households having no Electricity & living in areas where electricity grid connectivity is unavailable or unreliable. - Vulnerable households identified through BISP PMT score of 0-20. Beneficiaries without electricity connections.
On-Grid	143,000 households	Households connected to the national grid with average monthly electricity consumption of up to 100 electricity units as reflected in their electricity bills.

Note: The BISP PMT 0-20 category represents the poorest and most vulnerable households and forms a major focus group within the overall allocation of 275,000 systems.

Solar Home System Package

Each beneficiary household will receive a complete solar energy package designed to meet basic domestic energy requirements, including:

- 01 Solar PV Panel (180 Watt Peak)
- Integrated Charge Control Unit with Battery & Mobile Charging Port
- 01 BLDC Pedestal Fan (18 inches, 25 Watts)
- 03 LED Energy Efficient Bulbs (5 Watts each)
- Solar panel mounting structure/frame



The Solar Home Systems Initiative aims to provide reliable, affordable and sustainable energy solutions to households through both on and off-grid solar technologies, particularly targeting beneficiaries of areas with a poor access of electricity.



TARGETING 375,000 HOUSEHOLDS ACROSS 350M

[Product Categories](#)

- Provide clean and renewable energy access to 275,000 households across Sindh.
- Reduce dependency on expensive conventional energy sources and lessen the financial burden on poor households.
- Improve quality of life through enhanced household lighting, comfort, communication, and productive use of energy.
- Promote climate change mitigation through increased use of renewable energy.

The project is being implemented through the Last Mile Distributer (LMD) approach, with Sindh Rural Support Organization (SRSO) as the Lead implementing partner in joint venture with technical firms. The implementation follows a transparent MIS-based process, beginning with household verification, CNIC validation, and GPS-based beneficiary registration. After approval of the beneficiary list, Solar Home System kits are received, inspected, and distributed through a barcode-based inventory tracking system. Technical firm teams carry out installation at households, provide user orientation, and upload geo-tagged installation evidence and handover records on the MIS. A dedicated call center and third-party verification mechanism ensure after-distribution support, quality assurance, and transparency, while payments for LMD are processed against MIS-verified completed installations.





روشن گھر - روشن سندھ



SOLAR HOME SYSTEMS INITIATIVE POWERING HOMES, EMPOWERING LIVES

The Solar Home Systems Initiative aims to provide reliable, affordable, and sustainable energy solutions to households through both on-grid and off-grid solar technologies, particularly targeting low-income areas across Sindh with a clear process of selection.



TARGETING 275,000 HOUSEHOLDS ACROSS SINDH

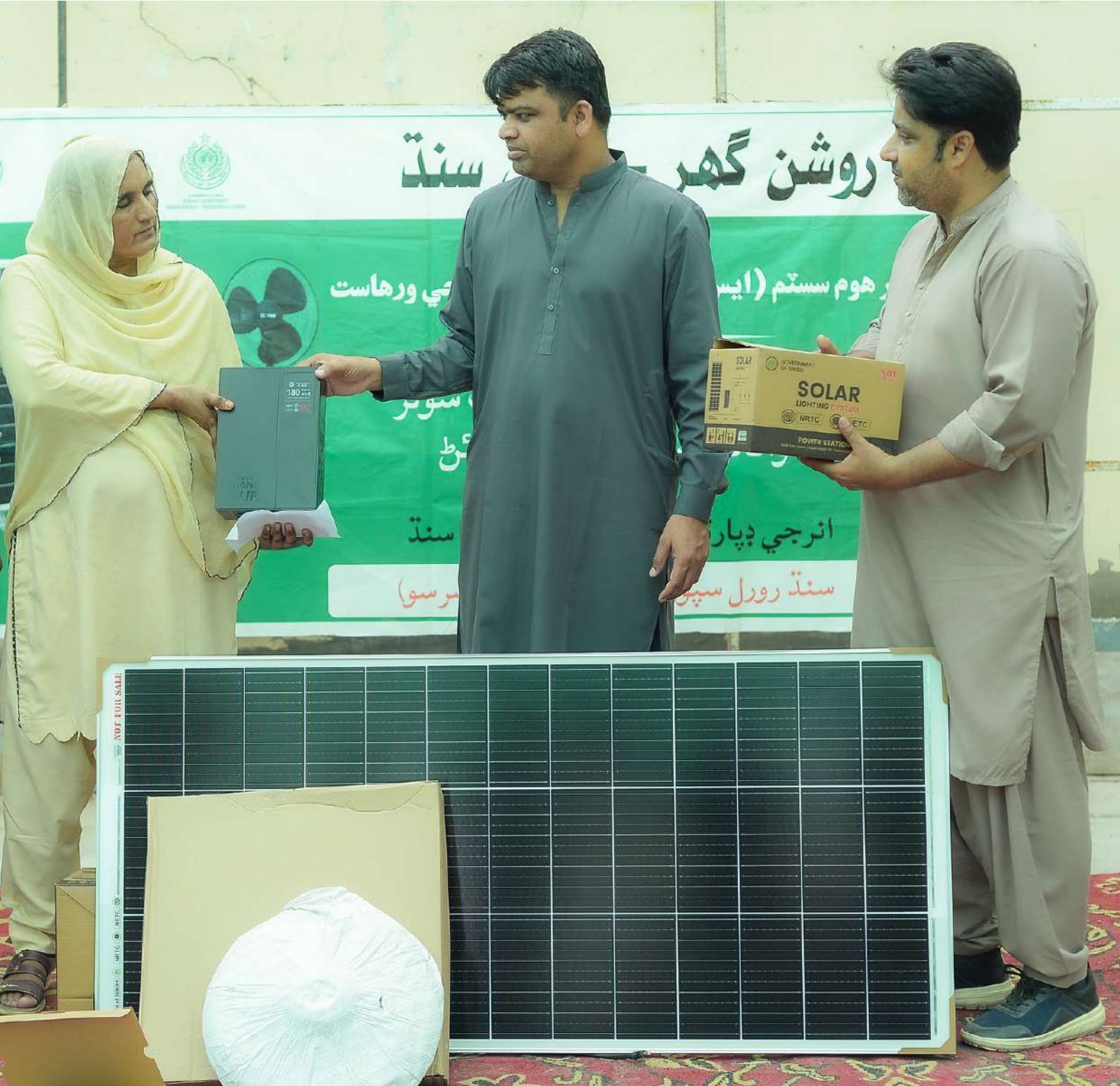
Expected Impact

The Solar Home Systems Initiative will transform the lives of 275,000 vulnerable households across Sindh by providing affordable and clean electricity, improving living standards, reducing energy costs, and supporting education and livelihood opportunities.

The project will also contribute to carbon emission reductions and climate resilience. With the support of the international partner Connolair Pvt Ltd, and through alignment with Gold Standard methodologies, the Government of Sindh is pursuing registration of the project in the international carbon credit market to formally recognize its environmental benefits and unlock future climate financing opportunities.



روشن گھر - روشن سنت



B-R-I-G-H-T

Building Rural Innovation & Green Household Transformation

- **B – Building Energy Independence:** Harnessing standalone solar PV technology to generate clean, reliable household power independent of grid outages.
- **R – Respiratory & Safety Enhancement:** Eliminating reliance on dangerous open flames, fuel wicks, and hazardous indoor lighting alternatives.
- **I – Illuminated Learning Environment:** Providing constant LED lighting so children can study after dark without eye strain or interruption.
- **G – Green Thermal & Living Comfort:** Enhancing indoor daily living conditions, safety, and nocturnal comfort for the entire family.
- **H – Household Economic Relief:** Removing recurring family expenditure on candles, battery cells, and external lighting fuel.
- **T – Transforming Academic Potential:** Building educational confidence and long-term learning routines for young students.



"Before receiving the Solar Home System, our evenings were defined by uncertainty. Darkness made simple daily tasks difficult and severely disrupted our children's studies. Today, bright LED lights have transformed our home into a safe, empowering space where my children study comfortably every night."

– Luqman Hakeem

In the Haji Arbab MC area of District Badin, the lack of reliable grid electricity severely impacted the daily household routine of Luqman Hakeem, son of Muhammad Saleh. Without dependable power, nightfall brought immediate logistical and educational challenges.

The primary burden fell upon the household's school-age children. Studying under inadequate lighting produced significant eye strain, slowed academic progress, and fragmented their evening learning schedules. Beyond educational barriers, basic household management—from preparing night meals to navigating the home safely—became cumbersome and unsafe after sunset.

Renewable Infrastructure Delivering Home Autonomy, so to mitigate energy poverty in the region, the Solar Home System (SHS) initiative deployed a dedicated clean-energy package to Luqman Hakeem's home. The standalone solar setup provides immediate domestic power:

- High-Efficiency Solar PV Panel installed for maximum daily solar radiation harvest.
- Integrated Battery Energy Storage Unit reserving reliable power for full evening utilization.
- Energy-Saving Indoor LED Luminaires providing bright, flicker-free illumination across living and study spaces.
- Multi-Port Charging Ports keeping essential household technology operational.

Academic Confidence and Family Uplift: The intervention has brought a structural shift to the family's daily life. Access to steady, bright light has created an optimal home learning environment. Luqman Hakeem's children can now comfortably complete their homework, review lessons, and build regular study habits long past sunset, significantly improving their academic confidence.

B-R-I-G-H-T

Building Rural Innovation & Green Household Transformation

In addition to supporting education, the system has made the home safer, cleaner, and more efficient. The elimination of makeshift lighting reduced household safety hazards while alleviating recurring expenses for lighting fuel. Expressing his gratitude to the project team, Mr. Luqman Hakeem highlighted that the Solar Home System has delivered fundamental security, academic opportunities, and long-term stability to his household.

"Clean energy access acts as a key catalyst for human development. For Luqman Hakeem's family in Badin, a Solar Home System is far more than a source of electricity—it is an educational gateway. By replacing darkness with reliable solar light, the initiative directly secures children's academic futures and establishes dignity within rural domestic spaces."

Building a Resilient Community: Luqman Hakeem's story reflects the primary objective of the Solar Home System Project. By deploying practical, sustainable green infrastructure to households across District Badin, the program continues to bridge the energy divide, protect family well-being, and empower the next generation through uninterrupted education.



P-O-W-E-R

Providing Off-Grid Well-being & Educational Resilience

- P – Providing Energy Autonomy: Delivering standalone solar infrastructure to liberate the household from total dependence on a fragile electrical grid.
- O – Overcoming Load-Shedding: Shielding evening domestic life and critical study hours from unpredictable, multi-hour power outages.
- W – Well-being & Household Safety: Eliminating reliance on dangerous open flames, hazardous fuel wicks, and emergency candles during sudden blackouts.
- E – Educational Resilience: Guaranteeing uninterrupted, bright LED illumination so young students can complete schoolwork without eye fatigue or academic disruption.
- R – Relieving Economic Strain: Halting supplementary spending on backup lighting fuels, battery cells, and external device charging fees.

- **Beneficiary: Muhammad Umar**
- **Father's Name: Muhammad Siddique Soomro**
- **CNIC: 41101-0641476-9, Contact: 03337554114**
- **Location: Molvi Muhammad Hussain Soomro, Dr. Abdullah Soomro, District Badin**
- **Grid Status: On Grid**

In the Molvi Muhammad Hussain Soomro neighborhood of District Badin, access to the national grid offered little actual security for Muhammad Umar, son of Muhammad Siddique Soomro, and his family. The area suffers from severe, extended, and unpredictable load-shedding, which routinely leaves households in complete darkness during peak evening hours.

This systemic energy deficit severely disrupted the household's fundamental routines. The heaviest burden fell on school-age children, whose critical study hours coincided with prolonged night blackouts. Attempting to learn under dim, flickering emergency lights or unsafe open flames caused severe eye fatigue, disrupted concentration, and weakened academic progress. Essential domestic operations—from meal preparation to safe navigation around the house—came to a complete standstill whenever the grid collapsed.

To counteract grid fragility in District Badin, the Solar Home System (SHS) project deployed a decentralized green-energy package engineered to grant the household total power independence during grid blackouts.

The standalone solar intervention provides complete domestic resilience:

- High-Efficiency Solar PV Panel installed for optimal daily solar radiation capture.
- Intelligent Battery Energy Storage System reserving clean electricity for seamless power during nighttime outages.
- Energy-Efficient High-Lumen LED Luminaires delivering constant, flicker-free illumination across living and study spaces.
- Integrated Multi-Port Charging Hub keeping communication devices powered regardless of grid status.

The deployment of the Solar Home System has transformed Muhammad Umar's home from a site of grid-dependent uncertainty into an empowered environment of educational continuity. The transition to clean, uninterrupted solar energy guarantees bright, flicker-free light throughout the night, completely isolating his children's learning schedule from the erratic behavior of the local grid.

"Grid electricity in our area was constant in name only—prolonged blackouts routinely plunged our home into darkness just as my children sat down to study. Today, thanks to this Solar Home System, our home remains illuminated regardless of grid failures, allowing my children to pursue their education without interruption."

– Muhammad Umar

P-O-W-E-R

Providing Off-Grid Well-being & Educational Resilience

Beyond educational stability, the system has restored convenience, safety, and dignity to everyday domestic life. Family members no longer scramble for makeshift lighting solutions during sudden blackouts or spend hard-earned funds on secondary lighting fuels. Expressing his profound gratitude to the project implementation team, Mr. Muhammad Umar noted that the system has delivered far more than clean power—it has safeguarded his children's academic futures and provided peace of mind for his entire family.

"True energy security is not merely about having a grid connection; it is about having reliable, uninterrupted power when life demands it most. For Muhammad Umar's family in Badin, a Solar Home System bridges the gap between grid failure and human potential—ensuring that blackouts no longer dictate a child's ability to learn, achieve, and thrive."

Muhammad Umar's experience reflects the core mission of the Solar Home System Initiative. By supplying reliable, sustainable solar infrastructure to grid-stressed communities across District Badin, the project continues to eliminate educational barriers, stabilize household living conditions, and foster long-term community resilience across Sindh.



روشن گھر - روشن سندھ

C-A-R-E

Clean Access Refreshing Environments

C – Clean Energy Access: Harnessing standalone solar PV infrastructure to liberate the household from total dependence on a failing electrical grid.

A – Academic Continuity: Protecting children's evening homework and learning routines from chronic, multi-hour power outages.

R – Resilient Living Conditions: Restoring domestic safety, thermal relief, and nighttime convenience during prolonged blackouts.

E – Educational Empowerment: Delivering constant, bright LED illumination so young students can pursue their studies without eye strain or academic delays.

- **Beneficiary:** Shahjaan
- **Father's Name:** Habib ur Rehman
- **CNIC:** 41105-6967140-1
- **Contact:** 03313829195
- **Location:** Rip Shareef MC, District Badin
- **Grid Status:** On-Grid

"Living under the shadow of constant blackouts meant that nightfall brought our children's education to a complete halt. Today, thanks to this Solar Home System, our home stays brightly lit through every power outage, giving my children the stability and comfort they need to study for a brighter future."

– Shahjaan

In the Rip Shareef MC locality of District Badin, having a physical grid connection provided little real energy security for Shahjaan, son of Habib ur Rehman, and his family. The community suffers from frequent, severe, and unpredictable load-shedding, leaving households plunged into darkness precisely when evening life begins.

These persistent power cuts severely disrupted the family's daily existence. The heaviest burden fell upon the school-age children, whose critical study hours coincided with multi-hour blackouts. Struggling to complete homework under dim, flickering emergency lights or hazardous open flames caused eye strain, slowed academic progress, and created constant anxiety around school deadlines. Simple domestic tasks—from preparing dinner to safely moving around the home—became frustrating and hazardous after sunset.

Solar Infrastructure Delivering Domestic Independence

To resolve this severe energy gap, the Solar Home System (SHS) project deployed a decentralized green-tech system to Shahjaan's home, engineered for complete household power autonomy during grid failures.

The standalone solar intervention provides immediate operational support:

- High-Efficiency Solar PV Panel installed for maximum daily energy capture.
- Intelligent Battery Energy Storage System storing clean electricity for seamless performance during nighttime outages.
- Energy-Saving High-Lumen LED Luminaires providing steady, flicker-free illumination across study and living areas.
- Integrated Multi-Port USB Hub maintaining essential device connectivity regardless of local grid blackouts.

C-A-R-E

Clean Access Refreshing Environments

The deployment of the Solar Home System has transformed Shahjaan's residence into an empowered environment of educational continuity. By eliminating dark hours, the system guarantees bright, safe illumination every evening, protecting his children's study routines from the unpredictability of the utility grid.

Beyond academic benefits, the solar system has restored comfort, safety, and dignity to everyday domestic life. The family no longer scrambles for makeshift lighting or incurs costs for secondary fuels during sudden blackouts. Expressing his deep gratitude to the implementation team, Mr. Shahjaan shared that the Solar Home System has lifted a heavy burden from his family, bringing tangible comfort today and hope for his children's future.

"A grid connection without reliability is merely an empty wire. For Shahjaan's family in Rip Shareef MC, a Solar Home System transforms erratic electricity into true energy independence—ensuring that blackouts no longer dictate a child's academic potential or disrupt the peace of a rural home."

Building a Resilient Community: Shahjaan's story exemplifies the core objective of the Solar Home System Initiative. By deploying sustainable green energy solutions to grid-stressed communities across District Badin, the project continues to eliminate barriers to education, strengthen domestic living conditions, and build long-term community resilience throughout Sindh.



H-O-M-E

Harnessing Off-grid Micro-power for Everyday Life



- **H – Household Energy Independence:** Generating self-sustaining solar power to break total reliance on an unpredictable utility grid.
- **O – Overcoming Nighttime Stagnation:** Keeping household tasks, meal preparation, and indoor mobility fully active through evening blackouts.
- **M – Mitigating Health & Safety Hazards:** Eliminating toxic smoke, soot, and open-flame fire risks from kerosene wicks and emergency candles.
- **E – Economic Relief & Savings:** Halting continuous spending on backup lighting fuels, battery replacements, and commercial phone charging.

- **Beneficiary Name:** Abdul Sattar
- **Father's Name:** Allah Rakhya
- **CNIC:** 41101-8556902-7

Contact: 03323155850

Address: Badin City MC, Badin

"When the power cuts out after sunset, normal domestic life usually comes to a complete halt. Cooking in the dark, tripping over furniture, and worrying about hot, airless nights were our daily reality. Today, this Solar Home System keeps our household moving smoothly through every blackout without losing a single hour of comfort."

– Abdul Sattar

In the Molvi Muhammad Hussain Soomro neighborhood of District Badin, having an electrical meter attached to the wall offered little actual utility for Abdul Sattar and his household. Unannounced and extended load-shedding routinely paralyzed the family's routine during peak evening hours.

Without electricity, basic domestic activities became grueling chores. Preparing evening meals in pitch darkness carried safety risks, while navigating dark rooms presented constant tripping hazards for elderly family members and young children alike.

During Sindh's sweltering summer nights, the sudden loss of power trapped stifling heat inside the home, making rest and recovery nearly impossible. To cope, the family had to rely on dim emergency lights, expensive disposable batteries, or open flames that filled small rooms with irritating smoke and soot.

H-O-M-E

Harnessing Off-grid Micro-power for Everyday Life

To liberate the household from utility grid instability, the Solar Home System (SHS) project deployed a standalone green-technology package engineered for total domestic energy resilience.

The installed solar package provides immediate operational independence:

- High-Efficiency Solar PV Panel installed for maximum daily energy capture.
- Intelligent Lithium Battery Storage Unit reserving clean energy for seamless deployment during nighttime blackouts.
- Energy-Efficient High-Lumen LED Luminaires flooding living spaces, kitchen areas, and hallways with bright, clear light.
- Multi-Port USB Charging Hub keeping mobile devices powered at home to ensure emergency communication readiness.

The deployment of the Solar Home System has transformed Abdul Sattar's home from a space of grid-dependent disruption into a self-sustaining domestic environment. The system automatically bridges power gaps, ensuring evening chores, cooking, and family gatherings continue effortlessly regardless of grid status.

Eliminating emergency candles and kerosene lamps has cleared the indoor air of toxic particulates while removing fire hazards entirely. Furthermore, avoiding recurring purchases for backup lighting fuel preserves vital funds from the family's monthly budget. Expressing his sincere appreciation to the implementation team, Mr. Abdul Sattar noted that the system has delivered true independence—restoring dignity, comfort, and productivity to his family's daily life.

"Energy access is fundamentally about human dignity and domestic control. For Abdul Sattar's family in Badin, a Solar Home System is not just a backup light—it is a tool of self-reliance that ensures a failing electrical grid can no longer freeze household life, endanger family safety, or dictate when a home goes dark."

Abdul Sattar's experience reflects the core mission of the Solar Home System Initiative. By supplying reliable, sustainable solar infrastructure to grid-stressed communities across District Badin, the project continues to eliminate domestic vulnerabilities, stabilize daily living conditions, and foster long-term community resilience across Sindh.

Impact Story # 05

S-E-L-F

Socio-Economic Energy & Local Freedom

- **S – Severing Expense Leaks:** Halting daily cash outflow spent on temporary battery refills, commercial charging, and emergency lighting wicks.
- **E – Evening Productive Hours:** Extending functional household time past sunset without relying on an unreliable utility grid.
- **L – Liberating Family Income:** Redirecting saved fuel money back into essential family nutrition, health, and farm needs.
- **F – Fostering Domestic Security:** Removing smoke hazards and open flames from tight living quarters to establish a safe home environment.
- **Beneficiary: Muhammad Rahokaro**
- **CNIC: 41105-1446287-3**
- **Contact: 03283758750**
- **Location: Village M. Juman Rahokaro, UC Mir Sahib Khan Talpur @ Saeedpur, Taluka Talhar, District Badin**

"In our village, when sunset came during a blackout, everything stopped. We were spending hard-earned income just to keep a single bulb alive or charge a phone outside. Today, we control our own power. Our home stays safe, well-lit, and functional without a single rupee wasted on emergency fuels."

– **Muhammad Rahokaro**

In Village M. Juman Rahokaro, unpredictable grid performance routinely left households in the dark, creating unproductive conditions during peak evening hours. For Muhammad Rahokaro, this instability meant more than just dark rooms—it created a compounding financial and operational drain.

To maintain basic visibility after dark, the household was forced to rely on inefficient, temporary energy sources like kerosene wicks and throwaway batteries. These recurring expenses drained the family's modest income while offering poor lighting quality and polluting indoor air. After dusk, basic domestic logistics, livestock management, and family coordination became hazardous and stressful tasks.

Clean-Tech Integration for Household Stability: Through the Government of Sindh's renewable energy initiative, executed in partnership with SRSO, a standalone Solar Home System (SHS) was installed at Muhammad Rahokaro's residence.

The hardware intervention provides reliable off-grid utility:

- High-Yield Solar PV Module engineered to withstand local climatic conditions and capture maximum daylight.
- Dedicated Energy Storage Unit ensuring zero power interruption throughout dark hours.
- High-Lumen, Low-Wattage LED Lighting illuminating interior rooms, cooking areas, and outdoor entryways clearly.
- Integrated Multi-Port Charging Interface giving the family continuous local communication access without paying external fees.

Impact Story # 05

S-E-L-F

Socio-Economic Energy & Local Freedom

Empowered Living and Socio-Economic Progress The installation of the Solar Home System has altered the daily rhythm of Muhammad Rahokaro's home. Nighttime productivity is no longer restricted by blackout schedules. Household routines run smoothly, family members navigate the premises safely, and children pursue their personal growth in a bright, healthy atmosphere.

By eliminating recurring expenses for temporary lighting sources, the solar system has plugged a persistent financial leak in the household budget. Expressing his gratitude to the Energy Department and SRSO, Mr. Rahokaro highlighted that the intervention goes far beyond lighting—it delivers economic dignity, enhances living standards, and proves how targeted public sector initiatives build lasting independence for rural communities across Sindh.

"True empowerment occurs when a family no longer has to choose between basic night light and their daily food budget. For Muhammad Rahokaro, clean solar infrastructure converts erratic local power into domestic security and financial independence."

Sustaining Rural Growth Muhammad Rahokaro's transformation demonstrates the practical reach of Sindh's green energy drive. By equipping off-grid households in District Badin with self-sustaining solar tools, the program continues to elevate rural living standards, strengthen local micro-economies, and pave the way for sustainable community development.



V-I-T-A-L

Village Innovation & Thermal Access Linkage

V – Ventilation & Heat Relief: Powering low-wattage DC fans to safeguard family members from dangerous heatwaves during extended blackouts.

I – Interruption-Free Living: Decoupling daily family routines from chronic grid failures and unannounced utility load-shedding.

T – Toxic-Smoke Elimination: Replacing hazardous kerosene lamps and dangerous candles with clean, zero-emission LED illumination.

A – Active Night Operations: Keeping cooking areas, indoor spaces, and entryways bright and navigable after sunset.

L – Liberated Household Income: Stopping recurring cash drains on temporary battery swaps, fuel wicks, and commercial phone charging fees.

- Beneficiary: Ghulam Mohammad Solangi
- CNIC: 41103-7485609-9
- Contact: 03403606887
- Location: Village Haji Abdullah Halepto, Taluka Matli, District Badin, Sindh, Pakistan

In Village Haji Abdullah Halepto, located within Taluka Matli, access to grid electricity was unstable and unreliable. For Ghulam Mohammad Solangi and his family, prolonged load-shedding created an exhausting cycle of domestic disruption, health hazards, and persistent financial leakage.

During the oppressive heat of Badin's summer months, sudden power cuts trapped stifling air inside the home, causing severe discomfort and sleepless nights. After dusk, the family relied on dim kerosene lamps and emergency candles. These temporary workarounds filled living quarters with toxic soot and smoke, posing constant fire hazards while offering minimal visibility.

Furthermore, purchasing lighting fuels and paying third-party fees to charge mobile phones eroded the family's limited income every week.

To permanently solve these off-grid challenges, the Sindh Solar Home System Scheme deployed a complete, high-efficiency solar package tailored directly to the family's daily power requirements.

The technical installation includes: High-Efficiency Solar PV Module engineered to withstand harsh local weather while converting sunlight into usable power.

Long-Life Battery Storage Unit storing clean energy to power the home seamlessly through the night. High-Lumen, Low-Wattage LED Luminaires providing steady, flicker-free light across all rooms. Energy-Efficient DC Fan System delivering continuous airflow and thermal relief during extreme heat. Multi-Port USB Charging Interface allowing phone charging directly at home without external fees.

"For years, prolonged power outages left us in heat and darkness, draining our small budget just to keep emergency lights burning. Today, this solar package has brought peace, health, and total security to our doorstep. We no longer fear the dark or rising energy costs."

– Ghulam Mohammad Solangi



Impact Story # 06

V-I-T-A-L

Village Innovation & Thermal Access Linkage

The installation of the Solar Home System has transformed Ghulam Mohammad Solangi's residence into a clean, cool, and self-sufficient environment. Nighttime domestic work now proceeds without hazard, family members sleep comfortably despite power failures, and indoor air remains completely free of dangerous combustion gases.

Financial relief followed immediately. By eliminating daily spending on backup lighting fuels and battery replacements, the Solangi family retains more money for essential food, health, and household needs.

Expressing his deep gratitude, Ghulam Mohammad Solangi shared:

"The Sindh Government's solar initiative together with the Solar Home System has completely changed our lives. We no longer worry about long power outages or heavy electricity bills. My home is bright, my children can study comfortably, and our daily life is peaceful.

"Energy access is fundamentally a matter of health, relief, and economic dignity. For Ghulam Mohammad Solangi's household in Matli, decentralized solar technology does not merely replace grid power—it clears the air of toxic smoke, restores restful sleep, and proves that public sector green initiatives can transform rural lives from the ground up."

Strengthening Rural Sindh: Ghulam Mohammad Solangi's transformation demonstrates the practical success of the Sindh Solar Home System Scheme. By equipping vulnerable households across District Badin with reliable renewable infrastructure, the Government of Sindh continues to eliminate energy poverty, improve rural public health, and drive sustainable development across the province.



Impact Story # 07

S-A-F-E

Solar Access Fostering Empowerment

S – Storming Financial Leaks: Halting continuous cash drain spent on disposable batteries, emergency candles, and torch repairs.

A – Academic Continuity: Shielding children's night study routines and exam preparation from unannounced, multi-hour power outages.

F – Fire & Smoke Hazard Elimination: Replacing dangerous open flames and toxic candle fumes with clean, zero-emission LED illumination.

E – Evening Domestic Security: Guaranteeing steady, reliable lighting for indoor mobility, meal preparation, and family safety after dark.

- **Beneficiary:** Qadir Bux Mallah
- **Father's Name:** Vikio Mallah
- **CNIC:** 41101-8515493-1
- **Contact:** 0314-8380298
- **Location:** Village Haji Umer Vikio Mallah, Kadhan Road, UC Muhammad Khan Bhurgari, District Badin

"Buying candles, replacing burnt-out torch batteries, and paying to charge our lights week after week was taking money directly out of our kitchen budget. For a low-income family, every rupee counts. Today, clean solar energy costs us nothing to run, allowing us to keep our hard-earned money for food and healthcare."

– Qadir Bux Mallah

In Village Haji Umer Vikio Mallah along Kadhan Road in District Badin, managing a tight household budget on a limited income required constant trade-offs. While Qadir Bux Mallah's home had an electricity connection, persistent and prolonged load-shedding forced the family into an expensive cycle of secondary lighting costs.

To keep their home functional after dusk, the family relied heavily on disposable candles, rechargeable torches, and dry-cell batteries. Torches frequently broke down, battery life degraded rapidly under heavy use, and candle prices continuously chipped away at their daily earnings. Over the course of a month, these small, recurring expenditures added up to a significant financial burden. Purchasing a commercial solar unit to break this cycle was entirely beyond their financial capacity.

Relief arrived when the Government of Sindh, in partnership with the Sindh Rural Support Organization (SRSO), selected Qadir Bux Mallah to receive a fully subsidized, complete Solar Home System package.

The cost-eliminating hardware installation includes:

- High-Efficiency Solar PV Module generating 100% free daily electricity from solar radiation.
- Long-Life Lithium Battery Unit providing reliable, zero-cost energy storage for complete nighttime operation.
- Energy-Efficient LED Luminaires delivering high illumination while drawing minimal power from the battery reserve.
- Integrated Multi-Port USB Hub enabling free, home-based mobile device charging to eliminate third-party charging fees.

Impact Story # 07

S-A-F-E

Solar Access Fostering Empowerment

The installation of the Solar Home System provided instant financial relief to Qadir Bux Mallah's household. By replacing consumable lighting sources with self-sustaining solar energy, the family plugged a persistent monetary leak in their monthly budget. The recurring need to purchase candles, buy batteries, or repair temporary lighting units was eliminated. The money saved is now retained directly within the home, strengthening the family's financial security and allowing them to allocate funds toward better nutrition and healthcare needs.

Expressing his deep gratitude, Qadir Bux Mallah stated: "I sincerely thank the Government of Sindh for launching this valuable initiative for deserving families for their commitment to public welfare and for making this life-changing support possible."

He further added: "I am also deeply thankful to the Sindh Rural Support Organization (SRSO) for providing me with the Solar Home System completely free of cost and for professionally installing it at my home. Their support has transformed our daily life. Today, our home is brighter, our financial strain is reduced, and our family enjoys a better quality of life. I hope that such welfare initiatives will continue to benefit many more deserving families across Sindh."

"Energy poverty is intimately linked to financial vulnerability. For Qadir Bux Mallah's family in Badin, free access to solar infrastructure does not just provide light—it halts the steady erosion of their hard-earned income, turning clean energy into a foundation for true household economic stability."

Building Economic Resilience in Rural Sindh: Qadir Bux Mallah's experience highlights the economic power of Sindh's renewable energy drive. By deploying free, zero-maintenance solar infrastructure to vulnerable families across District Badin, the Government of Sindh and SRSO are reducing poverty, protecting household budgets, and fostering long-term economic resilience across the province.



S-T-A-B-I-L-I-T-Y

Solar Technology Achieving Better Indoor Living, Illumination, & Thermal Yields

S – Shielding Evening Domestic Tasks: Ensuring women in the household can prepare meals and manage domestic duties safely after dark.

T – Thermal Relief & Comfort: Supplying reliable DC power for continuous cooling during sweltering coastal summer heatwaves.

A – Academic Protection: Safeguarding children's night study and homework schedules from unannounced, multi-hour power outages.

B – Bridging Grid Failures: Decoupling daily family routines from an unpredictable utility grid through standalone solar storage.

I – Illuminated Home Safety: Providing constant LED illumination across living spaces to prevent nighttime hazards and injuries.

L – Liberating Family Finances: Eliminating recurring spending on secondary fuels, emergency candles, and torch batteries.

I – Independent Energy Autonomy: Generating self-sustaining, clean electricity directly on the rooftop.

T – Transformative Quality of Life: Elevating daily living conditions, domestic peace, and security for low-income rural households.

Y – Yielding Community Growth: Fostering long-term resilience and well-being in off-grid and grid-stressed communities across Sindh.

- **Beneficiary:** Ghulam Mohammad Soomro
- **Father's Name:** Allah Dino
- **CNIC:** 41101-8757724-1
- **Contact:** 0335-3657480
- **Location:** Village Umar Soomro, UC Peeru Lashari, Taluka Talhar, District Badin

"When the power cuts out at night during the summer heat, life inside the house comes to a complete standstill. Cooking in darkness was dangerous, and our children couldn't focus on their studies. Today, our Solar Home System keeps our home bright, cool, and safe through every outage—restoring peace and comfort to our entire family."

– Ghulam Mohammad Soomro

In Village Umar Soomro, located within UC Peeru Lashari, Taluka Talhar, having an active grid connection provided little real security for Ghulam Mohammad Soomro and his family. The area suffers from severe, extended load-shedding, which routinely leaves households in total darkness during peak evening hours.

This systemic energy deficit placed an undue burden on every member of the household. The women faced significant hazards and delays while preparing night meals in pitch darkness. School-age children struggled to complete homework under dim, temporary lights that strained their eyes and disrupted their concentration. During the oppressive heat of Badin's summer season, prolonged blackouts trapped stifling air indoors, turning rest and recovery into an exhausting ordeal.

S-T-A-B-I-L-I-T-Y

Solar Technology Achieving Better Indoor Living, Illumination, & Thermal Yields

To resolve this severe domestic disruption, the Government of Sindh, in coordination with the Sindh Rural Support Organization (SRSO), equipped Ghulam Mohammad Soomro's household with a complete Solar Home System package.

The clean-energy deployment provides immediate operational independence:

- High-Efficiency Solar PV Module engineered to harvest maximum daily solar energy under local conditions.
- Long-Life Battery Energy Storage Unit reserving clean power for seamless operation during evening blackouts.
- High-Lumen, Low-Wattage LED Luminaires delivering constant, flicker-free illumination across kitchens, study areas, and living rooms.
- Multi-Port Charging Hub keeping mobile devices powered at home to ensure continuous family communication.

Restoring Comfort, Safety, and Quality of Life : The deployment of the Solar Home System has transformed Ghulam Mohammad Soomro's residence into a self-sustaining domestic sanctuary. Clean solar power now automatically bridges utility outages, ensuring that evening chores, cooking, and family gatherings continue effortlessly regardless of grid status.

Children now study under bright, healthy LED lighting without academic delays, and the family enjoys thermal relief and enhanced security throughout the night.

Expressing his heartfelt appreciation, Ghulam Mohammad Soomro stated: "The Solar Home System has greatly reduced the hardships caused by frequent power outages, improving our daily life and giving us a sense of comfort, security, and hope for the future. I express my sincere gratitude to the Government of Sindh for providing this valuable facility to deserving families."

He especially extended his thanks to the leadership: "I am deeply grateful to the Government of Sindh for their commitment to public welfare and for making such beneficial initiatives possible. I pray that these welfare programs continue so that many more deserving families across Sindh can benefit from clean and reliable solar energy."

"True energy security goes beyond wires and meters—it is about domestic peace, human dignity, and uninterrupted living. For Ghulam Mohammad Soomro's family in Talhar, decentralized solar technology transforms a fragile power grid into genuine energy autonomy, ensuring that darkness and heat no longer disrupt family life."

Strengthening Rural Sindh: Ghulam Mohammad Soomro's story highlights the core vision of the Sindh Solar Home System Initiative. By providing self-sustaining, renewable energy tools to grid-stressed families across District Badin, the Government of Sindh and SRSO continue to eliminate domestic vulnerabilities, improve public health, and build long-term community resilience.



Impact Story # 09

D-I-G-N-I-T-Y

Decentralized Infrastructure Generating New Indifference To Years of Off-Grid Darkness

D – Direct Zero-Grid Access: Delivering immediate clean power to a household historically excluded from the central electrical grid.

I – Illuminated Academic Safety: Eliminating eye strain and severe study delays by replacing weak torchlight with bright LED illumination.

G – Guaranteed Evening Mobility: Ensuring women can navigate living quarters and cook dinner safely after dark without open-flame risks.

N – Nulled Secondary Costs: Stopping continuous household cash leaks spent on purchasing lamp oil, battery cells, and torch maintenance.

I – Indoor Health Protection: Clearing living rooms of soot, carbon smoke, and toxic emissions caused by traditional oil lamps.

T – Total Household Transformation: Replacing decades of night-time isolation with daily domestic security, comfort, and peace of mind.

Y – Yielding Long-Term Resilience: Establishing a foundation of solar power that elevates the overall living standard of vulnerable rural families.

- Beneficiary: Abdul Kareem
- Father's Name: Muhammad Yousif
- CNIC: 41101-6568627-7
- Contact: 0342-3669202
- Location: Village Yousif Soomro, District Badin, Sindh

"For years, our nights were spent in dim, smoky darkness. Cooking dinner was dangerous, and our children had to squeeze around a single handheld torch just to do their schoolwork. Having clean solar energy directly in our home has restored our health, protected our children's future, and given our family true dignity."

– Abdul Kareem

In Village Yousif Soomro, living without access to basic utility infrastructure was a harsh daily reality for Abdul Kareem and his financially vulnerable family. Unlike homes struggling with grid load-shedding, his residence had zero grid connectivity, leaving the family in total darkness as soon as the sun went down.

To maintain minimal visibility after dusk, the family relied on traditional oil lamps and a single handheld torch. The weak, flickering illumination made simple domestic routines an exhausting ordeal. Women in the household navigated cooking areas in deep shadow, facing constant burns and safety hazards. Most critically, school-age children were forced to do their homework under the harsh, concentrated light of a torch, causing eye strain, physical discomfort, and severe academic impairment.

Subsidized Solar Hardware Integration: To resolve this deep structural vulnerability, the Government of Sindh, through its flagship renewable energy program in partnership with SRSO, provided Abdul Kareem with a complete, fully funded Solar Home System.

The clean-tech infrastructure includes:

- High-Yield Rooftop Solar PV Module engineered for maximum energy conversion in rural, off-grid environments.
- Long-Life Battery Storage Unit storing daytime energy to provide reliable, zero-cost electricity throughout the night.
- High-Lumen, Low-Wattage LED Luminaires flooding living quarters, cooking areas, and study rooms with clear, flicker-free light.
- Integrated Multi-Port USB Charging Hub giving the family free, home-based phone charging access for continuous communication.

Impact Story # 09

D-I-G-N-I-T-Y

Decentralized Infrastructure Generating New Indifference To Years of Off-Grid Darkness

The installation of the Solar Home System marked an absolute turning point for Abdul Kareem's home. The transition from toxic oil lamps to clean solar power has permanently cleared indoor air, protected family health, and eliminated the continuous financial strain of buying lighting oil and battery replacements. Children now study comfortably in well-lit rooms every evening without eye fatigue, while domestic chores are carried out efficiently and safely.

Expressing his happiness and gratitude, Abdul Kareem stated: "The Solar Home System has been a life-changing support for our family. It has not only brought light into our home, but has also improved our children's education and elevated our overall standard of living."

He further extended his appreciation to the leadership and program operators:

"I express my heartfelt gratitude to the Government of Sindh for providing this valuable support through the Solar Home System initiative. Their commitment to public welfare has extended this vital facility to deserving families who need it most. This initiative has



Transformed my family's life by bringing light, comfort, and dignity to our home, and I sincerely hope that such welfare programs will continue to benefit more deserving households across Sindh."

"Energy access is the ultimate equalizer. For Abdul Kareem's family in Village Yousif Soomro, transitioning directly from oil lamps to clean solar power is not just about illumination—it is about health, educational equality, and proving that targeted public initiatives can restore economic dignity to the most vulnerable off-grid communities."

Paving the Way for Rural Sindh: Abdul Kareem's story demonstrates the profound human impact of Sindh's off-grid solar initiative. By delivering self-sustaining renewable technology to un-electrified households across District Badin, the Government of Sindh and SRSO continue to eliminate rural energy poverty, safeguard public health, and build resilient futures across the province.

Impact Story # 10

H-O-P-E

Household Overhaul Providing Empowerment

H – Humanitarian Care Support: Providing continuous, steady LED lighting to assist Mojhi in caring for her eldest son, who lives with nighttime visual impairment and mobility challenges.

O – Off-Grid Thermal Comfort: Supplying reliable DC power for continuous fan operation during humid monsoon rains and severe summer heat.

P – Protecting Household Finances: Eliminating recurring expenses and travel associated with commercial mobile battery charging.

E – Expanded Evening Safety: Transforming a single-room mud house into a brightly lit, safe domestic environment free from darkness and pest hazards.

- Beneficiary: Mojhi
- Husband's Name: Aalam (Small-Scale Farmer)
- CNIC: 41105-1013399-0
- Contact: 0343-3695269
- Location: Village Haji Chutto Bhurgri, Union Council Tharokot, District Badin, Sindh

"For 13 long years, our family lived in total darkness. Managing a home in a single mud room during hot summer nights and rainy seasons was an endless struggle—especially when caring for my son who cannot see at night or walk. Today, clean solar energy keeps a fan running and lights our room brightly every evening. It has given us comfort, safety, and a reason to hope."

– Mojhi

In Village Haji Chutto Bhurgri, basic energy access was out of reach for Mojhi and her family. Living in a single-room mud home with her husband Aalam—a small-scale farmer whose modest earnings often struggle to cover two meals a day—purchasing a commercial solar setup was impossible. For 13 years, the household coped without grid power. The hardship intensified during humid monsoon months and extreme summer heatwaves, where the lack of ventilation made living conditions inside the mud structure stifling and unbearable. Nighttime brought additional risks: Mojhi's eldest son, born with a severe physical disability and poor night vision, required constant care in complete darkness. To secure a few hours of weak light, the family had to send mobile-phone batteries outside the village for commercial charging—a process that was both uncertain and costly for their tight budget.

To address these severe domestic and caregiving challenges, the Government of Sindh, in partnership with the Energy Department and the Sindh Rural Support Organisation (SRSO), selected Mojhi's family to receive a fully subsidized Solar Home System package.

The hardware installation provides immediate off-grid utility:

- High-Yield Rooftop Solar PV Module engineered to convert daylight into free, self-sustaining electricity.
- Long-Life Battery Storage Unit holding clean power reserve for uninterrupted nighttime operation. High-Lumen LED Luminaires delivering clear, flicker-free light across the home to support nighttime mobility and caregiving.
- Energy-Efficient DC Fan System offering immediate cooling relief during peak heat and humid rainy seasons. Integrated Multi-Port Charging Hub allowing the family to charge mobile phones directly at home without paying third-party fees.

Impact Story # 10

The deployment of the Solar Home System has permanently reshaped daily life for Mojhi and her four children. Continuous ventilation now keeps their living space cool during heavy rains and oppressive summer days, allowing the family to sleep comfortably and safely.

Nighttime care for her son is carried out under bright, dependable lighting, removing safety risks and emotional stress. Furthermore, keeping phone charging in-house has stopped a small but persistent drain on their daily meal budget.

Expressing her deep appreciation, Mojhi stated: "I am deeply grateful to the Government of Sindh, the Energy Department, and SRSO for the solar scheme. The solar system installed in our home has transformed our lives. For the first time, my children and I can sleep comfortably with a working fan during the rainy season. Small tasks such as studying, household work, and caring for my son are now easier."

She added: "This solar intervention has brought light into our home and hope into our lives. I sincerely thank everyone involved for giving us this life-changing support."

"Energy access is deeply connected to human dignity and caregiving. For Mojhi's household in UC Tharokot, decentralized solar technology does more than illuminate a room—it relieves thermal stress during harsh seasons, supports vulnerable family members, and proves how targeted green welfare can uplift the most resilient households in rural Sindh."

Mojhi's story demonstrates the core purpose of Sindh's off-grid solar initiative. By providing clean, self-sustaining energy tools to vulnerable, un-electrified households across District Badin, the Government of Sindh, the Energy Department, and SRSO continue to eliminate energy poverty, support specialized family care, and build lasting community resilience.







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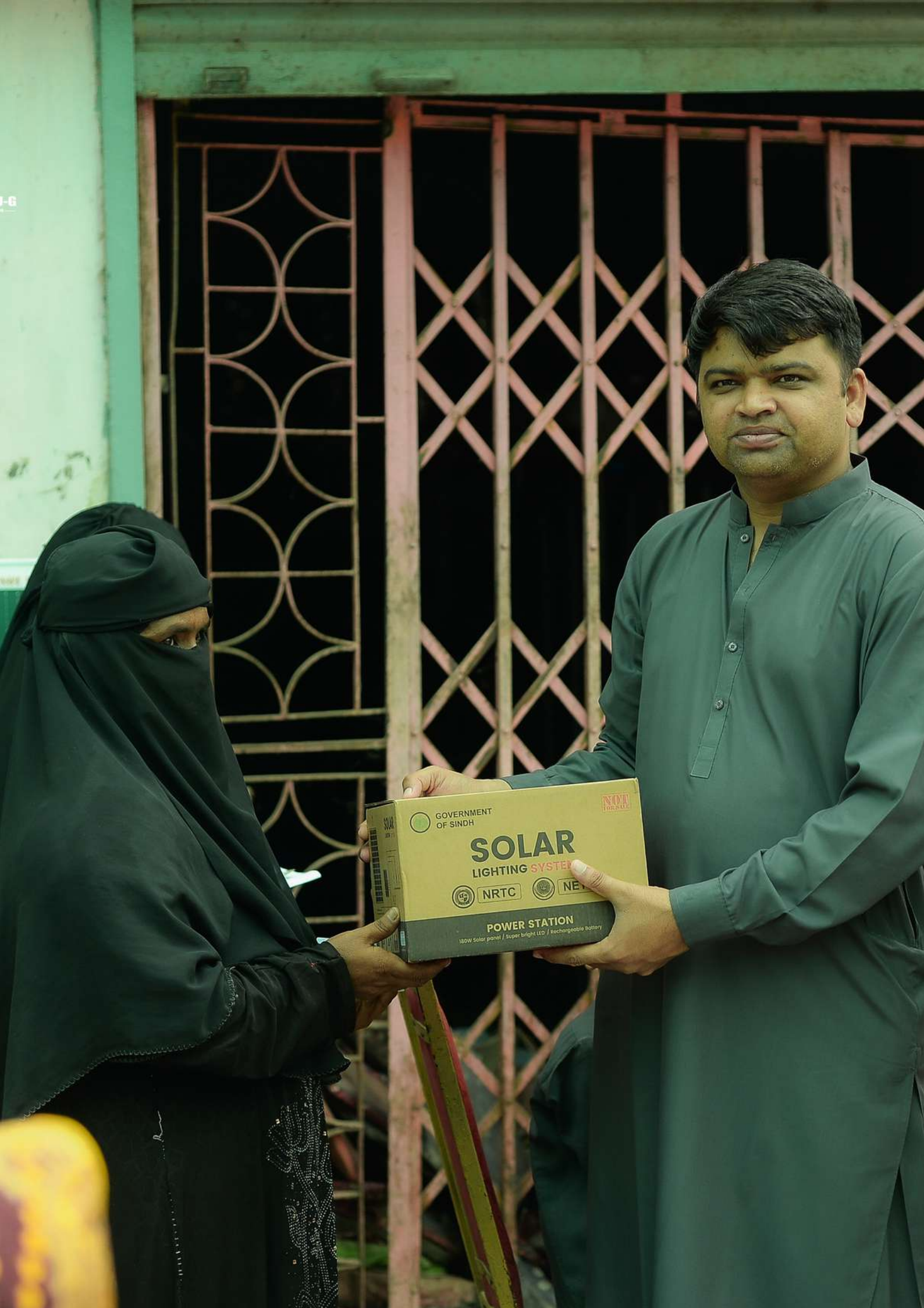
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