

Use of local organic fertilizers and bio pesticides: the winning alternative to chemicals.

"Agriculture must, literally, return to its roots by rediscovering the importance of healthy soil, drawing on natural sources of plant nutrition, and using mineral fertilizer wisely".

FAO, Save and Grow,p37

"Degradation of the environment is closely linked to the culture that shapes the human community".

Pope Benedict, XVI

## Use of local fertilizers & bio pesticesdes is a winning strategy

- Organic fertilizers increase organic matter which retain water in the soil;
- Bio pesticides preserve micro organisms which work for the soil fertility;
- Bio pesticides don't kill bees, bumblebees and other friendly insects (predators & parasitoids).



# "Let's save our common house"

"We all have a stake in saving our planet and ensuring that agriculture is able to grow and meet the challenges ahead".

Jacques Diouf, D.G. FAO in "Save and Grrow".



#### Issues:

Poverty;

Hunger;

Climate change (Droughts & Floods);

#### **Solutions:**

- Save money from pesticides & fertilizers import;
- Change the systems of people feeding (i.e. Soy beans vs beans, yam)
- New technologies (planting, seeds and seedlings);



#### Fertilizers:

- Dry the soil;
- Increase soil acidity

#### Pesticides:

- Huge health risks (fatal accidents, infirmities, cancers, auto immune diseases, etc.
- Destroy the environment, kill micro organisms and insects;
- Cause insect resistance;
- An unsuspected economic cost.

#### Alternatives to Chemicals:

#### Fertilizers:

- Compost;
- > Soil covering;
- Micro organisms;
- Industrial fertilizers (authorized in OA);
- > Agro forestry (Euphorbia albida).

#### Alternatives to Chemicals:

#### Bio pesticides:

- Integrated pest control: biological methods (parasitoids & predators), Push Pull (desmodium),
- Plants: herbs (tephrosia, tuthonia, capsicum, pyrethrium, ricinius, etc), trees (neem-Azadiracta Indica);
- Other products (authorized in OA).

## Ricinius & Tuthonia





## Tephrosia & Capsicum





#### Neem (Azadiracta Indica)



#### Use & Results on tomato





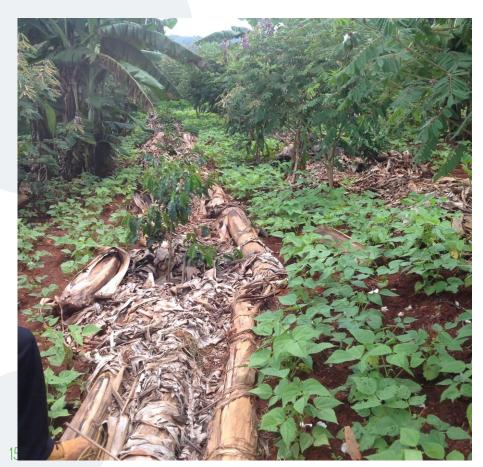
## Organic tomato



## Organic Coffee



## Organic beans





## Adapting cassava planting to climate change



## Adapting cassava planting to climate change



#### Conclusions:

- Alternatives to chemical fertilizers & pesticides are there: A little effort to discover them!
- Need of Government commitment;
- Information are Communication are very important!

# Thanks!

The presentation was done by Adrien SIBOMANA, BOAM

Email: sibad53@gmail.com

Phone: +257 79910345





Swiss Agency for Development and Cooperation SDC













