



FOOD SECURITY

Overview, Concepts and Guidance

First FAO Technical Consultation on
Bioenergy and Food Security
16-18 April 2007

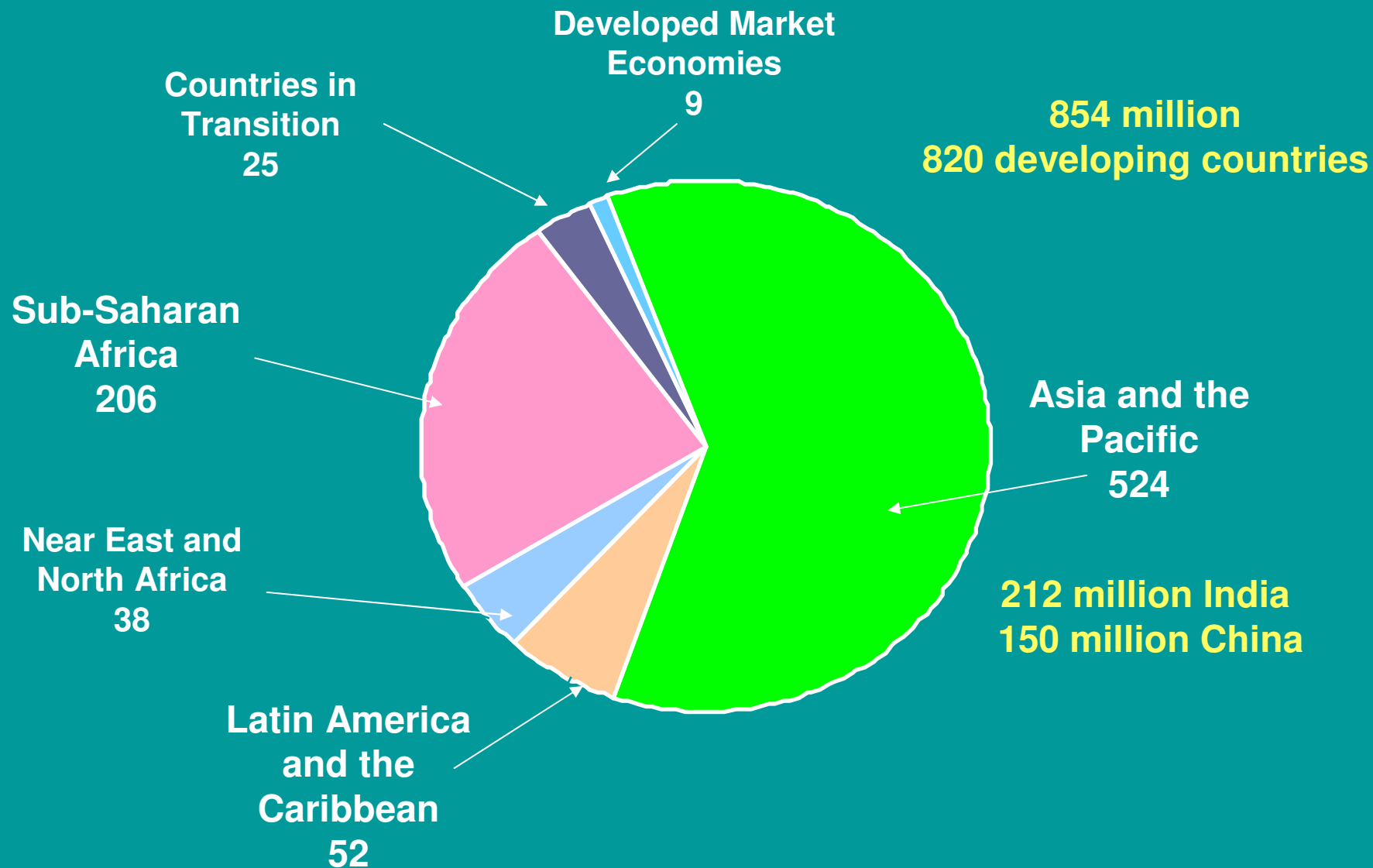


What is food security?

- FAO definition – food security exists when all people, at all times, have physical, social and economic access to sufficient amounts of safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life
- Four dimension of food security: Availability, Access, Stability and Utilization

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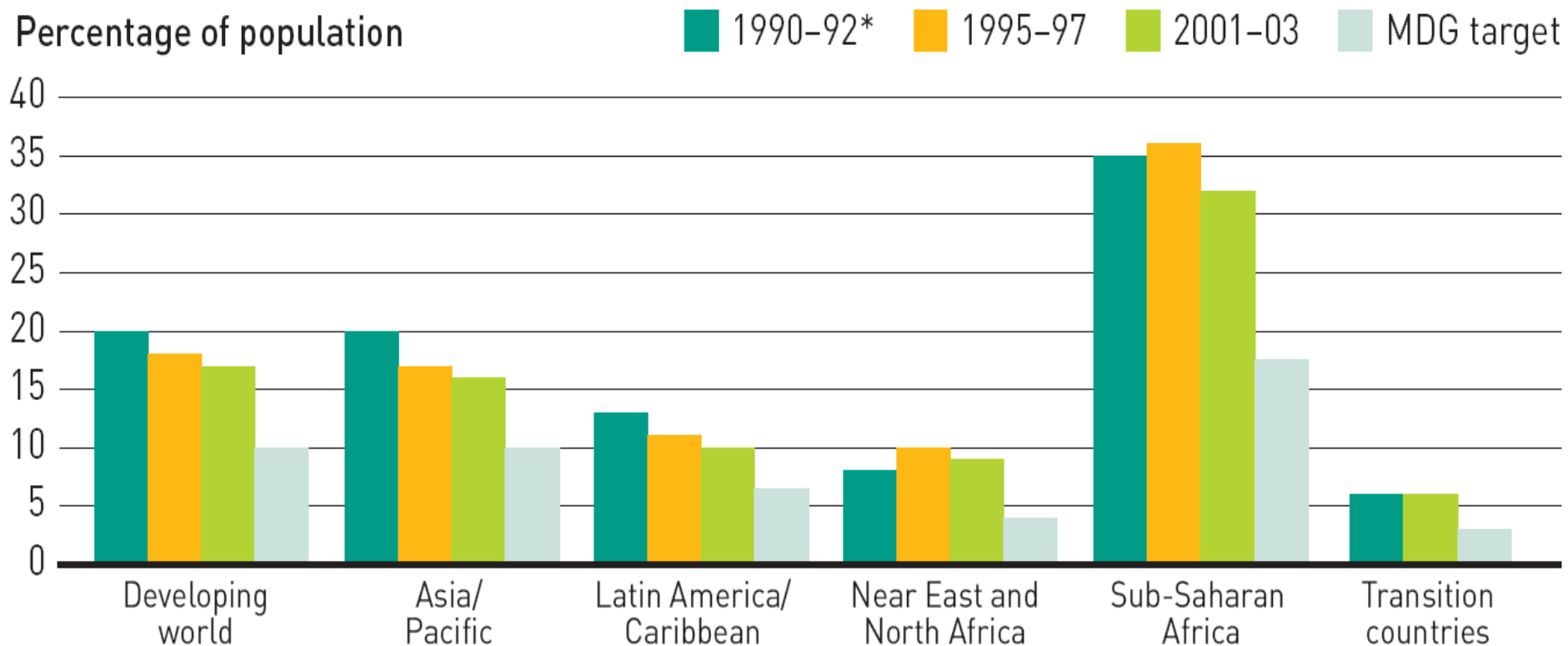
Who are the hungry?





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Proportion of undernourished people and the Millennium Development Goal target



* For the transition countries: 1993-95

Source: FAO



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Where are the hungry?

20 to 34% UNDERNOURISHED			
Bangladesh	Bolivia	Botswana	Cambodia
Cameroon	Congo	Dom Rep	Gambia
Guatemala	Guinea	Honduras	India
Kenya	Laos PDR	Malawi	Mali
Mongolia	Namibia	Nicaragua	Niger
Pakistan	Panama	Senegal	Sri Lanka
Sudan	Thailand	Togo	
> 35% UNDERNOURISHED			
Angola	Burundi	CAR	DRC
DPRK	Eritrea	Ethiopia	Haiti
Liberia	Madagascar	Mozambique	Rwanda
Sierra Leone	Tanzania	Tajikistan	Yemen
	Zambia	Zimbabwe	



Time dimension?

- Chronic food insecurity is a long term and persistent inability to meet food requirements
- Transitory food insecurity is a short term or temporary inability to meet food needs

What is vulnerability?

- Frequency and intensity of shocks households and the capacity to withstand shocks
- Chronic food insecurity reduces capacity to withstand shocks



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Environment, bioenergy and food security?

- Local issues related to potential conflict over access and control of natural resources
- Global issues related to climate change, most direct link to food security

Why analyze vulnerability?

- Monitor frequency and intensity of shocks
- Chronic food insecurity reduces household and community capacity (coping strategies)
- Integrated livelihoods analysis framework

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FOOD AND ENERGY SECURITY ASSESSMENTS?

Potential Positive Effects	Food Security Indicators	Potential Negative Effects
<ul style="list-style-type: none"> •Diversification of feedstock crops •Infrastructure development and employment (rural) •Competition for land use and other factor inputs •Diversification of domestic energy supply •HH energy burden reduced for women and children •SME energy access improved •New technological advances •Climate change mitigation •Revenue from payment for environmental services and monetization of carbon credits 	<ul style="list-style-type: none"> •Proportion of chronically undernourished (<5 stunting) •Adult literacy (+female) •Proportion of HH income to food (access) •Proportion own production of food (availability) •Population growth •GDP growth per capita •Agricultural contribution to GDP growth (%) •Adult HIV population •Number of food emergencies (stability) •Degree of import or export dependence •Access to water and sanitation facilities 	<ul style="list-style-type: none"> •Decreased access to food due to price increases driven by competition for biomass for energy versus food •Decreased food availability due to replacement of subsistence farm land by energy plantations •Increased environmental pressure due to introduction or expansion of unsustainable bioenergy systems (H2O pollution, loss of biodiversity, land degradation) •Pressure on prices of other goods and services related to land-use and biomass



Types of food security, livelihoods and vulnerability analysis?

- Food frequency and diversity score
- Coping Strategy Index
- Phases and scales combine hard and soft indicators (FAO/FSAU or Famine Scales)
- Household Food Economy Approach
- Household Expenditure Surveys
- Judgment-based Classification
- Household Self-Assessment



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Country Typologies Key Starting Point

- Preliminary analysis needs base in typologies
- Developing, LIFDCs and LDCs
- Positive extreme – traditional net exporter of food and energy (Indonesia or Malaysia)
- Negative extreme - net food and energy importer (LDCs and Near East)
- Poor spend high % HH income on food
- 33% of rural SSA HHs headed by women, lacking access to factor inputs, affected by environmental degradation, water and fuel shortages



Prices, biofuels and food security

- Rising commodity prices – potentially positive for producers but negative for poor consumers
- Clear linkages - fossil fuel prices and food crop feedstock
- Price increases in major biofuel feedstock markets (sugar, molasses, corn, rapeseed oil, palm oil and soybean)
- Additional uncertainty (biofuel mandates)
- Factors of exclusion and value chain considerations



Environment, bioenergy and climate change

- Trade-offs need analysis, particularly those related to impacts on food security
- Local issues related to access and control of natural resources
- Global impact of climate change and environmental degradation most direct links
- Increased frequency and severity of weather shocks reduce food production and livelihoods



Policy domains shape bioenergy and food security impacts

- Rural policies favor large-scale commodity and livestock production
- Increased competition for rural resources and need for credit, land and productive inputs
- Factors of exclusion need to be addressed
- Attention to agriculture in rural areas necessary
- Maintaining national and household level food security remains priority for most developing countries



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Lessons in hunger reduction

Applicable to bioenergy development?

- Agricultural growth is critical
- Safety net programs are crucial
- Peace, stability and good governance essential
- Development assistance needs better targeting



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What do we need to understand?

Focus questions

- Expected impacts on prices on food insecure HHs?
- Implications for food availability?
- Implications given current inequities?
- Impact of bioenergy on environmental sustainability as related to food security?
- Who is best placed to monitor and address conflicts?
- How can LIFDCs ensure that food security concerns are addressed?