

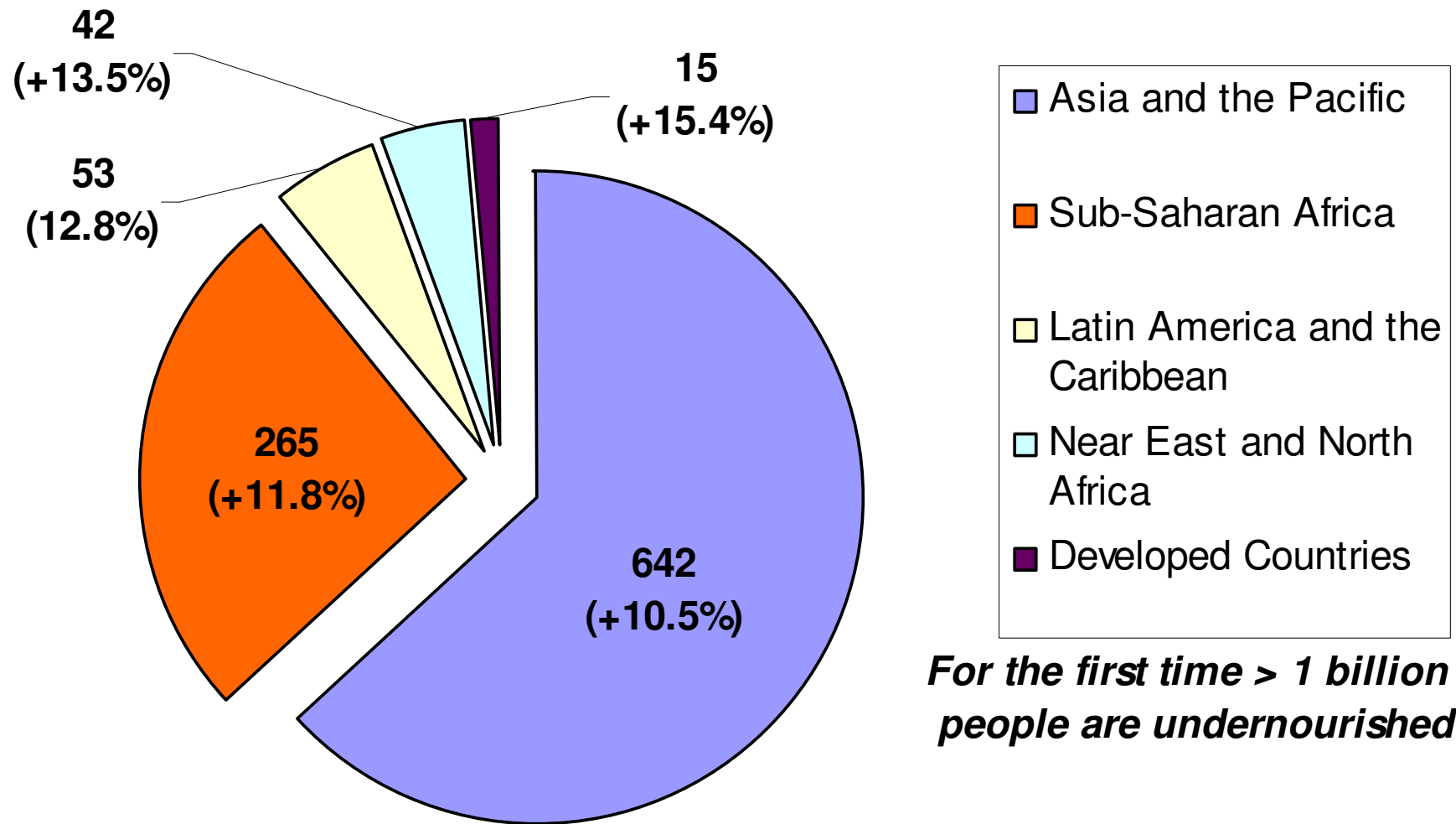
Agricultural Research for Development in the Asia-Pacific Region

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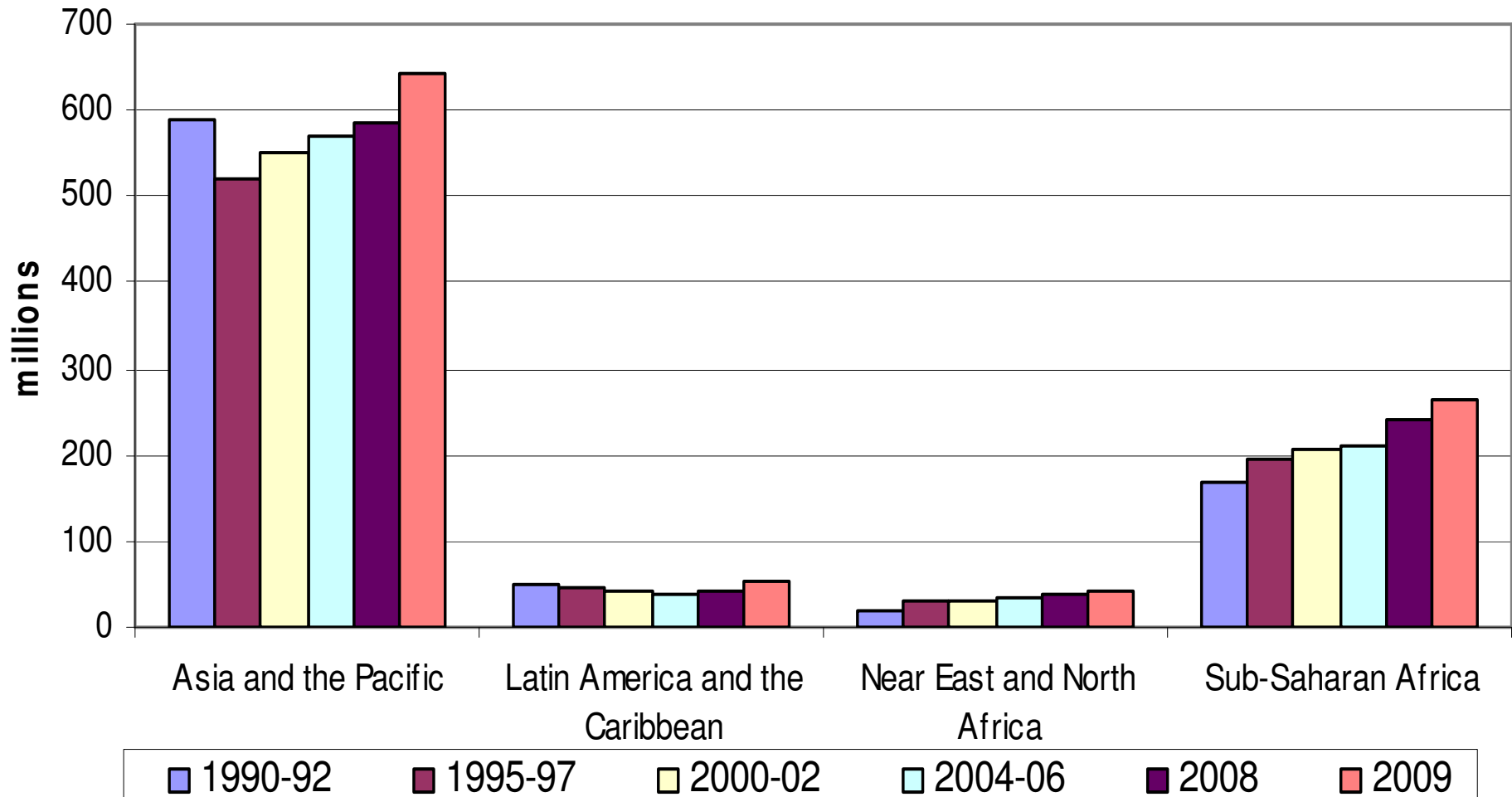
Asia-Pacific Agriculture Roles

- Feed nearly 60% of world's population, which includes nearly 66% of world's hungry and poor, from only 38% of global arable land
- Liberate itself from the curse of carrying over 70% of world's undernourished children and women
- Continue to supply its region and world with food and agricultural commodities, while its land, water and agro-biodiversity resources have been fast declining and degrading and the environmental footprint of agriculture has been intensifying
- Improve livelihoods of over 80% of world's smallholders who farm in Asia-Pacific (and the land fragmentation continues unabated), and of 90% of world's fisher folks and aquaculturists who have their homes in the region, the two groups comprising the bulk of the poor.
- Bridge the income divides between farmers and non-farmers which continues to widen from 1:2 about 40 years ago to 1:4 now.

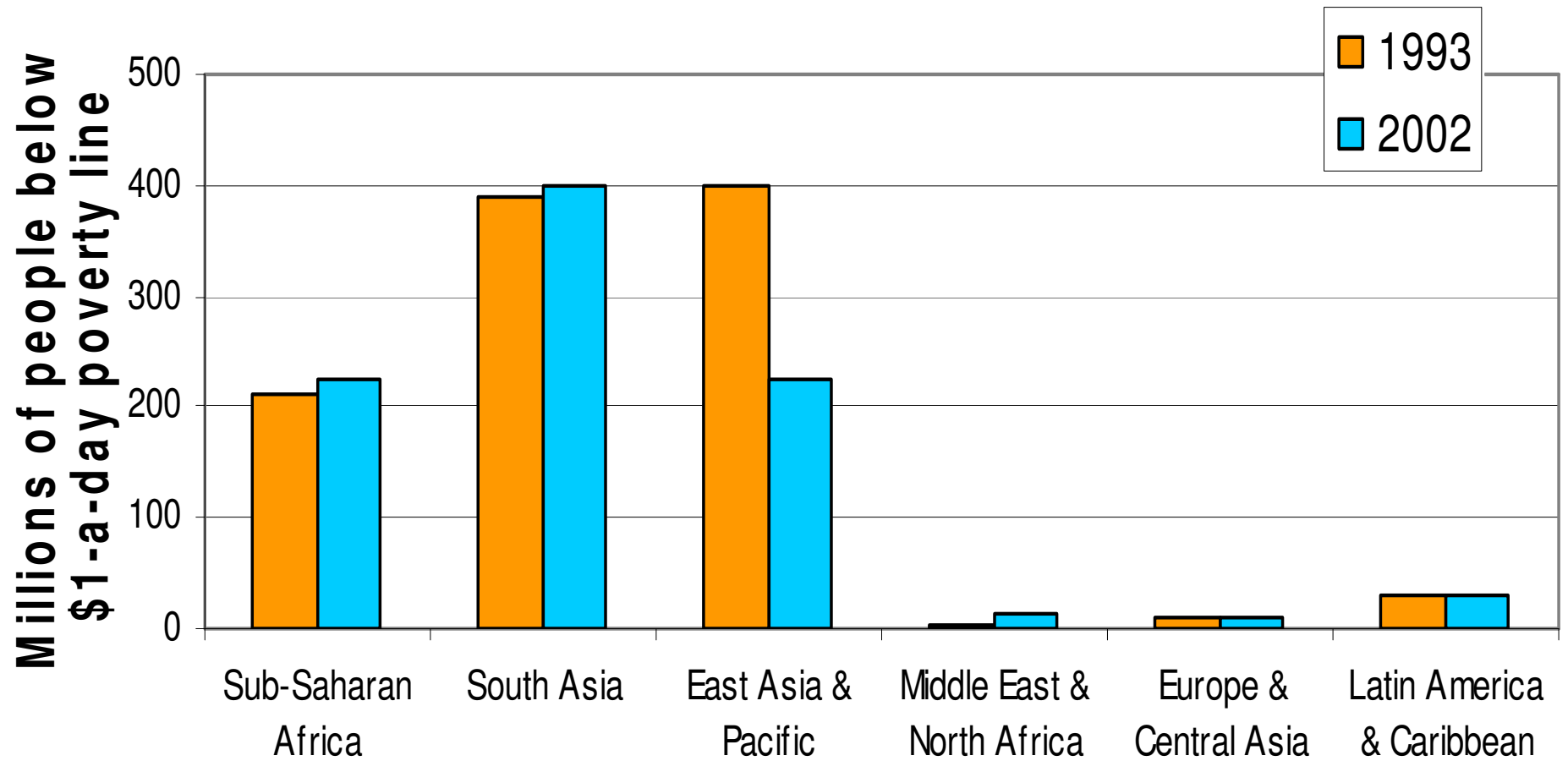
Estimated regional distribution of hunger in 2009 (in mil.) and increase from 2008 levels (in %)



Undernourishment on the Rise throughout the World, being Highest in Asia-Pacific, 1990-92 to 2009



The number of poor rose in South Asia



Key Feedbacks from E-Consultation and F2F Consultation on AR4D in Asia-Pacific

- Needs of the resource-poor smallholders not well addressed (except generally in case of rice) by the AR4D agenda in the past
- Inability of majority resource-poor farmers to adopt high-input-cost and high-risk technologies, and this fact not internalized in the past research agendas
- Underinvestment in Agriculture & AR4D, particularly in horticulture, livestock and fisheries, rainfed areas, socio-economic and NRM research, maintenance research and human capital formation
- Climate change adaptation, uncertainty and vulnerability, scarcity and declining quality of water, declining soil fertility, agro-biodiversity erosion, increasing biotic stresses, increasing threats of bio-insecurity, market volatility and income divides are frontline issues.
- Besides fighting stubbornly high hunger and poverty, synergizing productivity, sustainability and inclusiveness, technology transfer gaps at various levels, and poor linkage of farmers with markets and value chain were identified as other key drivers for AR4D.

AR4D Challenges : Asia-Pacific

o *Continuing Challenges*

- Extremely low and non-judicious investment in AR4D
- Bridging wide yield gaps and accelerating the rate of food and agricultural production
- Preponderance of small and marginal farmers and fragmenting farm holdings
- Low income of farmers and poor return from farming
- Inadequate access to production resources and markets, both domestic and international
- Declining and degrading natural resources and increasing environmental footprint of agriculture
- Non-alignment of policies, strategies, programmes, institutions and enabling mechanisms
- Inadequate human resources, infrastructure and overall research capacity.

o *New Challenges*

- Soaring food prices in recent years,
- Economic downturn and market volatility
- Climate change, increased risk, bio-insecurity and vulnerability
- High energy prices - diversion of food lands to fuel lands (energy plantations)

Investment in AR4D

- Triple investment in AR4D and judiciously deploy resources towards achieving Millennium Development Goal 1 (minimising hunger and poverty)
- Agriculture research for Asia-Pacific needs nearly US\$30 bn/year (at current rate)
- Each Government to provide 1% for AR4D expenditure of total Gross Value Added of Agriculture
- Promote performance-based funding, adopt innovative business models for revenue generation and competitive grant mechanism and synergize the related resources of different concerned Ministries for enhancing magnitude and efficiency of funding
- Formulate and strictly implement strategic result frameworks having built-in provisions of monitoring, evaluation and correction in each AR4D programme/project, and Governments should assure adequate and readily available funds for infrastructure, staff salaries and basic R&D facilities and operations.

Priority Research Areas in South Asia

1. Commodity-based:

- Rice, wheat, local staple cereals, pulses, livestock, horticulture and fisheries

2. Overarching non-commodity-based:

- Climate change management,
- Natural Resource Management (NRM),
- Socio-economics, policy and value chain management,
- Germplasm conservation and improvement,
- Post-harvest management, agro-processing and value addition,
- Quality improvement and safety, and
- Rural non-farm employment and income generation.

Priority Research Areas in Southeast Asia

1. Commodity-based:

- Rice, vegetables, fruits and aquaculture

2. Cross-Sectoral Priorities:

- Enhanced productivity and sustainability for food and nutritional security and poverty alleviation
- Increased resilience against climate change, extreme meteorological aberrations and market volatility
- Value chain management and prevention of post-harvest losses
- Genetic improvement, management of biotic and abiotic stresses
- Enhanced accessibility of research outcomes on part of small and resource-poor farmers

Priority Research Areas in The Pacific

- Value-adding (inclusive) for niche markets (domestic and export) to be considered within a value chain approach, and alleviation of NCDs;
- Crop improvement to support value-adding and climate change and also for nutritional security;
- Climate change management through mitigation and adaptation (modeling sadly lacking);
- Bio-security and trade facilitation – market access and farmer-market linkage; and
- Sustaining livelihoods in atolls.

Priority AR4D in Asia-Pacific as a Whole

- Productivity enhancement, increased input use efficiency and competitiveness, and informed diversification
- Integrated farm and natural resources (land, water, agrobiodiversity) management and enhanced sustainability
- Bridging wide yield gaps through revamping extension and services support, strengthening maintenance research, harnessing new technologies, enriching knowledge and communication domains and building human capital
- Resilience to climate change and natural disasters through developing adaptation and mitigation measures and restoring the balance of crop-tree-livestock-water-land cycles

Priority AR4D in Asia-Pacific Contd...

- Resilience to volatile markets and abnormal economic shifts
- Value chain development – aligning farmers along the chain, prevention of post-harvest losses, value addition and quality enhancement,
- Socio-economic research for developing informed policies and decision-making and rendering AR4D accessible.
- Enhanced employment and income security through integrated on-farm – off-farm and non-farm employment

Congruence among CGIAR-SRF and A-P AR4D/GCARD

- The CGIAR's Vision is to *“reduce poverty and hunger, improve human health and nutrition, and enhance ecosystem resilience through high-quality international agricultural research, partnership, and leadership.”*
- To achieve its vision, the CGIAR through its change programmes aims to further transform itself to develop a Strategy and Results Framework (SRF), which is expected to serve the CGIAR system goal and build on its three reiterative objectives or sub-goals, namely, Food for People, Environment for People and Policies for People.
- The three sub-goals will largely be achieved through the seven interlinked Mega Programmes and two cross-system platforms:
- Outcomes of the Programs will be assessed as per three criteria: (i) reduced hunger and malnutrition, (ii) improved productivity for poverty reduction, and (iii) sustainable natural resource and the environment.
- Notwithstanding praiseworthy efforts as the portfolios of the MPs unfold, the following aspects should be considered:
 - Seek greater involvement of regional fora and NARS and rationally internalize the needs and aspirations of the four sub-regions of the Asia-Pacific: South Asia, Southeast Asia, East Asia and the Pacific
 - Avoid structural and bureaucratic complexities and render the process simple, accessible and exciting for the stakeholders, especially the resource-poor farmers.

Agricultural Productivity Growth in Developing Countries

Annual total factor productivity growth, 1992-2003

	%
East Asia	2.7
South Asia	1.0
East Africa	0.4
West Africa	1.6
Southern Africa	1.3
Latin America	2.7
North Africa & West Asia	1.4
All regions	2.1

The majority smallholders in A-P can be as productive as large holders in Latin America

Source: von Braun et al. 2008.

Not Business as Usual for AR4D

- Increase investment in agriculture and AR4D with focus on poor and resource-poor farmers and inclusiveness (women, youth and vulnerable)
- Intensify advocacy for AR4D to duly internalize the needs, demands and realities of the undernourished and the poor, including the resource-poor farmers, and to emphasise income and productivity growth and alleviation of vulnerability and volatility
- Ensure entitlement of the poor to land, water, biodiversity, socio-economic safety nets and markets
- Integrate land and water use planning and management of natural resources, biodiversity, inputs and biotic and abiotic stresses, including climate change, transboundary diseases, and biosecurity
- Build innovative partnerships to strengthen REE, innovation systems, community-based management of natural resources and mutual enrichment and use of traditional and modern technologies and knowledge systems

Not Business as Usual for AR4D Contd...

- Strengthen capacities – infrastructure, ICT, rural/urban markets, human resource capital – trainings and skill development of actors in value chain to meet new and emerging needs
- Organise and support farmers in groups dynamics – contract farming, cooperatives, self-help-groups to scale-up their activities to render them competitive
- Strive for fair trade, pro-poor input-output pricing, access to domestic and international markets and management of market volatility, linking farmers with markets, supporting Producers' Companies and improving terms of trade for agriculture
- Provide informed options/opportunities to exit farming, particularly to those who are under acute farming-related distresses and to those marginal farmers who despite their best efforts are not able to have their two hands meet.
- Congruent and synergise policies and programmes of ministries of agriculture with those of relevant non-agriculture ministries to forge wider links and to benefit from the overall macro-economic policies and programmes, and also promote South-South cooperation

Thank You