



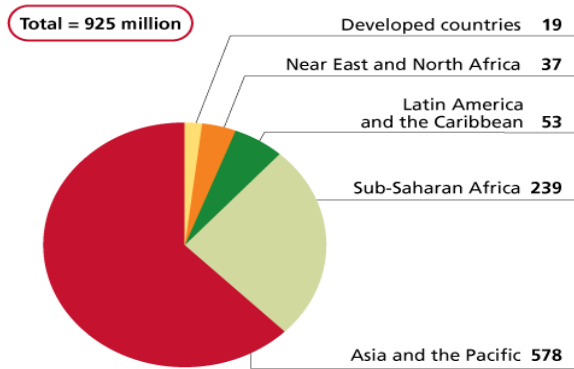
ICID-CIID

Water and Irrigation for Food Security

Gao Zhanyi, President of ICID
26 June, 2012, Adelaide



Distribution of Undernourished Population



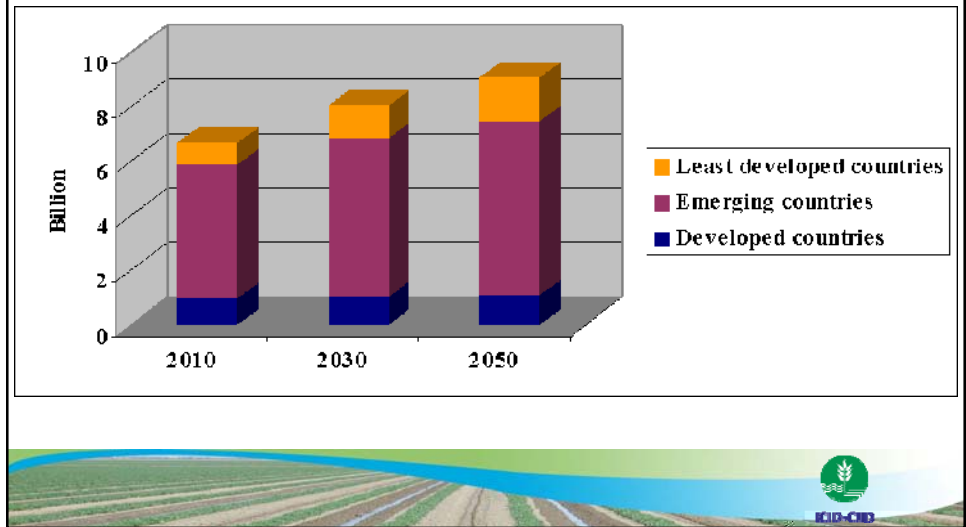
Source: FAO.



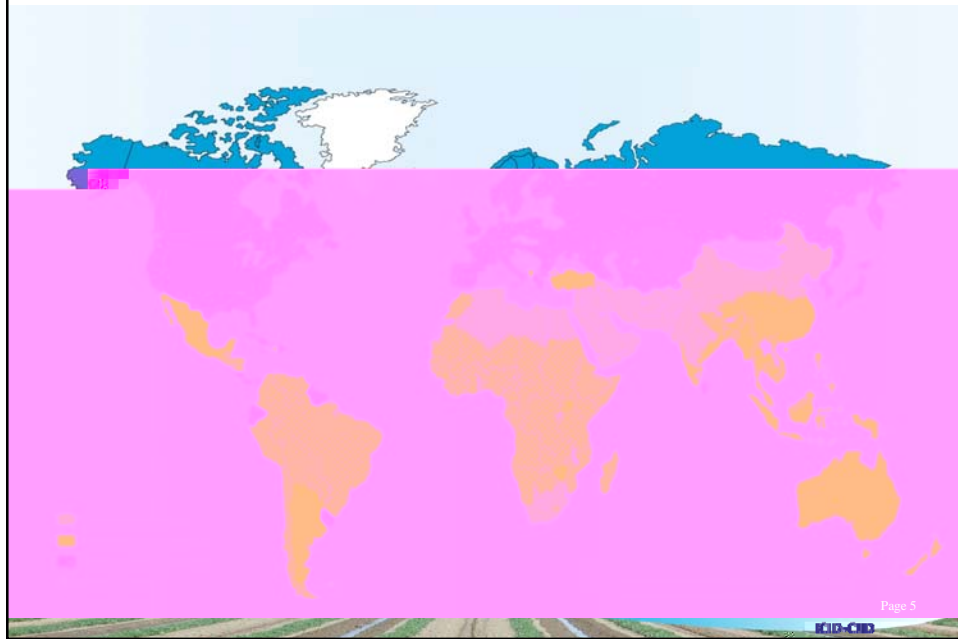
World Food Market Prices



World Population Growth



Projected Water Scarcity in 2025



Water for Food is a highlighted issue in world wide



The

Theme 2.2



1. Target I – Increase rain
2. Target II – Increase wa
3. Target III – Increase sus
water management

Target water

00000000-0000-0000-0000-000000000000





Theme of World Water Day : 'Water and Food Security'
 Objective: to raise awareness on the relationship between water and food production and promote more sustainable food production and consumption patterns.



FAO Workshop on
 REVITALIZING IRRIGATION AND AGRICULTURAL WATER
 GOVERNANCE IN ASIA

FAO Regional Office for Asia and the Pacific

4- 5 April 2012





First Asian Irrigation Forum 11-14 April 2012



RIO+20 UN Conference on Sustainable Development June 12 -22, 2012





Dialogue on Sustainable Development Water

Selected key measures to solve water problem

1. Secure water by promoting biodiversity, ecosystem and water resources
2. Implement right to water
3. Assert the importance of integrated water, energy and land-use planning and management at all scales



Dialogues on Water

Question 1: Brazil Minister of Agriculture: Can we reduce the water used by agriculture from 70 % to 60%?

Answer 1: yes , we have innovation and technology to produce more crop per drop

Answer 2: in Europe agriculture is not the largest water user, the largest water user is industry sector

Question 2: Can technology solve water problems?

Answer: Yes, but we need funds to adopt technology, and have incentives for application of technology, government should provide financial and service supports to farmers, especially smallholder farmers



Question 3: Can we produce enough food?

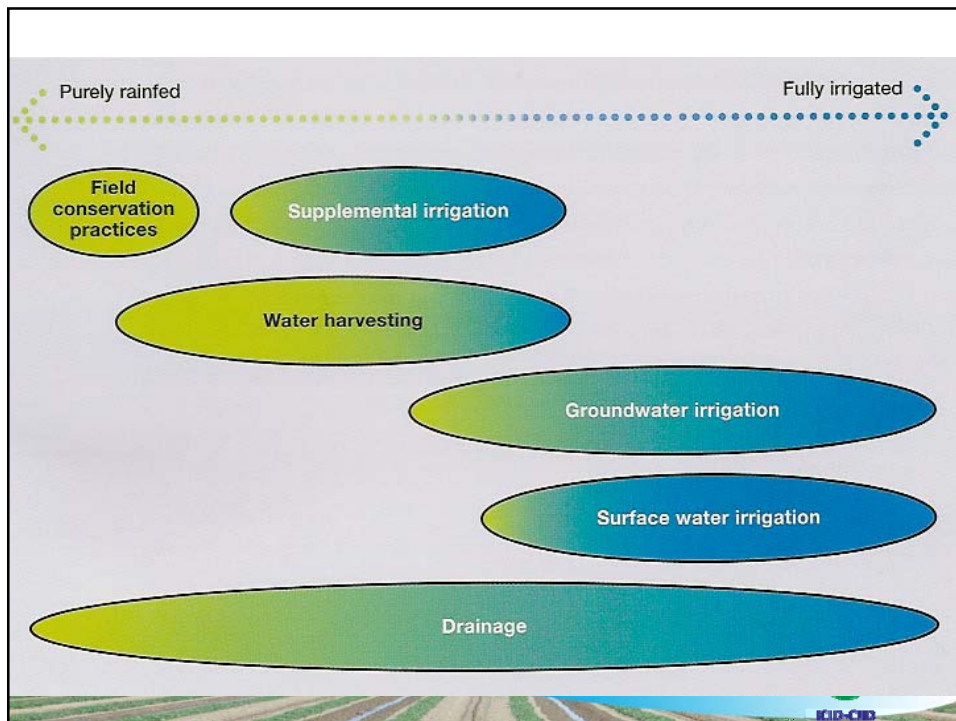
Yes, we need to encourage smallholders farmers from self sufficient cereal production to commercial production. In order to achieve this it is important to provide support to the smallholder farmers, and let them get reasonable revenue. We need to provide leadership, investment , water supply and other services to farmers. IFAD

- Technology and innovation
- Technology transfer
- Investment mechanism
- Ownership and management mechanism



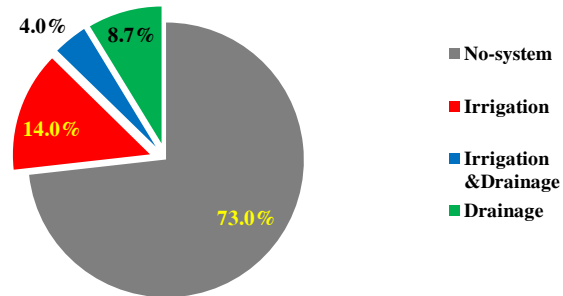
Expectation

- An increase in cereal production of 70 - 100% in the next 25 - 30 years will be required.
- 80 - 90% from existing cultivated area
 - *higher yield per ha, double or triple cropping*
 - *installation of irrigation and/or drainage systems in areas without a system*
 - *modernization of existing irrigation and drainage systems*
 - *installation of drainage in irrigated areas*
 - *installation of irrigation in rainfed areas with drainage*
- 10 - 20% from land reclamation



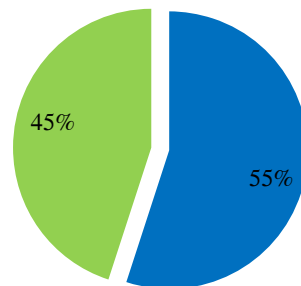
Farmland with Different Type of System

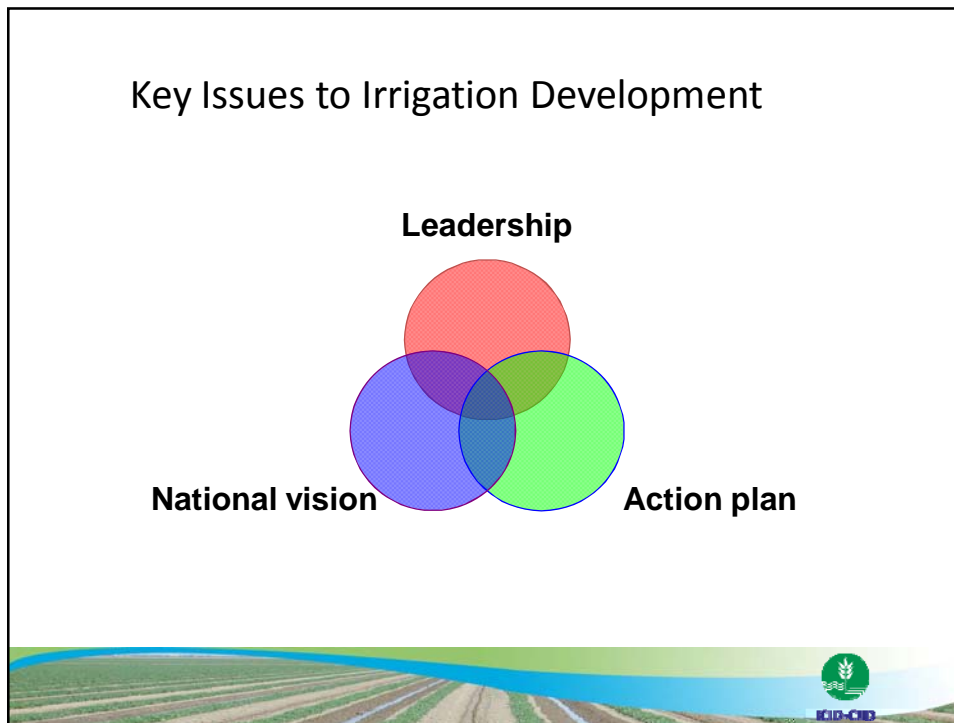
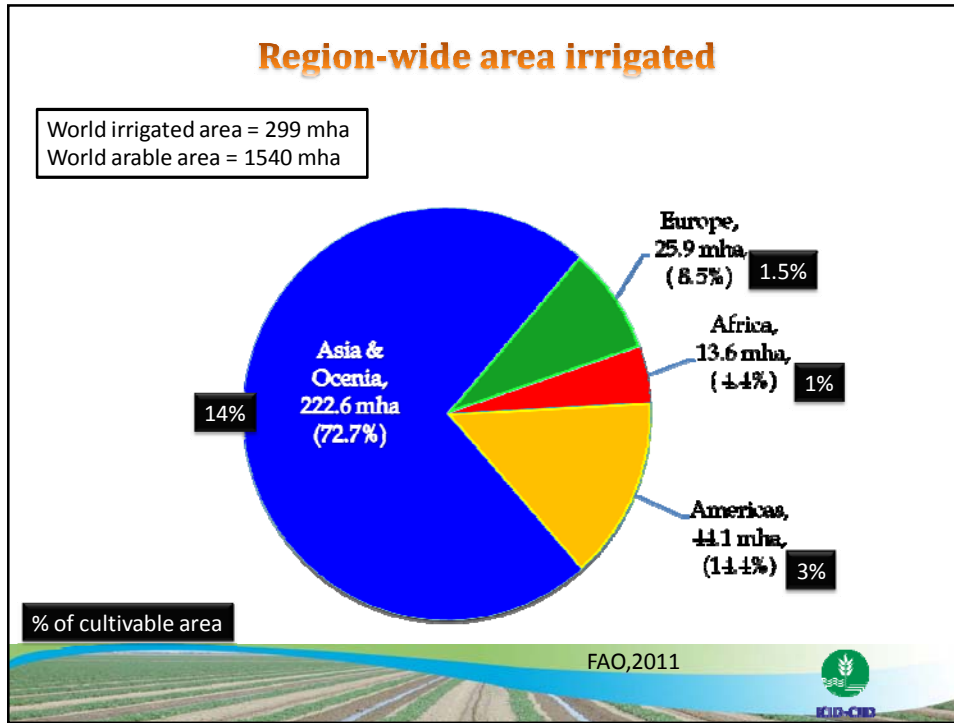
- no system 1,100 million ha
- irrigation only 210 million ha
- irrigation and drainage 60 million ha
- drainage 130 million ha



Cereal production from Rainfed and Water Management System

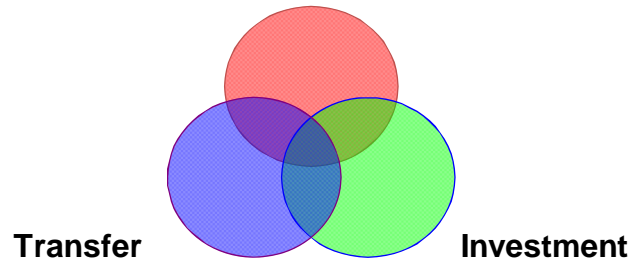
- Water Management
- Rainfed





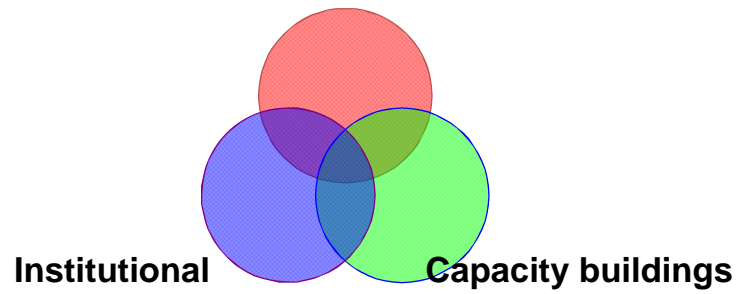
Key Issues to Irrigation Development

Innovation & Technology



Integrated Measures

Infrastructures



Technology Transfer



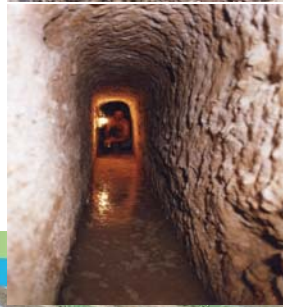
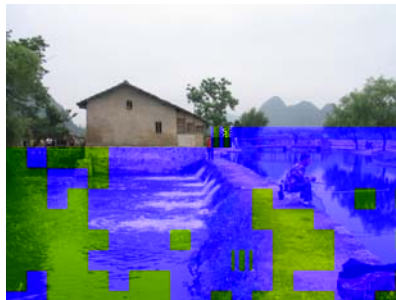
INCREASE IN FARM SIZE Food affordable for urban people



Technical exchange and cooperation



Historical Irrigation Schemes: Idea and Technology



Sustainable Development

Economic Issue

Social Issue **Environmental Issue**

RIO+20
United Nations
Conference on
Sustainable
Development

AGRICULTURE

THE WAY TOWARDS SUSTAINABILITY AND INCLUSIVENESS

- **Economic Prosperity**
Prosperidade Económica
- **Social Inclusion**
Inclusão Social
- **Environmental Protection**
Proteção Ambiental

SIDE EVENT
RIO+20 CONFERENCE

VENUE:
EUROPEAN UNION PAVILION
(ATHLETES PARK)

THURSDAY 21 JUNE 2012
13:30 - 15:15

ORGANISED BY
THE EUROPEAN COMMISSION,
DG AGRICULTURE & RURAL DEVELOPMENT
AND
DG DEVELOPMENT & COOPERATION - EUROPEAID

ONLINE REGISTRATION AT:
<http://event.service-europa.eu/rio20-europeaid>

The EU - World Leader in Development Aid

