# Global Alcohol Policy Conference GAPC 2013

Title: Alcohol and Non-Communicable Diseases (NCDs): Promise of Grain Amaranth

By:

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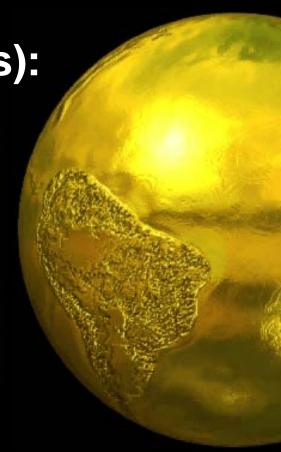
Sourcing Sustainable
Solutions to poverty

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# What is grain amaranth?

#### WHAT IS GRAIN AMARANTH?

- is a non grass cereal or pseudo-cereal, member of the amaranthus and celosia families called amaranthaceae
- 60 species, 4000 to 6000 lines or varieties
- Early maturity, between 45-75 days in Kenya
- Pests, diseases and drought resistant
- Is a medicinal crop

# What is grain amaranth?



# 1. BACKGROUND

- Alcohol consumption is the leading factor for diseases burden in low mortality developing countries and the third largest risk factor in developing countries (WHO, 2004)
- It contributes to poor health globally, devastates families and damage the structure of communities

# Background cont'd

- harmful drinking is a major risk factor for non-communicable diseases-NCDs, in particular cardiovascular diseases-CVDs, cirrhosis of the liver and various cancers.
- Millennium Development Goals-MDGs
- Paper will demonstrate how Strategic Poverty Alleviation Systems-SPAS uses organic grain amaranth to control NCDs
- Use of traditional resources, skills and knowledge

## Background cont'd

 Addresses multiple goals, requirements and issues for communities either affected or suffering from NCDs due to harmful use of alcohol

# Grain amaranth as food



# Amaranth is associated with the cure, prevention and management of the following diseases:

CURE	PREVENTION	MANAGEMENT
<ul> <li>Marasmus</li> <li>Kwashiorkor</li> <li>Facilitates</li> <li>evacuation of placenta.</li> <li>Nausea</li> <li>Dizziness</li> <li>Migraines</li> <li>Scurvy</li> <li>Herpes</li> </ul>	<ul> <li>Dermis diseases</li> <li>Cancer of the stomach, gullet, breast, lungs and colon.</li> <li>Improves quality of male sperm</li> <li>Prevents aging</li> <li>Plays a major role in preventing heart diseases</li> <li>Tapeworms</li> <li>Prevents bile accumulation</li> <li>Prevents deposition of teeth tartar</li> <li>Prevents constipation</li> <li>Prevent high blood pressure</li> <li>Prevents weakness of muscles</li> <li>Prevents paralysis</li> <li>Prevents emotional instability.</li> </ul>	<ul> <li>Reduction of Tuberculosis</li> <li>Helps in the production of urine</li> <li>Helps milk secretion</li> <li>Reduction of diabetes</li> <li>Controls the growth of Candida albicans (thrush) in the mouth and esophagus for AIDS patients</li> <li>Good for rheumatism</li> <li>Manages Bronchitis</li> <li>Assists in wound healing.</li> <li>Manages HIV/AIDS</li> </ul>

#### **MATERIALS AND METHODS**

- Small scale farmer families in Kenya are assisted to grow grain amaranth and other medicinal crops
- interactions between crops, livestock and the environment forms the basis for designing appropriate and sustainable improvements to these farming systems for improved livelihoods
- They grow organic grain amaranth for food/nutrition and incomes and surplus bought by SPAS for preparing nutraceuticals
- Capacity building and capacity development for addressing NCDs due to harmful use of alcohol

#### RESULTS

- dominant sources of food and livelihoods enhanced to reduce harmful use of alcohol due to poverty
- SPAS has demonstrated the possibility of achieving a new era of sustainable control of NCDs due to harmful use of alcohol

## Results

- Reduced burden of diseases
- Contributes in improved health and nutrition, livelihoods and ecological sustainability
- Climate change mitigation and adaptation

#### Discussions

- The process in which people may be required to change a whole or part of their traditions and culture, particularly in their alcohol consumption and dietary orientation, may be a major challenge.
- Grain amaranth demonstrated the dynamics of NCDs control as people are encouraged to change

## Discussions----cont'd

- suggested ways to reduce threats to harmful use of alcohol.
- solve other developmental challenges facing communities in this century and beyond.
- rapid increase in consumption of alcohol will compound problems and challenges, already of great concern today

## RECOMMREDATIONS

- Integrate grain amaranth into the diets and landscapes of poor communities
- significant contribution to meeting health energy needs and reducing the growth in NCDs in the years immediately ahead.
- Governments have a role to play in creating an enabling environment to enhance the ability of the poor to tap into the reservoir of this model

## Recommendations Cont'd

- model with low external inputs or capital outlays and utilizes existing skills and knowledge which are optimized with existing local community resources
- vision for sustainable control of NCDs is certainly possible, but will only be attained with adoption of a coordinated and strategic approach, based on the support, input and involvement of governments, industry and the donor community.

## CONCLUSION

- Integrating grain amaranth technology into the interaction between crops, animals and the environment provides a dependable path towards sustainable cotrol of NCDs due to harmful use of alcohol
- the most potent tool in our policy arsenal for controlling NCDs and rapid development, with an environmental advantage

# Acknowledgements

Compliments go to the organizers of this GAPC 2013 conference for their singular foresight in convening this conference that might contribute to averting deaths from harmful consumption of alcohol in the future.

# Grain amaranth technology?

A future without diseases?