



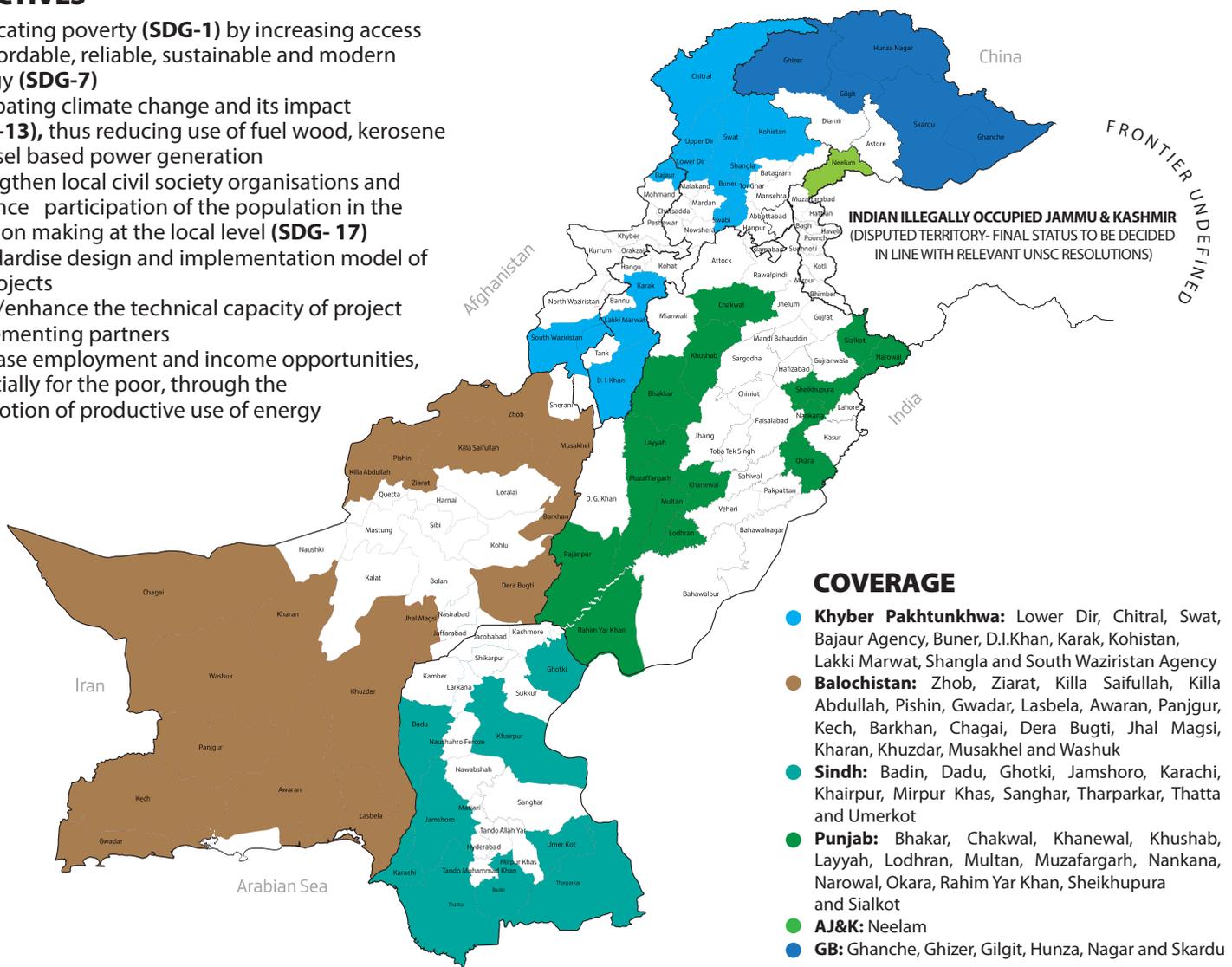
## RENEWABLE ENERGY PROGRAMME

PPAF has so far supported the implementation of more than 1300 Renewable Energy (RE) projects of diverse types and various capacities. These include the design and implementation of mini & micro hydropower projects, solar lighting and water pumping systems, wind energy projects, solar-wind hybrid and biogas plants.

Mini-solar grid system installed in District Swabi, Khyber Pakhtunkhwa

### OBJECTIVES

- Eradicating poverty (**SDG-1**) by increasing access to affordable, reliable, sustainable and modern energy (**SDG-7**)
- Combating climate change and its impact (**SDG-13**), thus reducing use of fuel wood, kerosene & diesel based power generation
- Strengthen local civil society organisations and enhance participation of the population in the decision making at the local level (**SDG- 17**)
- Standardise design and implementation model of RE projects
- Build/enhance the technical capacity of project implementing partners
- Increase employment and income opportunities, especially for the poor, through the promotion of productive use of energy



### COVERAGE

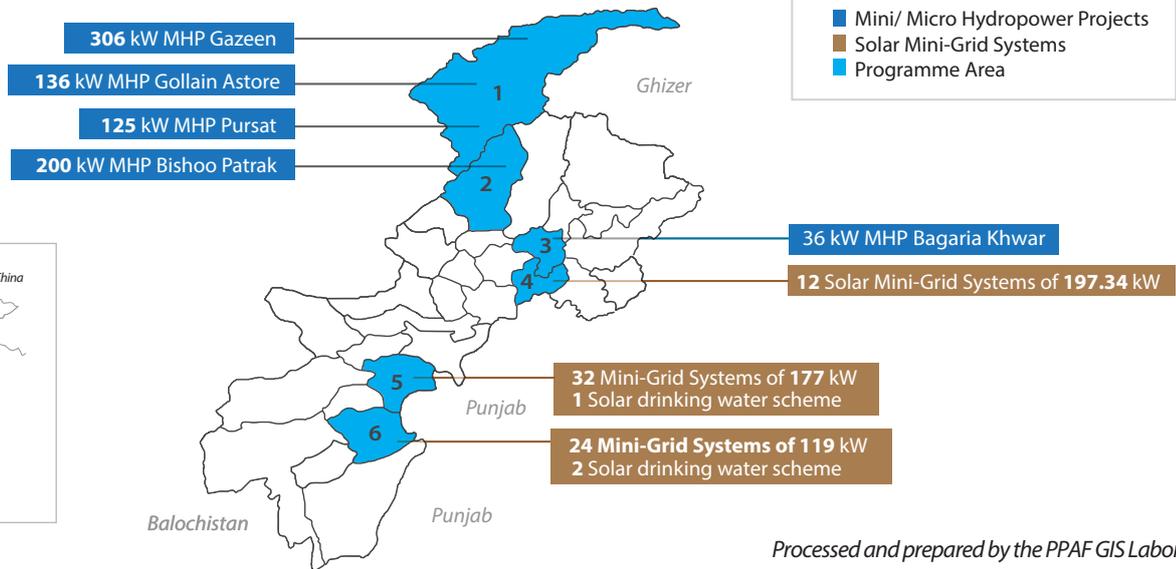
- **Khyber Pakhtunkhwa:** Lower Dir, Chitral, Swat, Bajaur Agency, Buner, D.I.Khan, Karak, Kohistan, Lakki Marwat, Shangla and South Waziristan Agency
- **Balochistan:** Zhob, Ziarat, Killa Saifullah, Killa Abdullah, Pishin, Gwadar, Lasbela, Awaran, Panjgur, Kech, Barkhan, Chagai, Dera Bugti, Jhal Magsi, Kharan, Khuzdar, Musakhel and Washuk
- **Sindh:** Badin, Dadu, Ghotki, Jamshoro, Karachi, Khairpur, Mirpur Khas, Sanghar, Tharparkar, Thatta and Umerkot
- **Punjab:** Bhakar, Chakwal, Khanewal, Khushab, Layyah, Lodhran, Multan, Muzafargarh, Nankana, Narowal, Okara, Rahim Yar Khan, Sheikhupura and Sialkot
- **AJ&K:** Neelam
- **GB:** Ghanche, Ghizer, Gilgit, Hunza, Nagar and Skardu

# THE DEVELOPMENT OF HYDROPOWER AND RENEWABLE ENERGY (HRE) PROJECT KHYBER PAKHTUNKHWA

Funded by the Federal Republic of Germany through KfW and implemented by Pakistan Poverty Alleviation Fund (PPAF), the HRE Project was initiated in 2013. The Project mainly comprises of two components i.e. Mini/Micro Hydropower Projects and Solar Mini Grid Systems. PPAF is implementing this Project through indigenous and specialized Partner Organisations including Aga Khan Rural Support Programme (AKRSP), National Rural Support Programme (NRSP), Sarhad Rural Support Programme (SRSP), Community Motivation & Development Organisation (CMDO) and Social Action Bureau for Assistance in Welfare & Organisational Networking (SABAWON). Additional phase DKT-German Climate-Technology Initiative covering necessary trainings and capacity building of community for operation and maintenance of the installed systems, installation of solar water pumps, connections to additional households and Tree Plantation has been initiated. This phase spans over two years and will be completed by the end of 2021.

## COVERAGE

1. Chitral
2. Upper Dir
3. Buner
4. Swabi
5. Karak
6. Lakki Marwat



Processed and prepared by the PPAF GIS Laboratory

## OVERVIEW

 <b>Project Cost:</b> <b>11 Million €</b>	 <b>Project Recipients:</b> <b>16,819</b> (2,155 households)	 <b>Year of Commencement:</b> <b>2013</b>	 <b>Targetted Year of Completion:</b> <b>2021</b>	 <b>Project Implementating partner Organisations:</b> <b>05</b>
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Cumulative December, 2021 | Source: Quality Assurance, Research & Design- PPAF

## COMPONENTS

### Mini/Micro Hydro Power Projects

Five mini/ micro hydro power plants with total installed capacity of over **800 kW** have been implemented in Chitral, Upper Dir and Buner Districts of Khyber Pakhtunkhwa. The produced electricity is sufficient to meet not only the lighting, cooking and heating requirements of the community, it will also be used to fulfill energy needs of small and mini enterprises. This will increase the household income, add value to local products and transform lives of marginalized communities.

### Solar Mini-grid Systems

**68** Solar Mini-grid Systems with total installed capacity of **493.52 kW**s (ranging from 2 kW to 51 kW) have been installed in remote and off-grid locations of Karak, Swabi and Lakki Marwat districts of Khyber Pakhtunkhwa. These Solar Mini-Grid Systems are not only meeting basic lighting requirements of the community, but also supporting the village level businesses and local enterprises.

### Tree Plantation

Over **56,596** trees of different species have been planted by communities in the HRE project area of Karak, Lakki Marwat, Swabi, Buner, Chitral and Upper Dir districts. These plants include popular/ local species as well as fruit trees for long term environment and economic benefits of the community.

### Solar Drinking Water Supply Schemes

A total of **3** solar drinking water supply schemes have been completed in the HRE project districts Karak and Lakki Marwat. Overall **1,337** persons (52% women) benefited through these completed solar schemes.