

Presentation

Presentation from the 2009 World Water Week in Stockholm
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WORLD
in Stockholm,
August 16–22, 2009
WATER
WEEK



Big, Sweet Tomatoes !

Mainstreaming Productive Sanitation Systems in the Agricultural Sector.

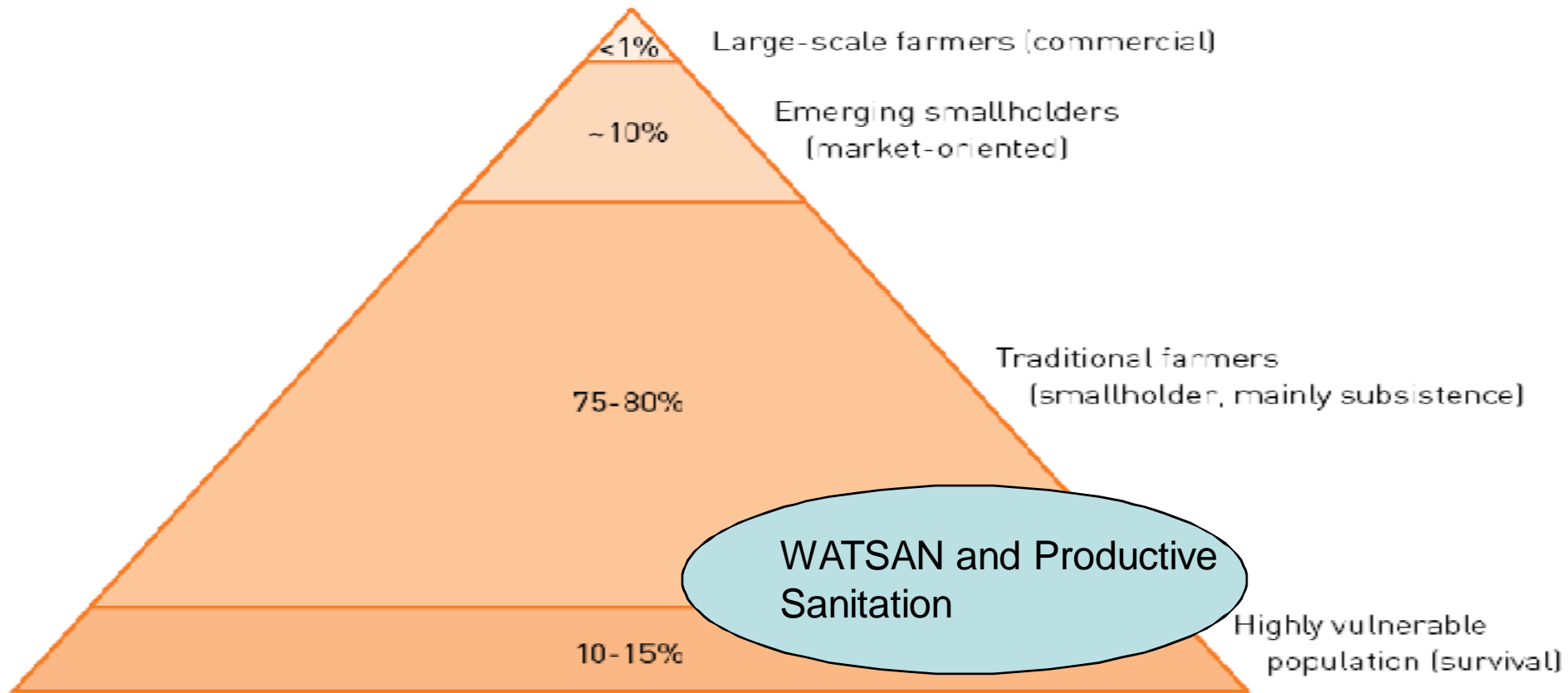
August 19th

World Water Week (Stockholm)

Laurent Stravato

- Financing mechanisms of the International Fund for Agricultural Development (IFAD) at programme level: Mainly through loans to government on agro-productive activities/rural finance for poor smallholder farmers .
- US \$ 10 billion financed
770 projects:
- - **Africa: 36%**
- - **Asia & the Pacific: 32%**
- - **Near East & North Africa: 17%**
- - **Latin America & the Caribbean: 15%**
- Partnerships with BSF.JP to support social investment (1984)

IFAD



Source FAO

Background

Money doesn't smell

In 45 BC, the Roman Emperor Vespasian introduced a urine tax on public toilets. When his son Titus criticized him, he supposedly pointed out that a coin did not smell, even though it came from urine (*e lotio est*). (Suetonius, *Vesp.* 23)



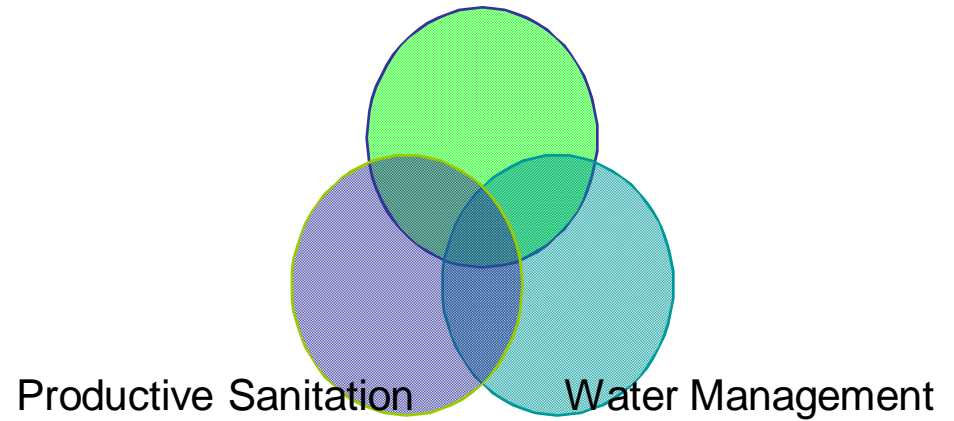
Justification

- **Food security situation**
- 800 Million People in 46 countries malnourished and each day 40,000 die of hunger and hunger-related diseases, famine threatens 9 African countries, 20 million lives at risk.
- The increasing scarcity of food is the biggest crisis looming for the world", according to WFP officials.
- **Sanitation situation**
- 700 million people in 50 countries eat food from crops irrigated with untreated sewage
- 3.5 billion people are infected with helminthes worm parasites
- Half the world lacks proper sanitation systems

Synergies



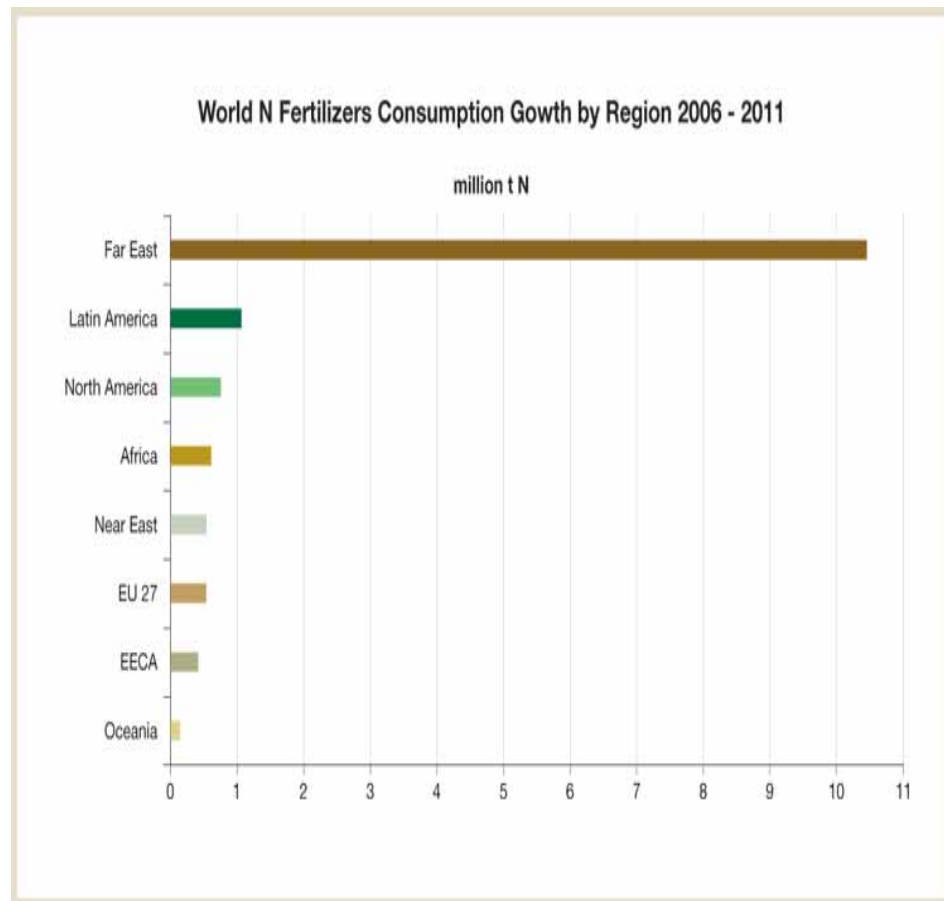
Conservation Agriculture



Justification

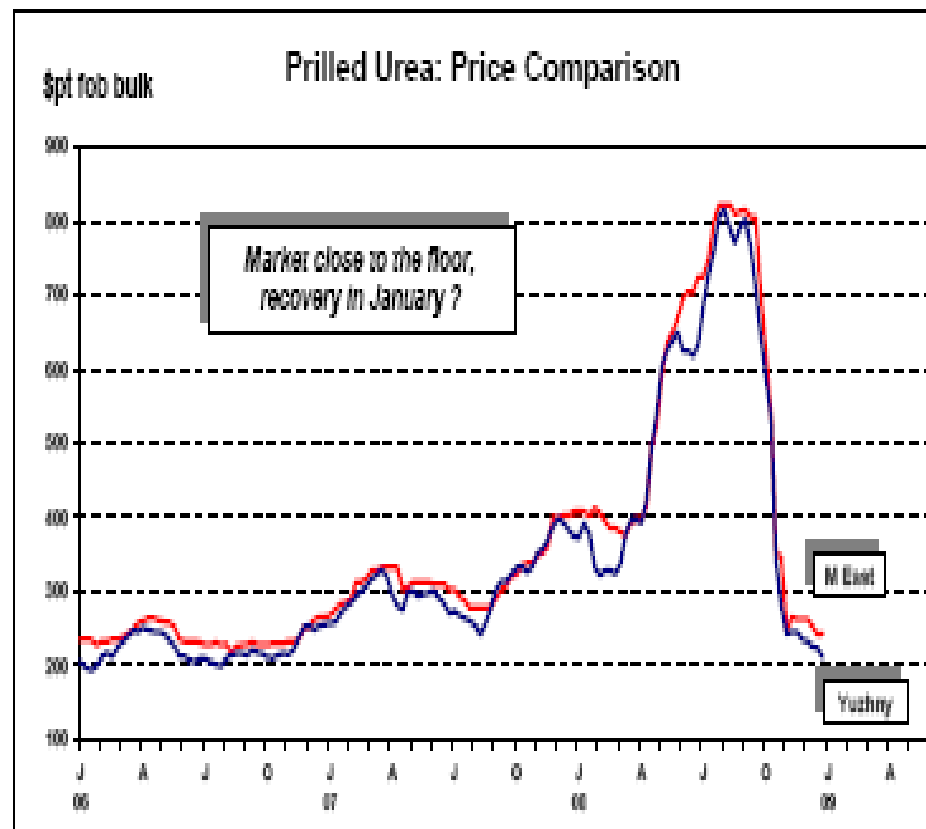
- **Soil Fertility crisis**
- The earth is losing 25 billions tons of nutrient rich topsoil annually
- The inextricable link between food production and mineral fertilizer
- Dr. Norman Borlaug, Nobel laureate “*The soil nutrient losses are an environmental, social, and political time bomb*”.

20/08/2009



Justification

- Soaring fertilizer prices
- In India, the government's subsidy bill was of \$22 billion in 2008, up from \$4 billion in 2004-5.
- In Africa, they pay the highest tariffs in the world (6 times higher than in Europe).



Justification

Urine enriches compost

Urine can also be used to enrich compost. Add urine (1 part urine:3 parts water) to the compost at time of first mixing of the different layers. Sprinkle (do not pour) the urine-water mixture to the compost layers, then cover the compost heap to prevent nutrient loss through leaching and evaporation.

Pests and diseases

Black aphids (*Aphids fabae*) These pests cause considerable reduction in harvest and may even result into total crop failure.

“Yellow vein” virus disease – this is mostly seen during heavy rains.

Pests and disease control

Both pests and diseases are controlled by use of crop rotation, which reduces the build-up of diseases and pests in a particular bed. Mulching, intercropping, field crop hygiene and good soil nutrient supply reduce vulnerability to pests and disease damage. Contact your Agricultural Extension officer for advice on organic or commercial pesticide use.

Harvesting and post harvest handling

Nakati may be harvested starting at 2 months old (30 cm height or 1 ft tall). Cut the top part of the shoot to encourage

Watering plus continuous harvesting prolongs the vegetative phase hence good leaf yield. The whole leaf (with petiole) may be cut into pieces and steamed before serving. The slightly bitter leaves make a delicious and nutritious vegetable dish.

Seed production

The crop takes 4 to 5 months to produce seeds. Allow a few plants to produce seeds for the following season.

For more information, Contact:

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Better Vegetables using urine

NAKATI (*Solanum aethiopicum*)



Photos from Kyanja by NARO-Kawanda staff

Introduction

Nakati is local vegetable grown widely in many parts of Africa. It grows well in fertile, well-drained soils and requires high rainfall. Although *Nakati* can recover after a dry spell, it is very sensitive to soil moisture. Low rainfall causes stunted growth and reduced yields. On double-dug beds, regular watering boosts production.

The FAO recommendation for leafy vegetables is 700g for a family of 6.

Activities

- **Financing Productive Sanitation (Bio Gas) through Loans (China, Honduras)**
- **AP Aguié Funded project in collaboration with IFAD PPILDA project (loan to the government of Niger).**
- **SCAMPIS project (Linking Micro Irrigation Systems and Liquid Organic Fertilizers)**
- **Small grant with UWESO in Uganda to test Productive Sanitation with schools.**
- **Technical and Policy support to IFAD loan projects to test Nutrient recycling systems (Mauritania, India)**

Activities

- In **2008**, CREPA and SEI were awarded with an IFAD small grant for a project entitled "*Testing a nutrient recycling system (productive sanitation system) in Niger with a view to measuring its potential for improving Agricultural productivity*"
- **Budget of 200 000 US \$**
- **To mitigate the food security crisis and soaring fertilizer prices.**
- **To test new approaches supporting poor smallholder farmers and potentially scale up following results.**

The SCAMPIS project



Liquid Organic Fertilizer systems

- Support the supply of 10 000 LOFS.
- Small-scale localized fertigation in relation with MIS systems.
- Low cost and easy operation and maintenance.



Thank you! Merci! Gracias!

