



# Programme for Biomass Energy Conservation in Southern Africa

## The role of household energy conservation in HIV/AIDS mitigation



..... The first step towards winning the battle against HIV/AIDS for the **infected** and the **affected** is their ability to conserve enough energy to keep them going...."



household  
energy conservation  
is  
human energy  
conservation



# Cooking is central!

## FUEL

efficient use of firewood

smoke reduction

kitchen management

firewood management

wood fuel substitutes

## HEALTH

prevention mitigation

heat retainer (hay box)

**cooking process**

efficient technologies

forest management

## FOREST

nutrition

food preparation

food preservation

food & fuel crops

food diversification

## FOOD



- We ALL need food to live
- Most food needs to be cooked
- For cooking we need energy (fuel)
- Over 95% of Malawian households use firewood or charcoal (= biomass energy)
- Firewood and charcoal are scarce, expensive and used unsustainably

**saving firewood contributes to**

- **Care of PLWHA**
- **Mitigation**



“...When I get up in the morning the first thing is to make fire...”

## **Role of energy (‘moto’) in care and support:**

- **Cooking meals**
  - **Boiling water for drinking**
  - **Cooking herbal remedies, hot compresses**
  - **Warm water for bathing**
  - **Sterilizing utensils for patients**
  - **Warmth**
- ....and many more



## How can we save energy?

- Using improved stoves and fireless cookers - *technologies*
- Keeping a lid on the pot, soaking legumes, using less water, cooking for less time etc. - *techniques*

## How can we get more firewood?

- Cut the branch and not the tree
- Plant trees or just let them grow
- Plant woody shrubs e.g. pigeon peas



# Benefits of energy saving technologies

## Mud stove

With clay liner

## Clay stove

## Food warmer

or fireless cooker

## Rocket Stove



Saving up to 80% firewood

Small twigs can generate enough heat for cooking

Smoke reduction

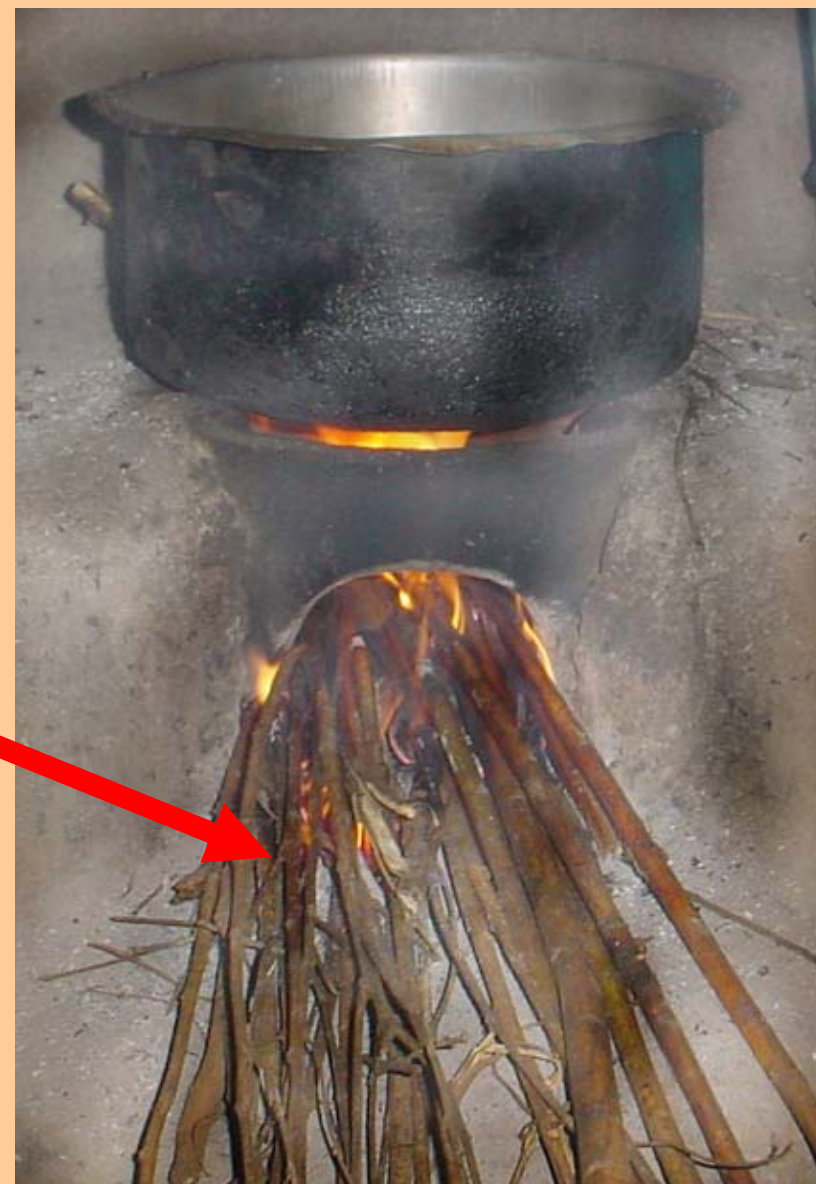
Fast cooking, less time

Sheltered fire, less heat exposure





## Potential for using alternative fuelwood sources: pigeon pea stalks, agroforestry species e.g. gliricidia etc.



- Soil fertility = more food
- Less expenditure for fertilizer
- More food (relish) or cash
- Fuel for cooking



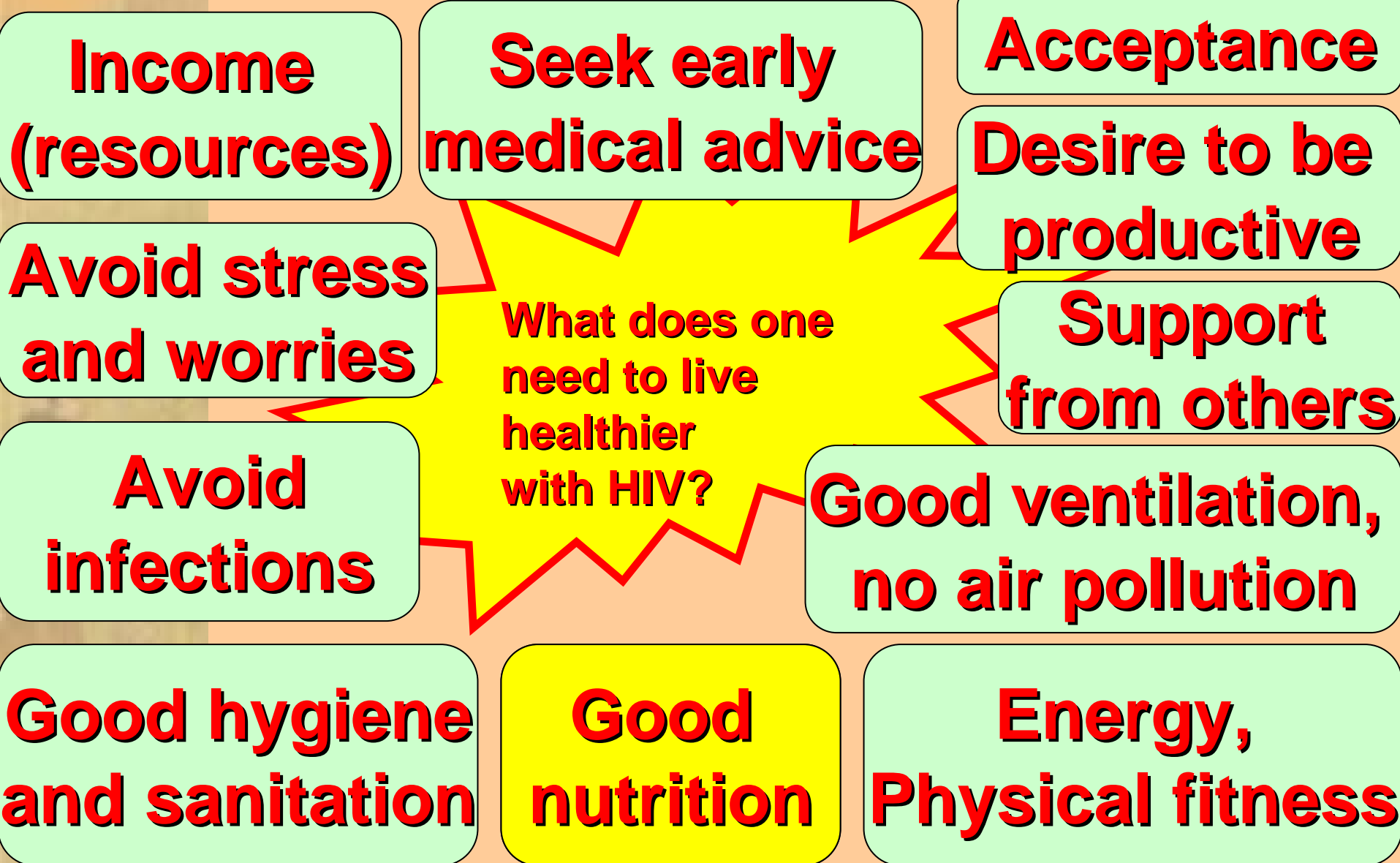
# In care there are two perspectives:

**Infected Patients**      and      **affected Caregivers**





# Patients Perspective





# Patients Perspective

**Frequent meals**

**Timely meals**

**Steamed or boiled food, less frying**

**Less cooking time**

**What is good nutrition?**

**Nutrients preserved**

**Warm, soft and palatable food**

**Use of locally available food**

**Safe and clean drinking water**

**Variety of food**

**Adequate small amounts**



# Patients Perspective

**Reduce vulnerability to re-infections**

**Avoid smoke**

**Less ash, cleaner food**

**Avoid infections**

**Less respiratory infections by good ventilation**

**Reduce burns**

**Avoid infection through improved nutrition and hygiene**



# Patients Perspective

**Avoid walking long distances**

**Avoid carrying heavy loads**

**Avoid too much heat**

**Avoid physical stress, but maintain physical fitness**

**Get gentle exercise, collect twigs with little effort**

**Avoid stress from cooking**

**Get adequate rest, spend less time on cooking and getting firewood**



# Caregivers Perspective (household, community, institution)

**Less time for collecting firewood and cooking**

**Less exposure to heat and smoke**

**Mobile feeding**

**Save money for food and others**

**How does the caregiver benefit from saving energy?**

**Less stress and burn out**

**Reduced time conflicts**

**Chitetezo Mbaula as an IGA**

**Less food wastage**

**Time to mobilize resources for the household**

**Time to care for other family members**



# Role of household energy in mitigating HIV/AIDS







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Health  
and  
prolonged life!



# Who can tell me more?

ProBEC Regional Coordinators MW – TZ - ZM

Christa.Roth@gtz.de

Christoph.Messinger@gtz.de

Zambia: National Coordinator Ms Ngula Ikafa Mubonda

probec.gtz-zambia@gtz.de

Tanzania: National Coordinator Mr Arfaksad Ndilanha

probec.gtz-tanzania@gtz.de

Malawi: National Coordinator in Lilongwe

probec.gtz-malawi@gtz.de

Info Centre for Food&Fuel Security Promotion Mulanje,

ifspmulanje@malawi.net

gtz

gtz