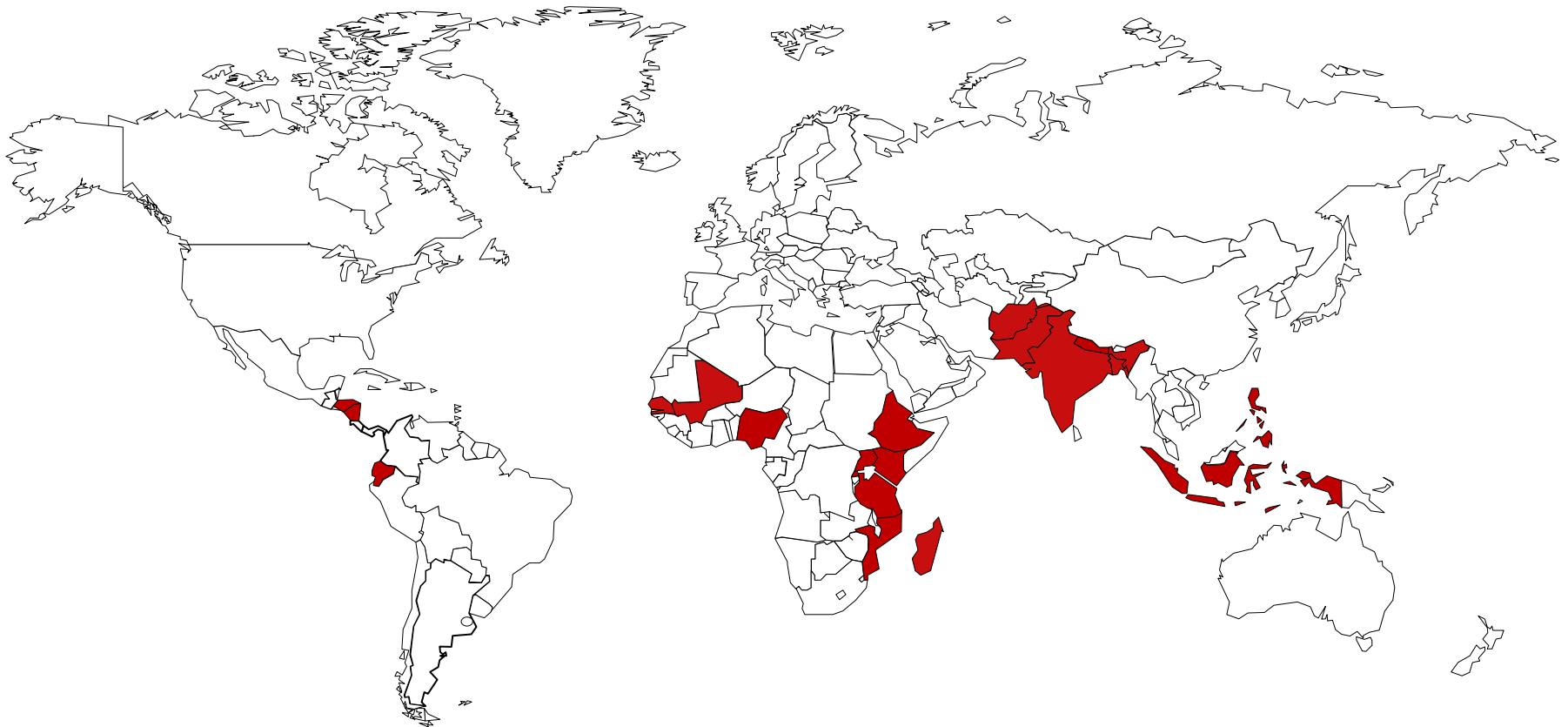# Catalogue of Mini-grid Tools

Bozhil Kondev
17 November 2015

GIZ activities on mini-grids

GIZ services and approach

- **Capacity development and policy preparation support** to public actors and private actors

- Support for **concept/project development, planning and implementation**

- Support to **programme implementation** (e.g. data collection, procurement, monitoring, evaluation)

- Development and implementation of **incentive schemes and promotion instruments**

- **Facilitation of private sector participation**

- **Institutional strentgthening** through secondment of experts

- Facilitation of expert **dialogue and exchange**, stakeholder involvement

- **Knowledge management**

- **Support to international initiatives and actors**

Catalogue of mini-grid tools

- **Rationale:**

  - Reduce transaction costs of practitioners
  - Avoid duplication when developing new tools
  - Identify gaps among the existing tools

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- **Release:**

  - Q1 2016
  - As an output of the Clean Energy Mini-grid HIO

Tools for rural electrification planning and mapping

Bing Maps	Network Planner	SWARM Software
Google Maps	LAP	
GeoSim	developmentmaps.org	

Tools for resource assessment

Solar and Wind Resource Maps	IRENA Global Atlas for Renewable Energy	PVGIS
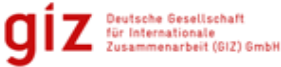
Tools for technical system design and analysis

SMA Sunny Design Off-Grid SMA Off-grid Calculator	HOMER	Demand Analyst	RLI Energy System Model
ASIM	Mini-grid Builder	NSol!	PV Syst
Paladin DesignBase	DAPPER; DC System Analysis Module	ETAP	

Tools for financial planning / business model development

SME Toolkit	NREL Crest	Power and Tariff Calculation Tool for Solar Mini-grids in Indonesia
Business model canvas	Financial Modelling tool; Feed-in-tariff tool; Retail tariff calculation tool	Solar PV–diesel hybrid business planning checklist
RETScreen	IRENA Project Navigator	SPP Evaluator

Tools for operations and management

Productive use promotion tool and impact evaluation guide	SteamaCo	SparkMeter
Supplier Capability Assessment Tool	Lumeter Payment platform	MG Manager

Other tools

WBG Environmental, Health, and Safety Guidelines	Legal templates for generation/distribution licences and PPAs	World Bank collection of Terms of Reference
Key Performance Indicators and Sustainability Survey for PV mini-grids	UNFCCC tool to calculate CO_2 emissions from fossil fuel combustion	Community Toolbox
Cooperative Assessment Tools	Organizational Capacity Assessment Tool	Community Sustainability Assessment tool

Have we missed to include any of your favourite tools?

Let us know:

- By filling out a short survey:

  - https://www.surveymonkey.com/r/5KMR2XJ

- By sending us an email:

  - bozhil.kondev@giz.de / caspar.priesemann@giz.de

The draft catalogue is available online at:

  - https://energypedia.info/wiki/File:Mini-grid_HIO_-_Catalogue_of_Mini-grid_Tools_draft_01112015.docx