



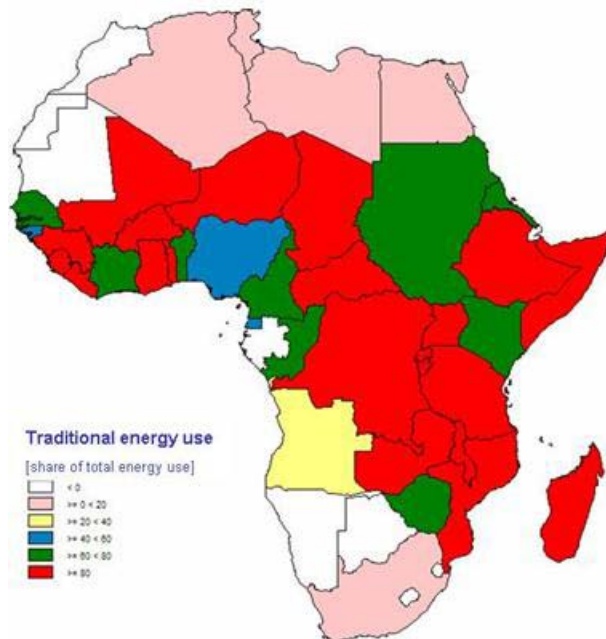
SNV- Africa Biogas Partnership Programme

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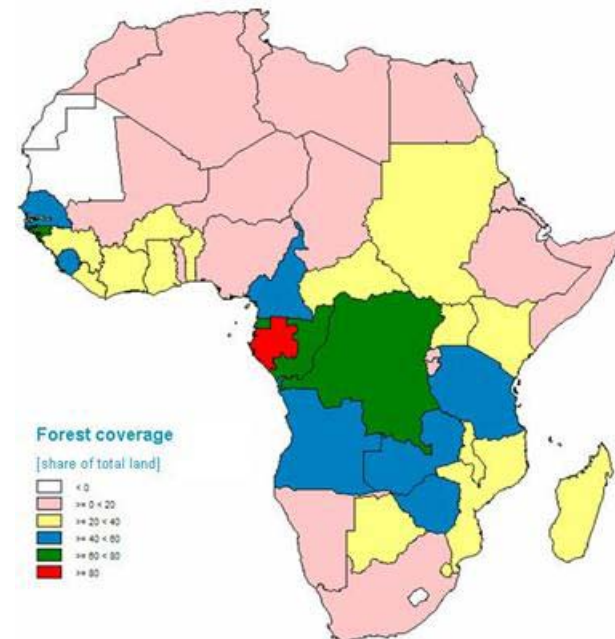
The African domestic energy issue

- High reliance on biomass for cooking
- Forests are rapidly dwindling
- More time spend on collecting fuel wood or increased cost for fuel wood and charcoal
- Health effects due to smoke inhalation
- Environmental degradation

Traditional energy use



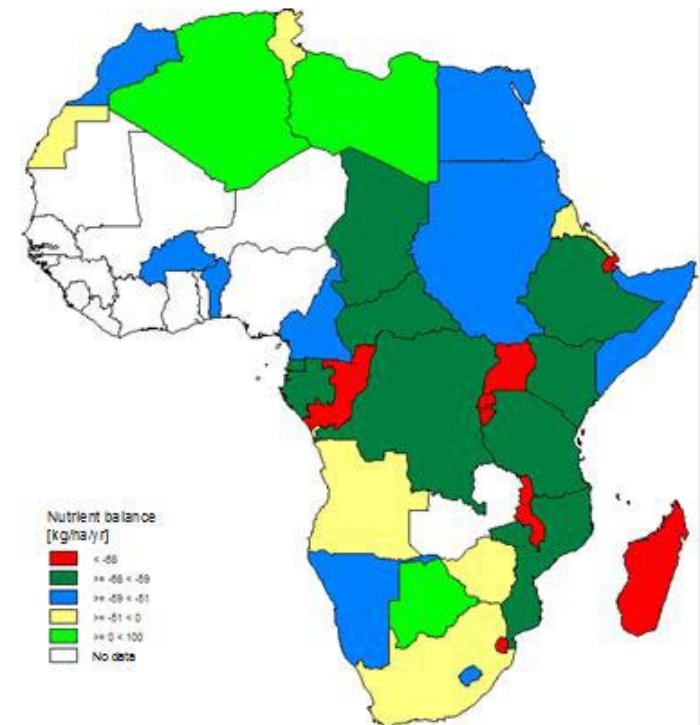
Forest coverage



The African soil fertility issue

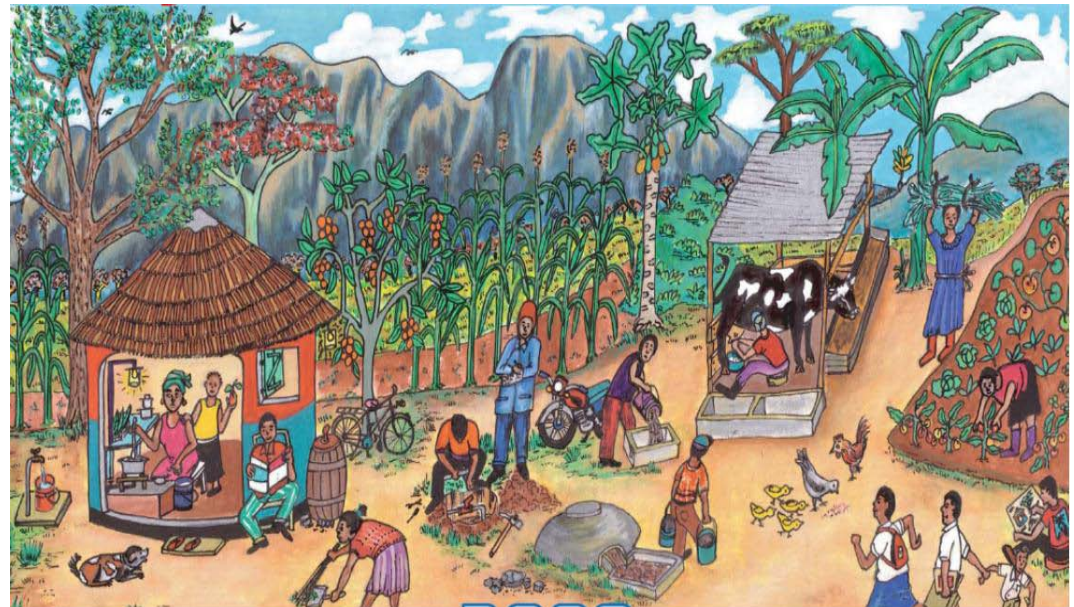
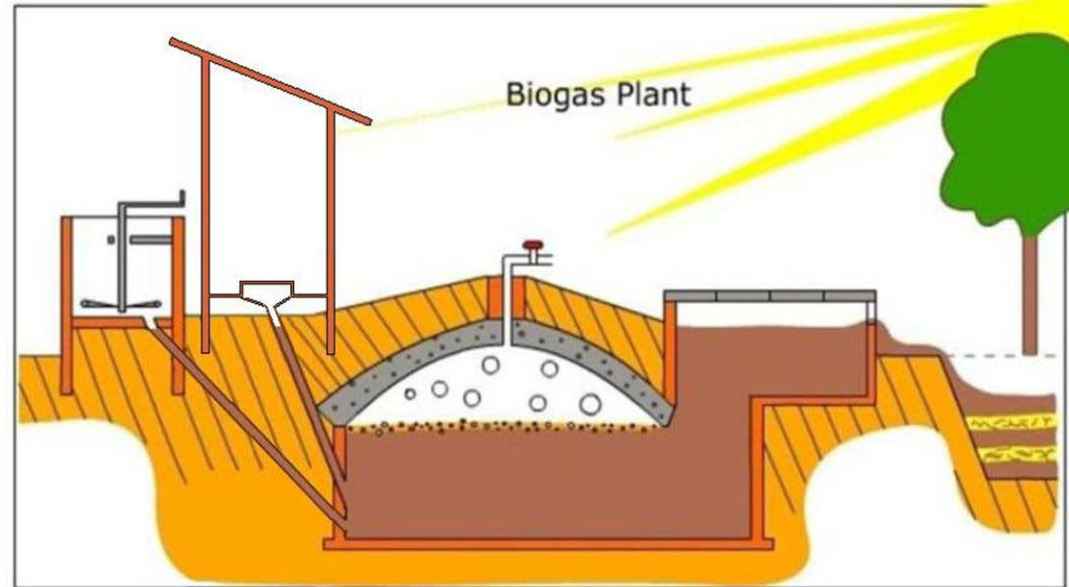
- Nutrient depletion through water and wind erosion. In addition and increasingly, nutrients are exported through product export.
- For a large share of farming households, chemical fertilizer is either insufficiently available or unaffordable, while its costs are increasing.
- As a result, soil productivity is declining, threatening the livelihood of ~ 80% of the African population.

Nutrient balance



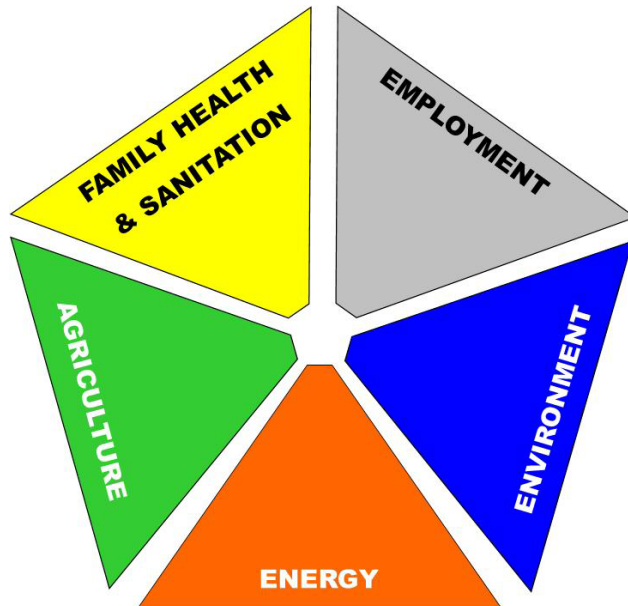
Domestic biogas

- Small biogas installations coming in many different designs.
- Applicable for households involved in integrated farming (livestock & agriculture) having access to sufficient dung and water.
- Investment ~ € 600 per installation, depending on scope, location and size.
- Lifetime, for fixed dome biogas plants, over 20 years.

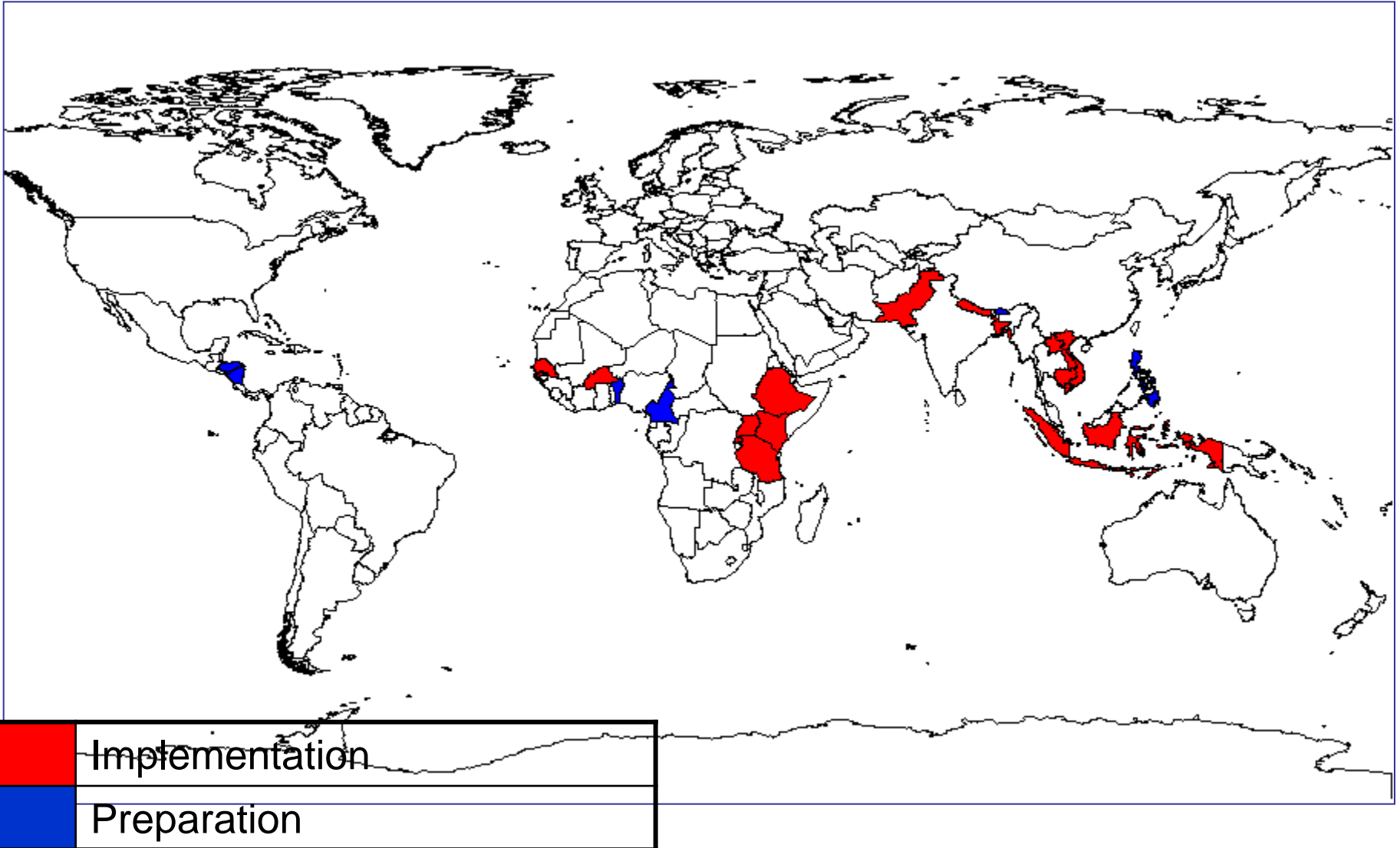


Benefits of biogas

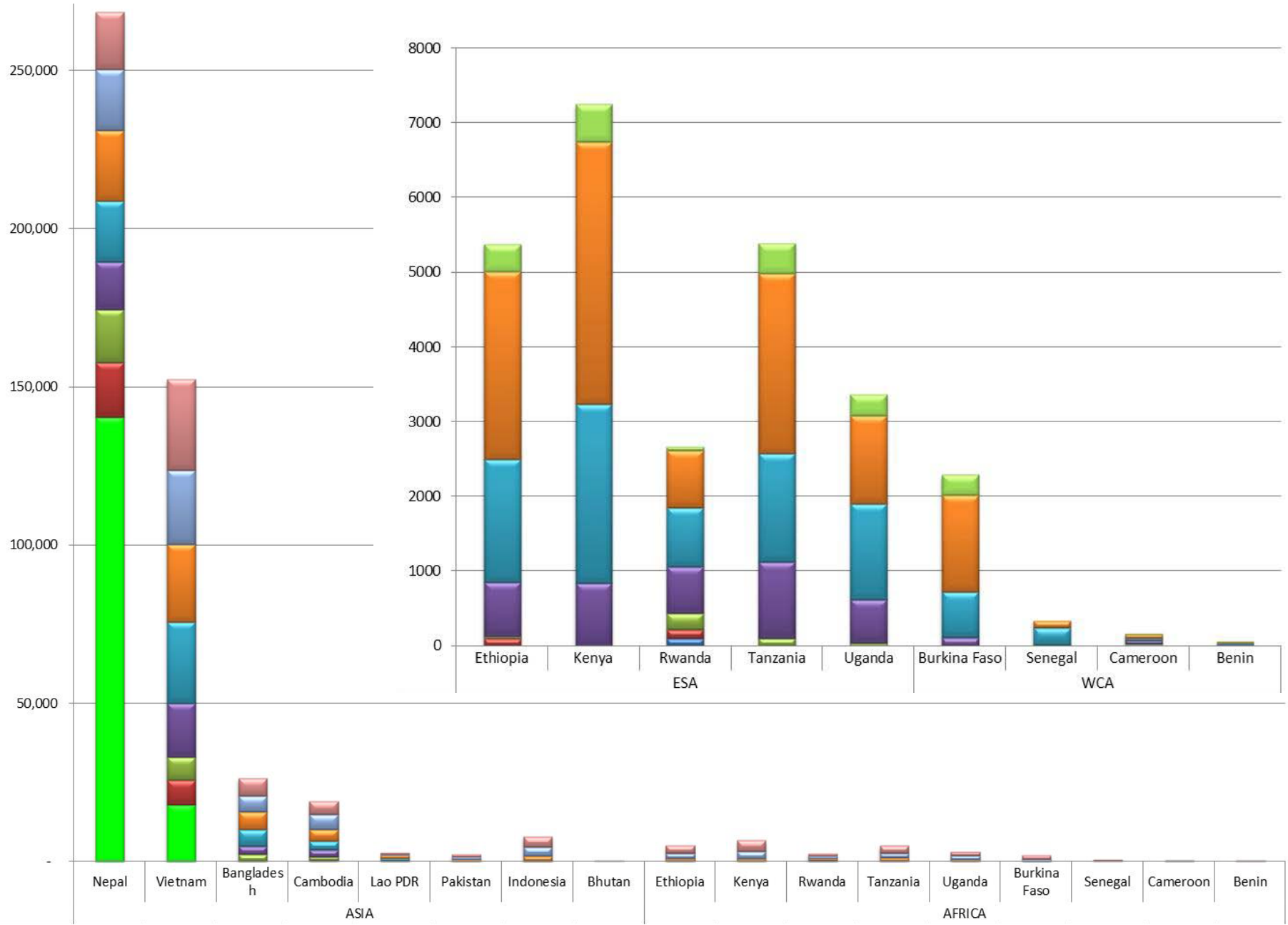
- Substituting traditional energy with 1 to 5 m³ biogas / day.
- Improving agricultural production with high quality organic fertilizer.
- Clean stoves eliminate ARI exposure; connected toilets improve sanitation; reduced fuelwood collection, quicker cooking, less cleaning of utensils.
- Artisan-level rural employment generation in marketing, construction and after sales service.
- Contributing to reduction of deforestation, overgrazing, surface water pollution, greenhouse gas emissions.



SNV & domestic biogas



25 years, half a million plants



Established 2009 ...



ABPP

Biogas, cleaner energy,
better lives

Main objective

to contribute to the achievement of the MDGs through the dissemination of domestic bio-digesters as a local, sustainable energy source through the development of a commercial, market oriented sector in selected African countries.

How?

- Programme development
- Support programme implementation
- Ensure the continued operation of the constructed installations
- Maximize the benefits (in particular on agricultural production)
- Develop capacity in a multi-stakeholder sector development environment
- Develop financial opportunities for poorer households
- Exchange knowledge between partner programmes through networking

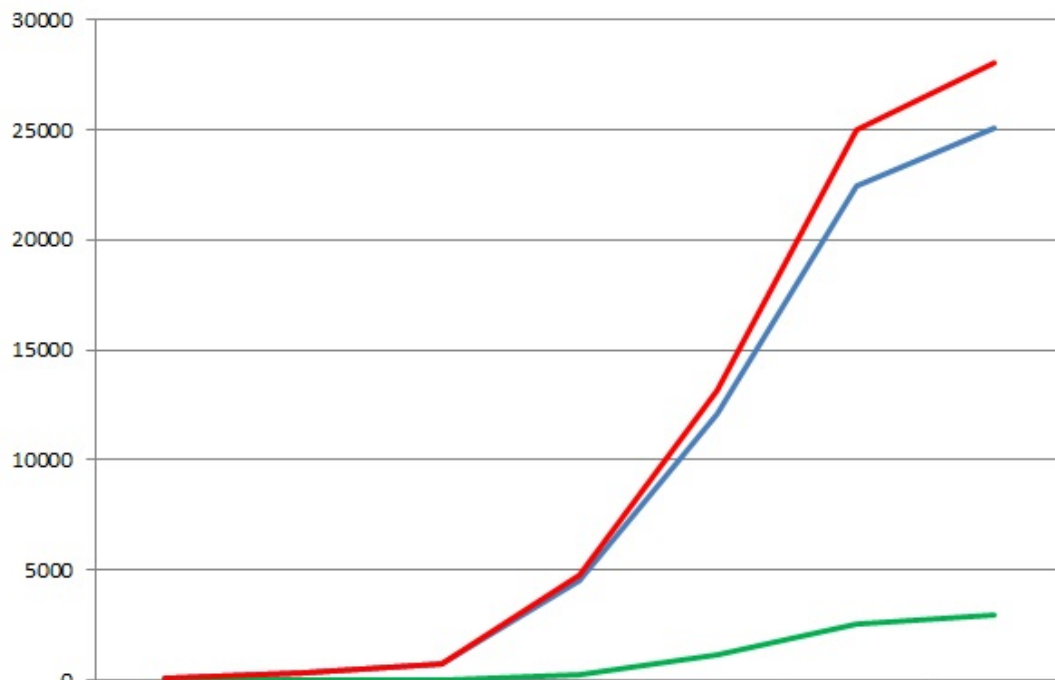
- **Donors** **DGIS (till 2014), GOVERNMENTS**
POSSIBLE DONORS FROM 2014 ONWARDS: AFDB, ENDEV, GIZ, CLIMATE INVESTMENT FUNDS (FIP/REDD+,...) WB, ...
Co-funder, promoter, facilitator
- **HIVOS** Humanist Institute for Development Cooperation
Fund management, partnership facilitator
- **SNV** Netherlands Development Cooperation
Technical assistance / capacity building, knowledge brokering,
- **NHOs** National Hosting Organizations
Programme coordination facilitation
- **NDBPs** National Domestic Biogas Programmes
Programme coordination and implementation
- **Stakeholders:** Private Companies, NGO's, MFI's,

Phase I: Six countries

- Improve living conditions of households in six African countries
- Introduction of 70.550 domestic biogas digesters for cooking and lighting
- Lay the foundations for domestic biogas programmes in three additional countries.

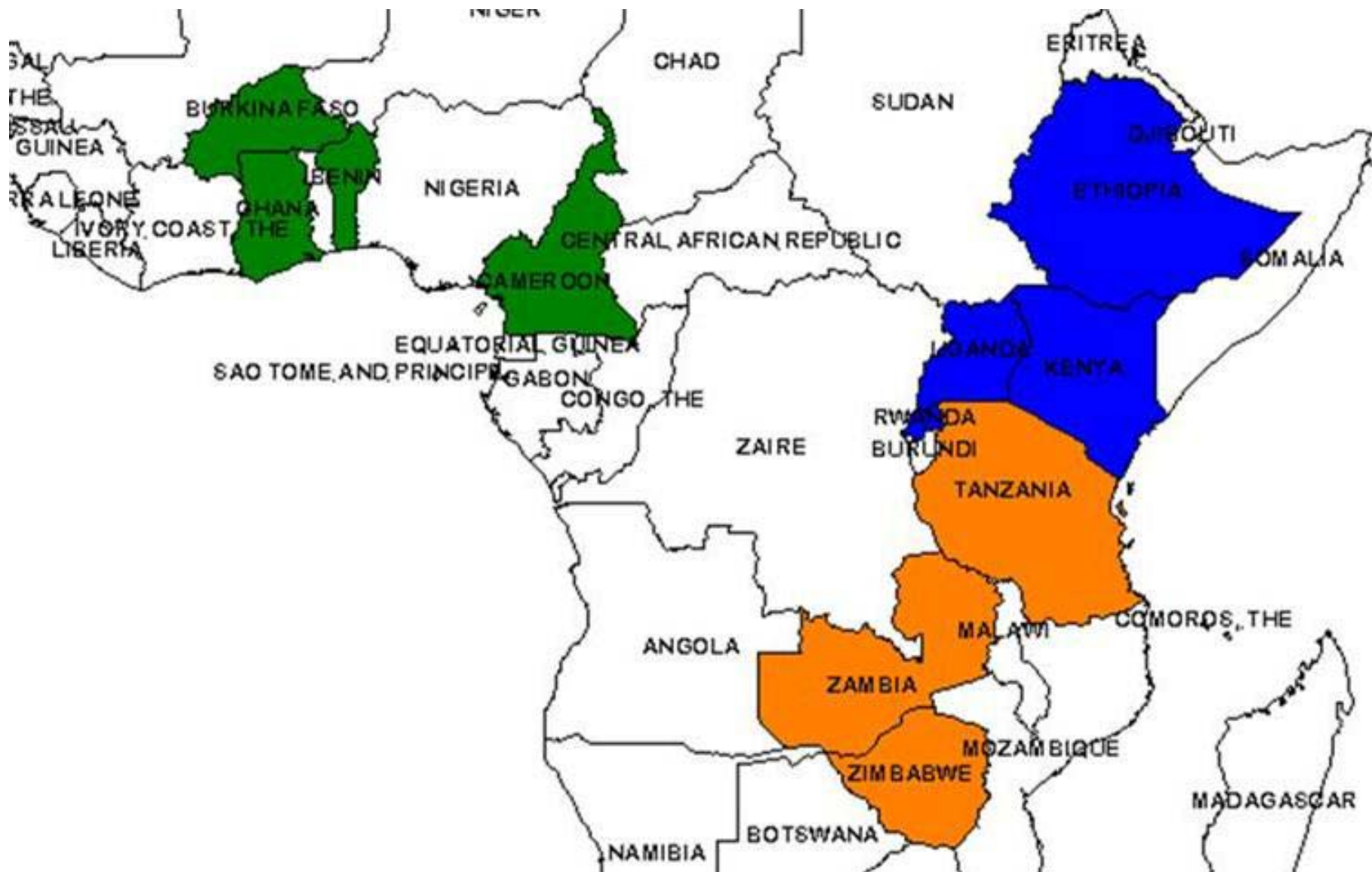


- SNV Africa biogas over 28.000 installations over the period 2009 to March 2013
- ABPP contribution in this: 24,928 units
- Production likely to double from April 2013 to 2014

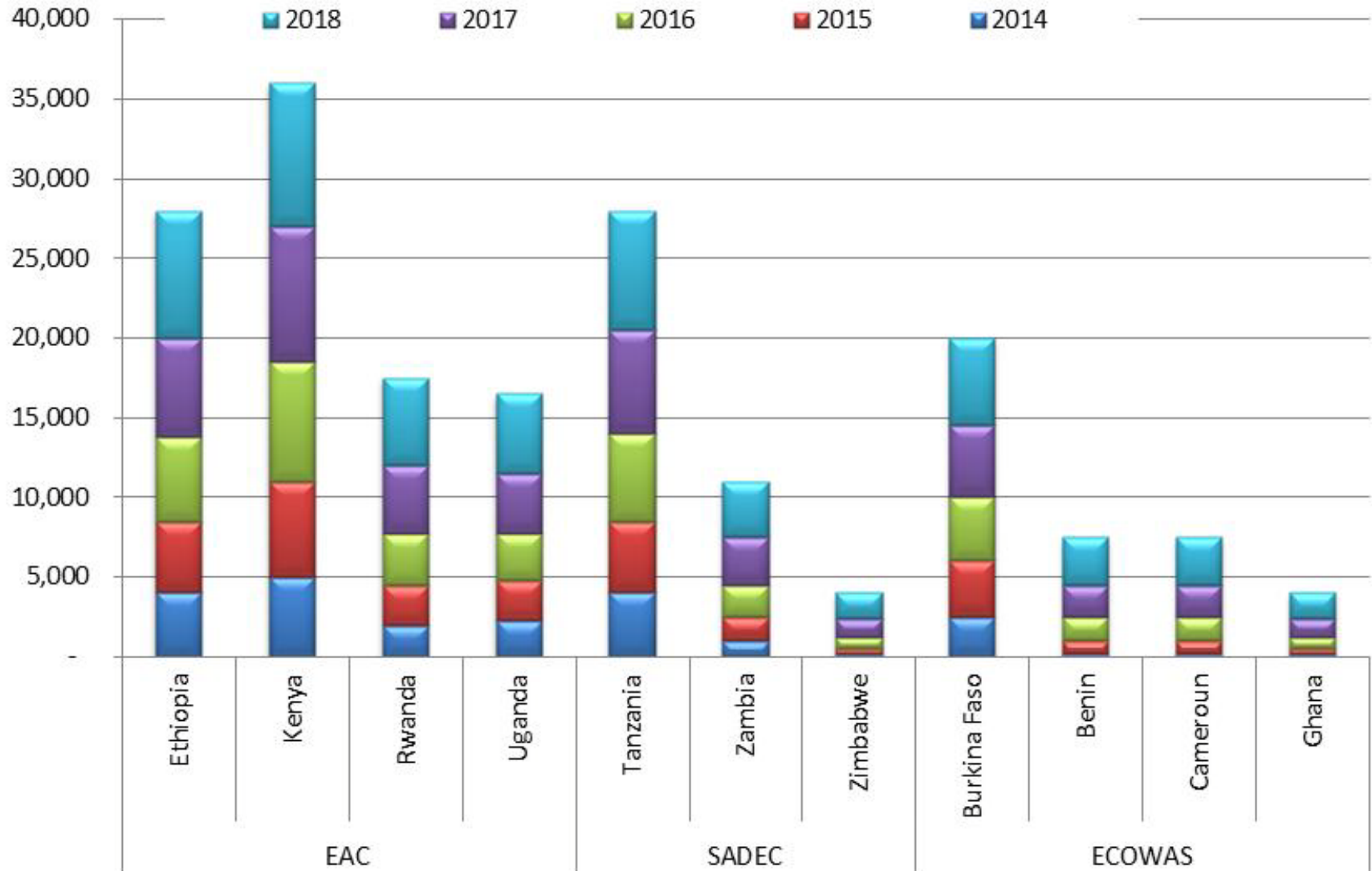


	2007	2008	2009	2010	2011	2012	2013
ESA	101	322	714	4513	12058	22442	25078
WCA	0	0	24	220	1107	2560	2979
Total	101	322	738	4733	13165	25002	28057

Phase II: Eleven countries



ABPP II forecast



Programme costs and sources (mln Euro):

Programme costs:

Investment	133
Programme support	67

Total **200**

Funding sources:

Households	133
ODA – grants	20
Carbon finance	12
Participating G'vts	35

Total **200**

Programme period: 2014 - 2018

Expected results

- 2014 – 2018
- Expansion to 11 countries
- Adding 180,000 biogas installations
- Carbon revenue important income stream for programme support
- Donor – Government coalition for programme support funding

Expected results		
		<i>provisional</i>
Biogas plant construction	180,000	[plants]
Energy		
Energy production	2,112,001	[MWh]
Power installed	590,144	[kW]
Environment		
GHG emission reduction	1,842,600	[t CO ₂ eq]
Deforestation reduction	152,015	[ha of forest]
Soil nitrification	1,243,755	[t(DM) bio-slurry]
Fuel substitution		
Biomass	1,893,272	[t biomass]
Fossil fuel	13,820	[t]
Socio-economic		
Persons reached	1,080,000	[persons]
Workload reduction (women & children)	38,388	[pers years]
Exposure to indoor air pollution reduced	900,000	[women & children]
Toilets attached	72,000	[toilets]
Productive slurry use	144,000	[households]
Employment generation (direct)	12,600	[person years]
Training		
User training	252,000	[person days]
Professional training	77,130	[person days]

In favour:

- Promotional tool
- Quality leverage
- Priming the market
- Pro-poor
- Affordability
- Public benefit
- Govt. commitment
- Steers development

Against:

- Market distortion
- Inflexibility
- Suppresses innovation
- Expensive
- Private benefits
- Addiction
- Unsustainable
- Ownership

Policy shift:

from upfront investment subsidy to

“RESULT BASED FUNDING”

1. Preparatory phase:

- Communication strategy
- Concept notes for individual countries
- Formulation of PIDs
- Finalize data base of donor agencies with country specific info
- Formulation of specific country plan: explore local (and international) dynamics to draw a road map and finally clarify roles & responsibilities
- Resource mobilization

2. Implementation phase:

- Implement the road map

- Host Government buy-in
- ODA fund mobilization
- Increasing awareness domestic biogas at policy and household level
- Private sector development in rural Africa
- Biogas credit facilities for households and biogas companies
- Improving bio-slurry application and value for agriculture



Thank you

For further information, please contact:

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