







Dr. Jens Liebe, UNW-DPC

## "Wastewater" is a resource

Wastewater use can ...

...reduce pressure on freshwater resources

...improve food production, nutritional status

...save fertilizers and energy

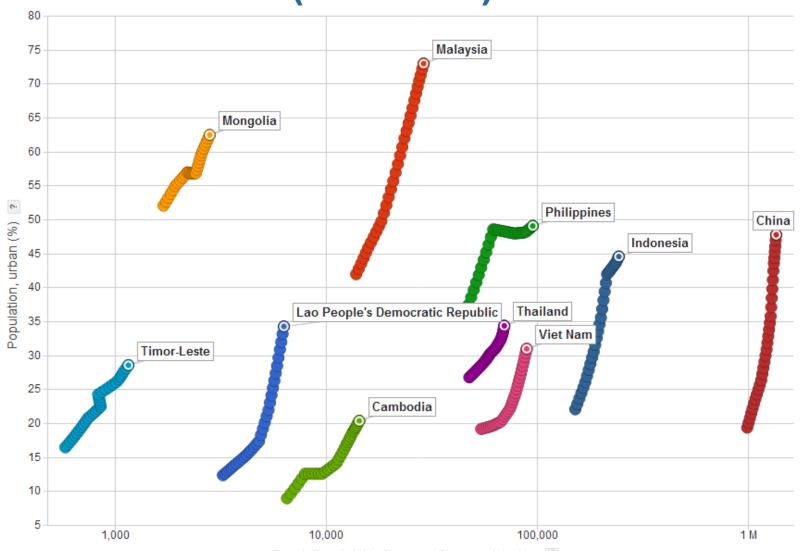
How can member states be supported in promoting safe practices where wastewater is used in agriculture?

### "Wastewater" use

### In many countries

- Wastewater use is a reality (whether there are regulations in place of not)
- Wastewater use will become more important

## Population growth and urbanization (1980-2011)



Population, total both sexes (thousands) - Log ?

Data from Human Development Report 2011, United Nations Development Programme Last updated: Nov 2, 2011 ©2012 Google - Help - Terms of Service - Privacy - Disclaimer - Discuss

## Goal

autrients

## Qualified people in key organizations to

formulate the right policies and put into practice the safe use of wastewater in agriculture.

- Materials and methods
- Dissemination strategy
- Capacity building action plan

Organizations

Individuals

# **Wastewater - a multidisciplinary** issue

### Bringing people together

UN-Water members and partners

- Country delegates from different disciplines
- Participants from different countries

→ step towards safer practices















#### **Safe Use of Wastewater in Agriculture**

Bonn2011 Conference

The Water, Energy and Food Security Nexus Solutions for the Green Economy 16–18 November 2011

> International Kick-Off Workshop

14 · 15 November 2011 UN Campus, Bonn, Germany 1" Regional Workshop for Francophone and Northern Africa

18 - 19 February 2012 Palais de Congrès, Marrakech, Morocco 2™ Regional Workshop for South, West and Central Asia

16 - 18 May 2012 NAS Auditorium, New Delhi, India 3<sup>rd</sup> Regional Workshop for Anglophone Africa

26 - 28 September 2012 Tambo Conference Center Johannesburg, South Africa 4th Regional Workshop for Latin America and the Caribbean

11 - 13 December 2012 Hotel José Antonio 5 \* Regional Workshop for Southeast and Eastern Asia

5 - 7 March 2013 Ramada Bintang Resort Bali, Indonesia Wrap-Up Conference Mid - 2013!



## Phases of capacity building at the individual/organization level

Phase I: Individual Capacity Needs Assessment (CNA)

Phase II: International workshop November 2011

Phase III: Regional workshops February 2012 to March 2013

Phase IV: Wrap-up workshop *May 2013* 

**National Reports Gap Assessment** Capacity building action plan at the individual/organization level

Implementation of Recommended Actions

New CNA at the intitution/system level

## Safe Use of Wastewater in Agriculture

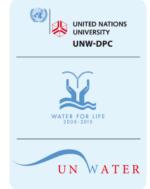
Workshop title	No. of Countries	No. of Participants
International Kick-Off	13	23
1 <sup>st</sup> Regional Workshop for Francophone and Northern Africa	17	27
2 <sup>nd</sup> Regional Workshop for South, West and Central Asia	11	21
3 <sup>rd</sup> Regional Workshop for Anglophone Africa	20	36
4 <sup>th</sup> Regional Workshop for Latin America and the Caribbean	13	29
5 <sup>th</sup> Regional Workshop for Southeast and Eastern Asia	10	29
Total	73 (unique)	165

















## **Capacity Needs Assessment**













Annex - II

- 1. Assessment of health risk
- 2. Health protection measures
- 3 Programme of Monitoring and system assessment
- 4 Crop production aspects
- 5 the aim of the Environmental disaspects
  The questionnaires' results will had
- 6 de la delitional glo Socio-cultural de la spects
- 7. Economic & financial considerations
- 8. Policy aspects for this purpose. It is not necessary to evaluate those capacity areas that are

columns: separate table that is divided in thre

The first column shows selected components (e.g. microbial and observed to

## Capacity needs

#### Francophone & Northern Africa

- Health risk assessment
- 2. Health protection monitoring
- 3. Resource efficiency

#### **Anglophone Africa**

- Economic & financial considerations
- 2. Health risk assessment
- 3. Monitoring & System assessment

#### After workshop

- 1. Economic & financial considerations
- 2. Policy Aspects
- 3. Monitoring & System assessment

#### South, West, and Central Asia

- 1. Monitoring & System assessment
- 2. Economic & financial considerations
- 3. Health risk assessment/Health protection monitoring

#### **Latin America & the Caribbean**

- Economic & financial considerations
- 2. Environmental aspects
- 3. Health risk assessment

#### After workshop

- 1. Health risk assessment
- 2. Policy Aspects
- 3. Socio-cultural aspects

#### Organized by:











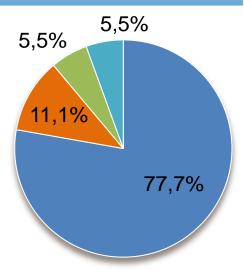


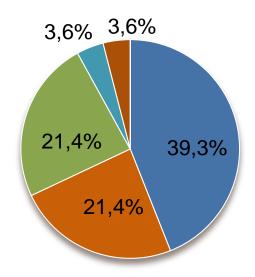






# **Background of the participants of this workshop**





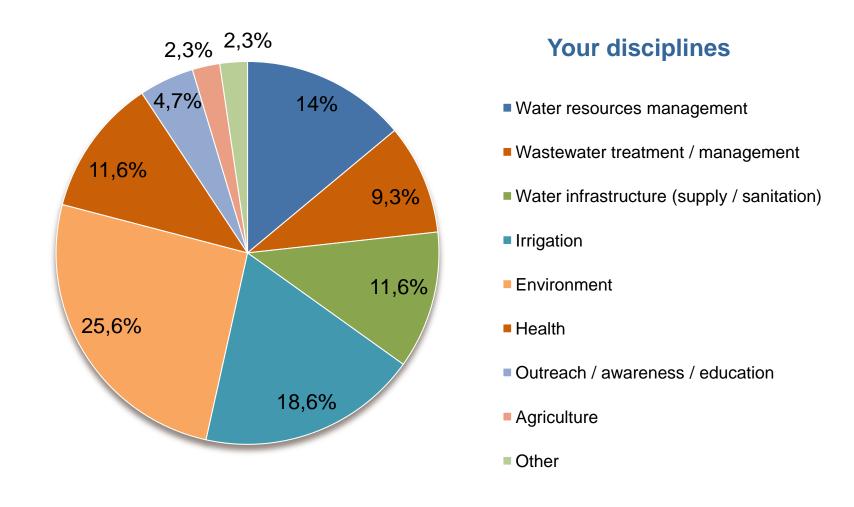
#### **Organizational background**

- Government
- Other:
- Research & Development
- Non Governmental Organization

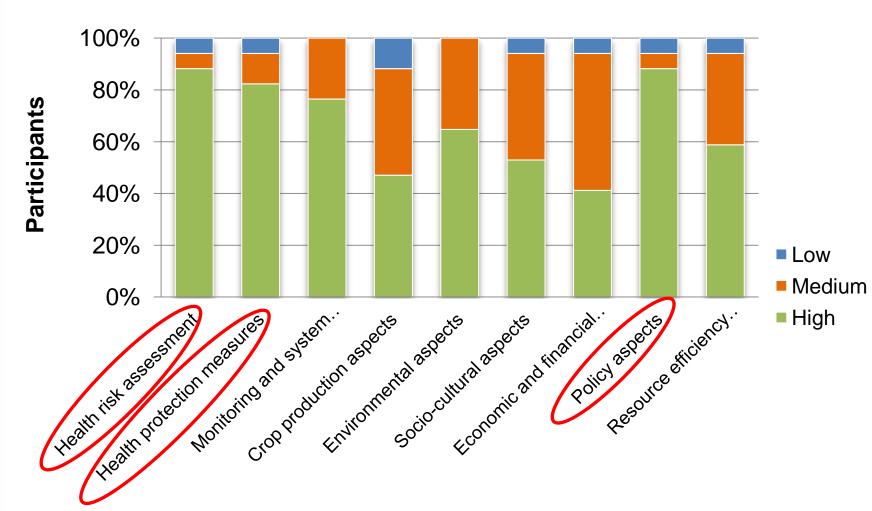
#### Your daily activities

- Management / strategy
- Policy
- Research & development
- Administration / finance / human resources
- Production / operation
- Marketing / public relations

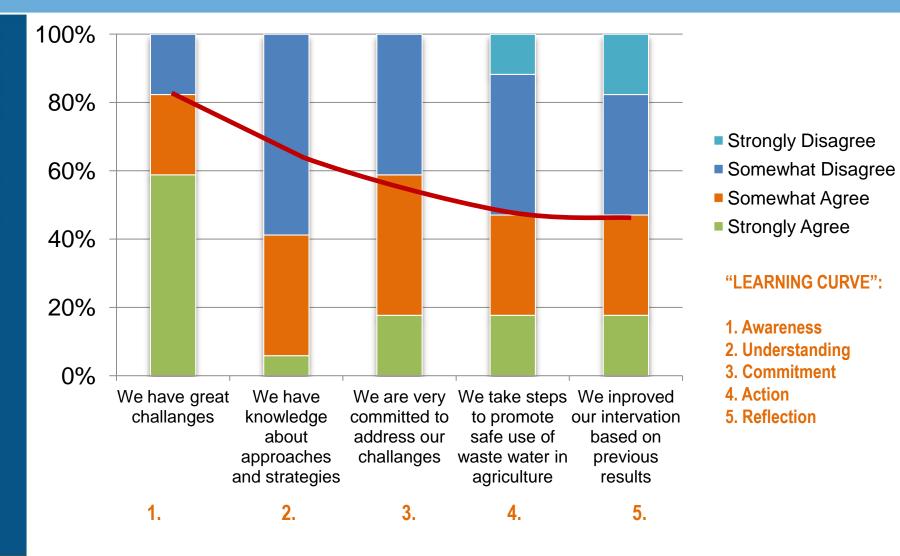
# **Background of the participants of this workshop**



## Capacity needs Southeast and Eastern Asia



## The situation in your countries



## What you want to learn

"Experiences shared by participants and related policies on use of wastewater in agriculture"

"The best practices and strategies in making safe use of wastewater in agriculture a priority in my country"

"Knowledge and experiences from the experts and other countries about the wastewater use in agriculture"

"The approaches to manage safe sanitation and wastewater use "

"The **good and bad experiences from other countries** about safe use of wastewater in agriculture and how they deal with those challenges"

## What you want to share

"I want to share our initiatives and efforts, existing regulations and how we were able to implement these"

"The research of wastewater treatment in my country."

"I would like to share my real condition in my country with other countries for safe use wastewater in agriculture."

"Current situation of wastewater and its potential use in agriculture in my country"

## What you want to take home

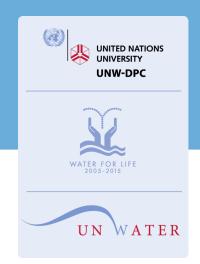
"Guidance on proper use of wastewater in agriculture"

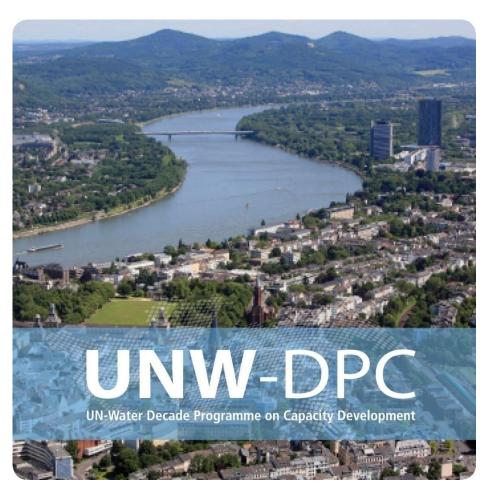
"New contacts and possible networks for continuous exchange of information and knowledge with regard to broader and wider safe use of wastewater"

"Technologies/experiences/skills of safe use of wastewater in agriculture"

"Recommendations on the safe use of wastewater in terms of technical, management as well as governance."

## Thank you!





UN-Water Decade Programme on Capacity Development (UNW-DPC)

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