

RENEWABLE ENERGY

energizing rural development,
village empowerment
and
creating sustainability

a closer look to
COMMUNITY BASED ELECTRIC POWER SUPPLY CONCEPT
in Indonesia



- > 13.000 island,
- +/- 7000 inhabited island
- +/- 240 million population
- > 66.000 scattered villages
- +/- 105 million unelectrified
- +/- 33.000 unelectrified villages
- (> 125.000 sub villages/ hamlets)

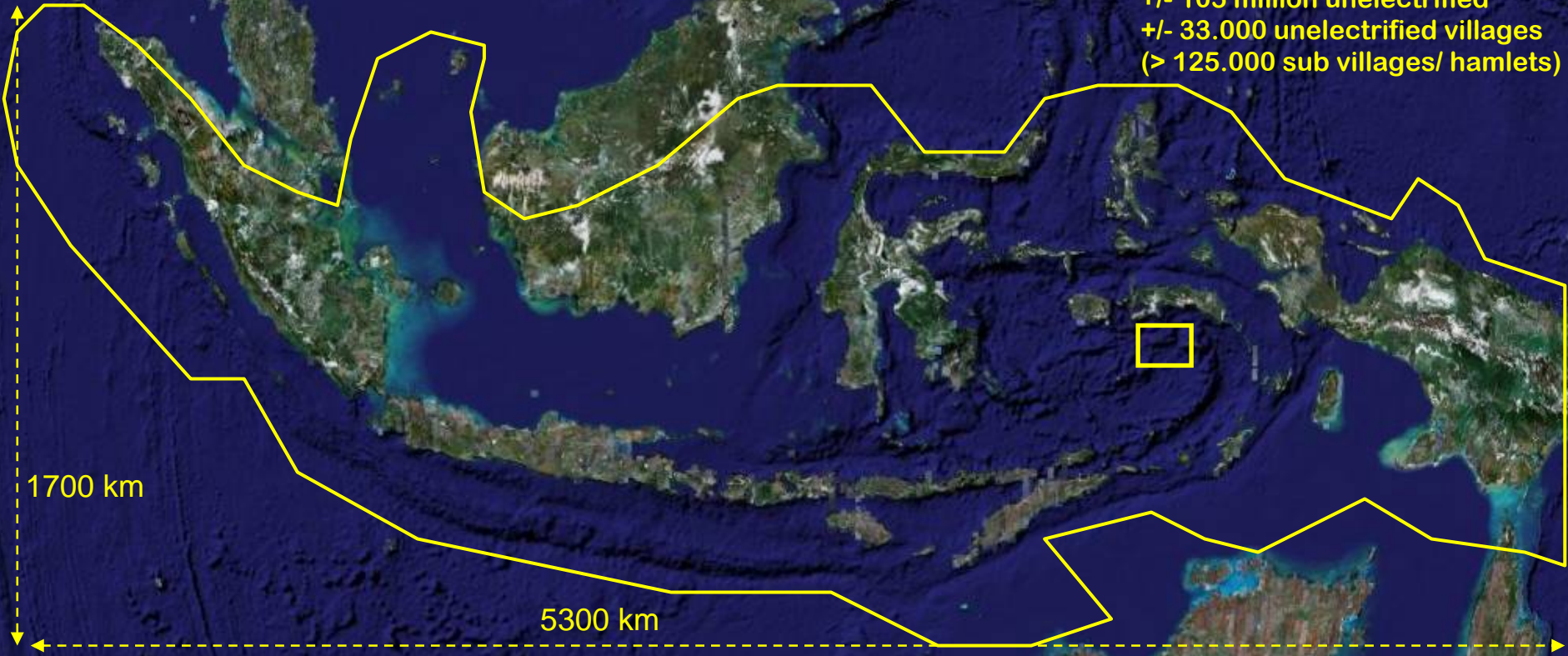
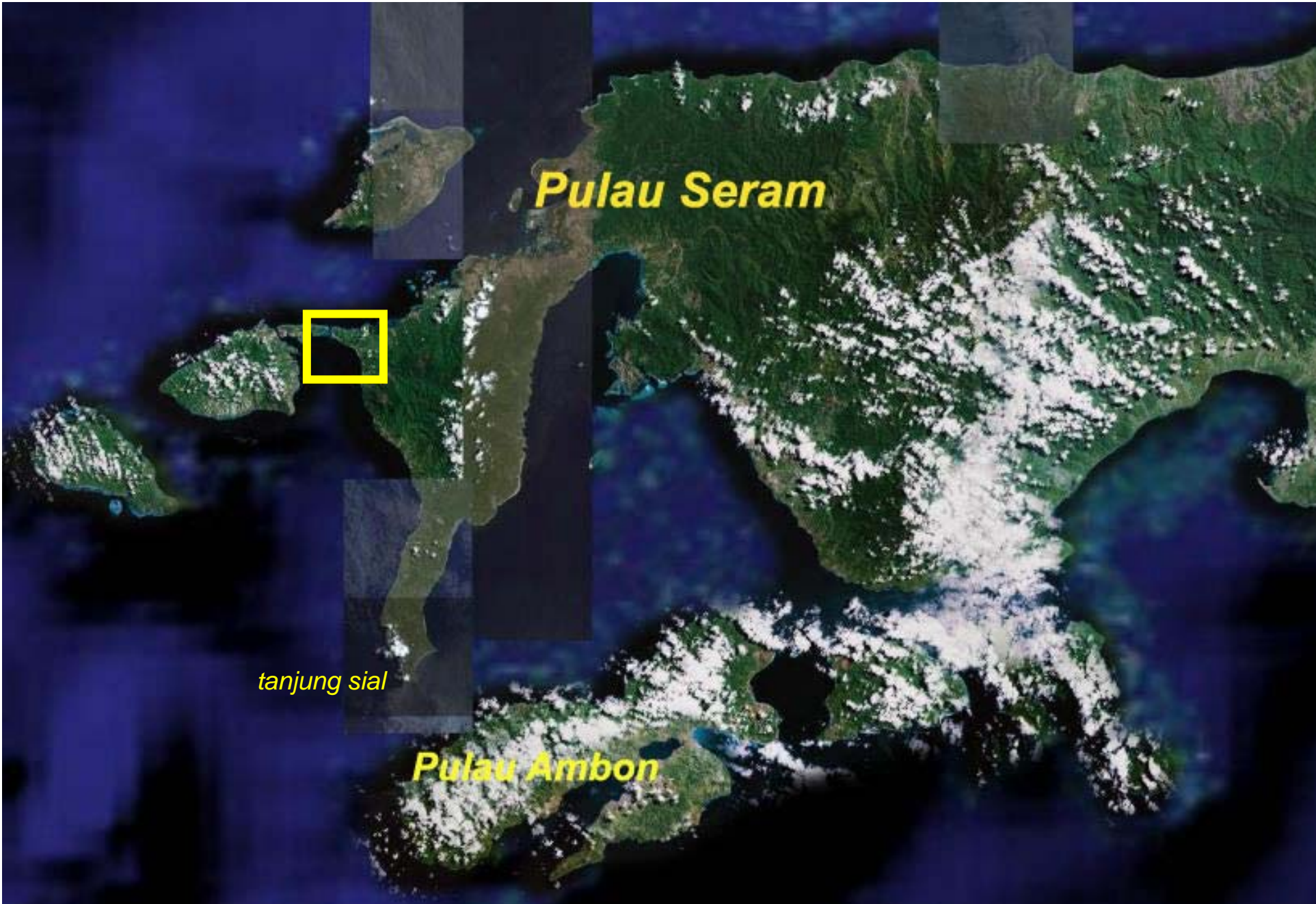


Image NASA
Image © 2007 TerraMetrics

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Pulau Seram

tanjung sial

Pulau Ambon



Telaga Nipah
(520 HH)

Melati
(302 HH)

Alang
(76 HH)

Nagalema
(105 HH)

BATU TAGEPE
3 x 50 KW

Euro 1.6 million

fund needed to electrify 1003 HH



MELATI



ALANG



NAGALEMA







West Jawa



**East
Nusa
Tenggara**



**Nanggroe
Aceh
Darusalam**



**East
Kalimantan**

FALSAFAH DAN PARADIGMA PEMBANGUNAN BERBASIS MASYARAKAT



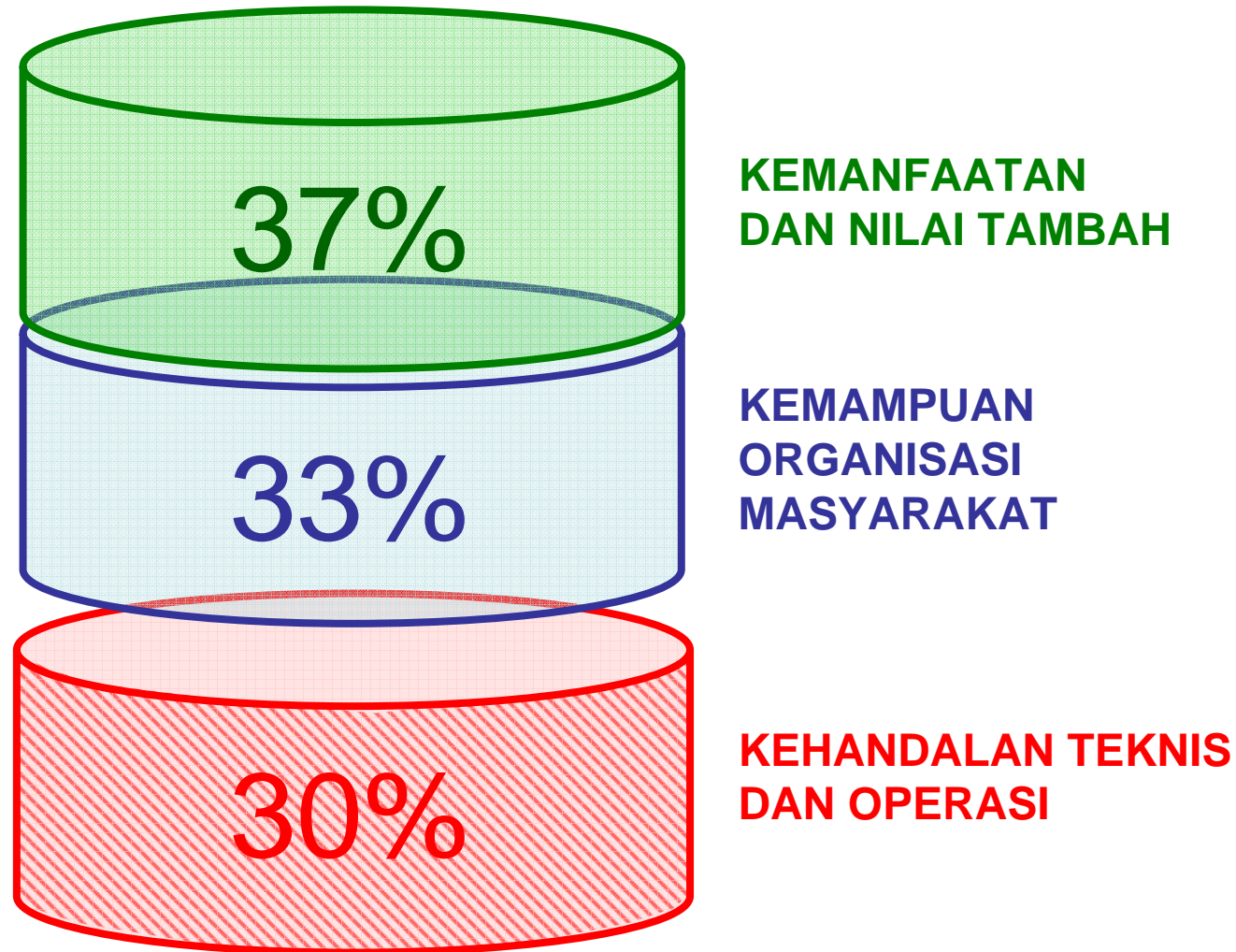
PLTMH BERBASIS MASYARAKAT YANG BAIK DAN BENAR



BERKELANJUTAN SECARA MANDIRI

**PENGOPERASIAN PLTMH OLEH MASYARAKAT
DESA SETEMPAT, BERDASARKAN KEMAMPUAN
LOKAL TANPA DUKUNGAN APAPUN DARI LUAR DESA**

SYARAT PEMBANGKIT MIKROHIDRO UNTUK USAHA KETENAGALISTRIKAN BERBASIS MASYARAKAT



MIKROHIDRO YANG BAIK dan BENAR

DIRENCANAKAN DENGAN BAIK
(well design)
DIBUAT DENGAN BAIK
(well made)

KEHANDALAN TEKNIS
DAN OPERASI

KUALITAS

DIRAWAT DENGAN BAIK
(well maintain)

KEMAMPUAN ORGANISASI
MASYARAKAT

KEMANFAATAN
DAN NILAI TAMBAH

KESINAMBUNGAN

Social Development Terminology

PARTICIPATORY CONSOLIDATION 2

(PFA) RECONSTRUCTION and CONSOLIDATION 1

SELF ORGANIZING 3

ADDED VALUE INTEGRATION

SATURATION, MATURATION

EDUCATION, LONGEVITY CREATION

Short Term Medium Term Long Term

UNSUSTAINABLE 20% - 50%

SUSTAINABLE 70% - 80% (PFA)

SUSTAINABILITY BOUNDARY

CAPACITY building

STABILITY LINE

EQUITY building

neglecting community condition and perspective
internalizing community condition and perspective

MATERIALISM (INVESTOR DOMINANCE)
DEVELOPMENTALISM (COMMUNITY PARTNERSHIP)

local resource development

- Physical quantitative outreach
- Technical aspect
 - Civil Construction
 - Mechanical & Electrical installation
 - Commissioning and O & M processes

- Community preparation
 - Base line data
 - Organization set-up

- phase I
- Social aspect
 - Training and apprenticeship
 - O & M processes
 - Organization Management
 - Village Resource Utilization
 - Income generation
- phase II

Social transformation qualitative goals

- Capacity & Equity building
 - Entrepreneur initiation
 - Child Education & Youth Mainstreaming

project oriented attitude

Temp

META STABLE

local empowerment attitude

IMPLEMENTATION METHOD

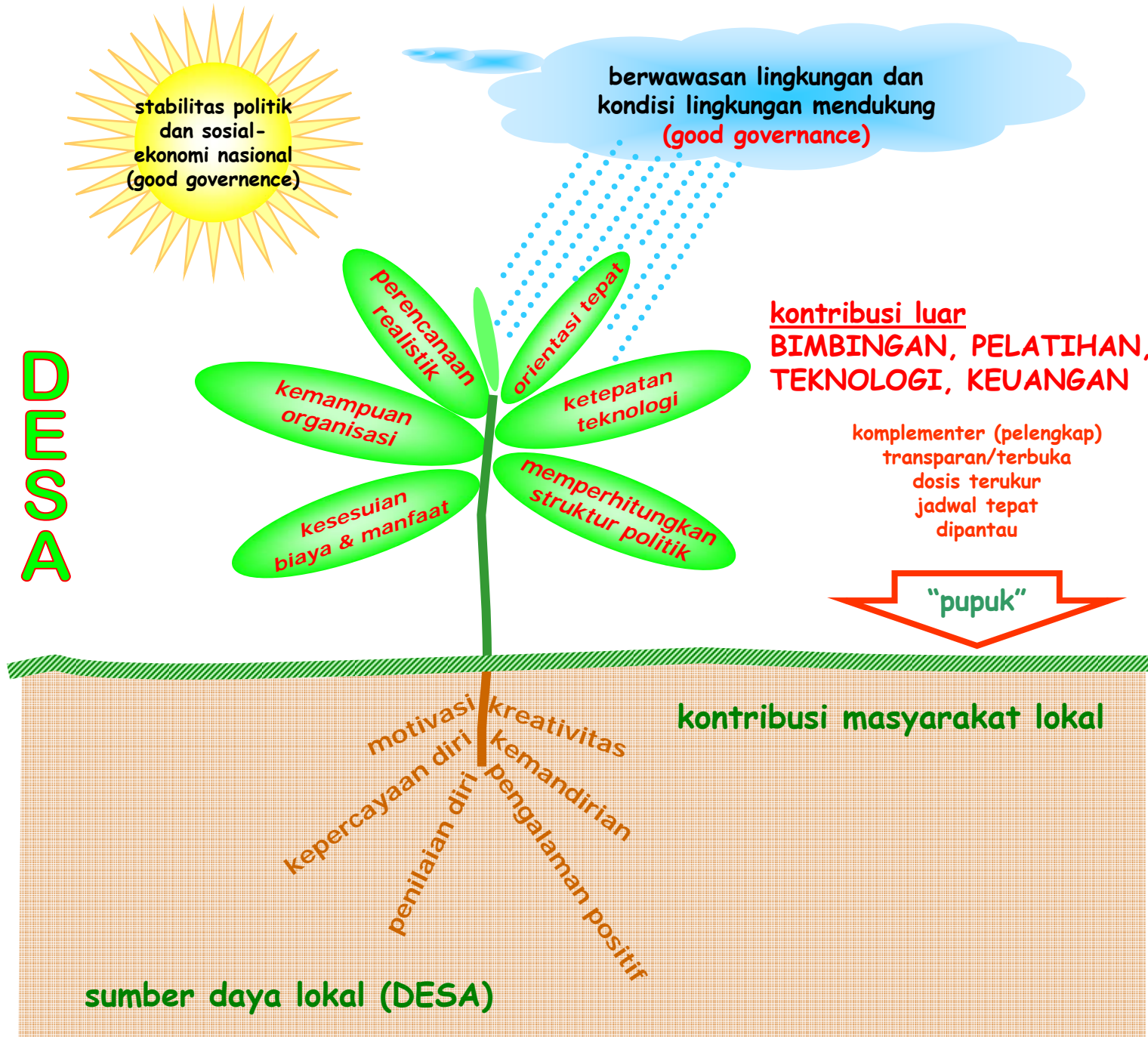
CHARITY PROGRAM

COMMUNITY EMPOWERMENT for
SOCIAL TRANSFORMATION

C-5P PROGRAM

COMMUNITY - PRIVATE PARTNERSHIP
PRO POOR PROGRAM

PEMBAHAYUAN DESA





*one kilowatt hour
every year
from a hydro power*

equals to

*one big tree
in catchment area*

Micro and Mini Hydro



friends of the river, conserve the nature and empower the people