

Combating Africa's Post Harvest Challenges

Operationalizing Post-harvest Knowledge

Commodities: Cassava, Cereals, Banana/Plantain and Fisheries

Ending hunger in Africa: change is now within our grasp – Kofi Annan, October 14, 2010

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Africa's Strategic Food Security Goal

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AU/NEPAD's Strategic Food Security Goal

... agriculture-led development that eliminates hunger, reduces poverty and food insecurity, opening the way for export expansion

- Achieve 6% annual growth rate in productivity
- Dynamic markets within countries and regions
- Improved access to markets
- Play strategic role in ST&I for development

2011 State of Food Insecurity in the World

- **Import-dependent countries in Africa, were deeply affected by food/economic crises.**
- **High/volatile food prices are likely to continue**
- **Price volatility makes smallholders and poor consumers most vulnerable to poverty**
- **High food prices worsen food insecurity in the short term**
- **High food prices present incentives for increased long-term investment in agriculture sector, which can contribute to improved food security in the longer term**
- **Safety nets are crucial for alleviating food insecurity in the short term**
- **Investment in agriculture value-chains remains critical to sustainable long-term food security**

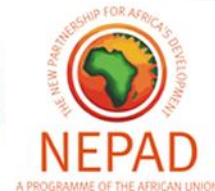


Bring Back PHL Remains on Policy Agenda

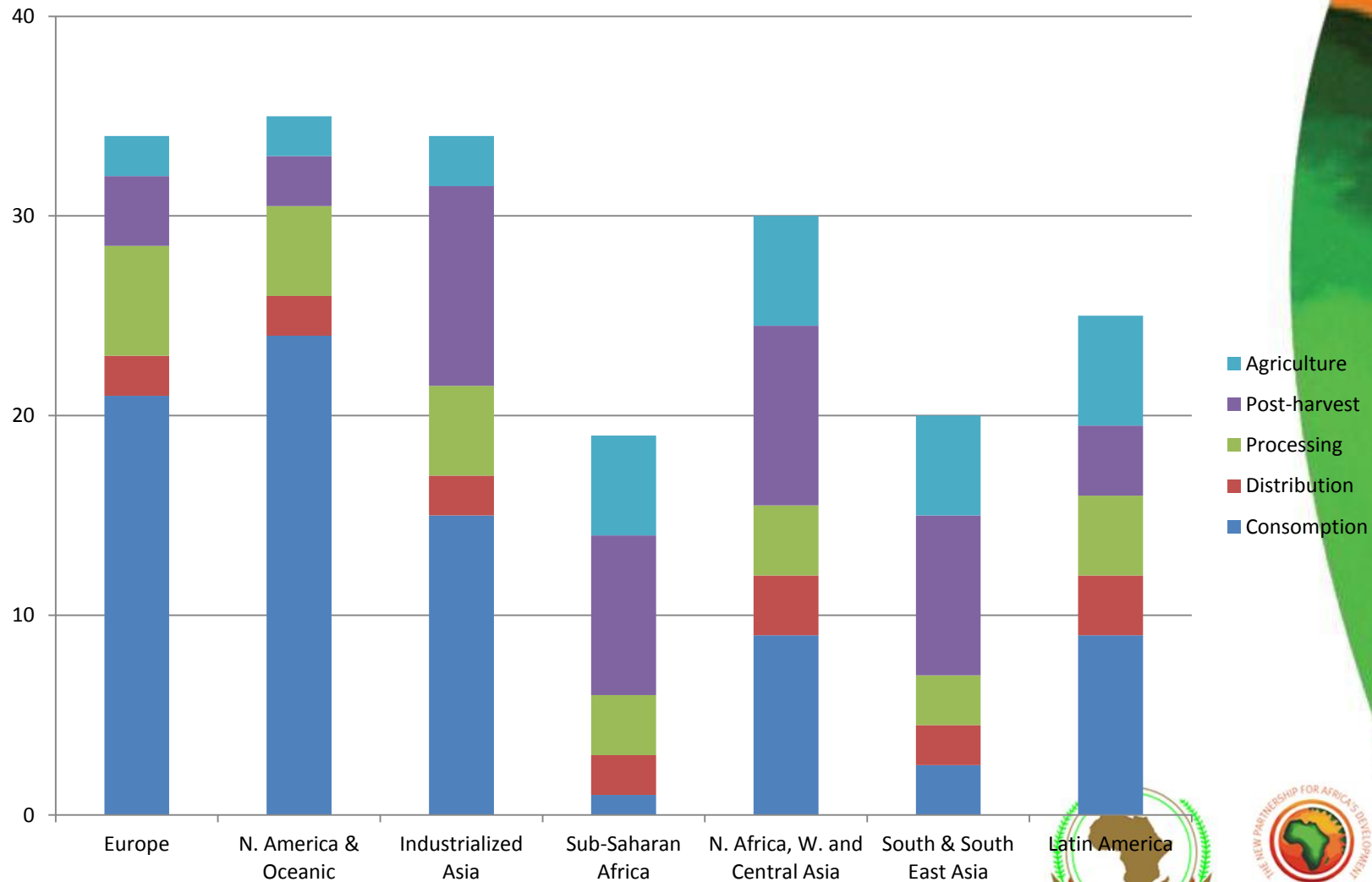
- UN's GA 1975 resolution – reduce loss to 50% by 1985
- AU's 2006 resolution – reduce loss to 50% by 2009
 - And reduce losses to 10% by 2015!
- Shift Africa's agricultural Policy – focus on **post-production**
 - Invest in state-of-the-art Post-harvest knowledge use
 - A post-harvest investment Policy of 10% of production costs needed

Rationale for focusing on post-harvests

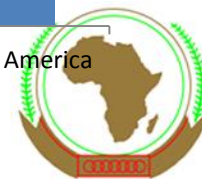
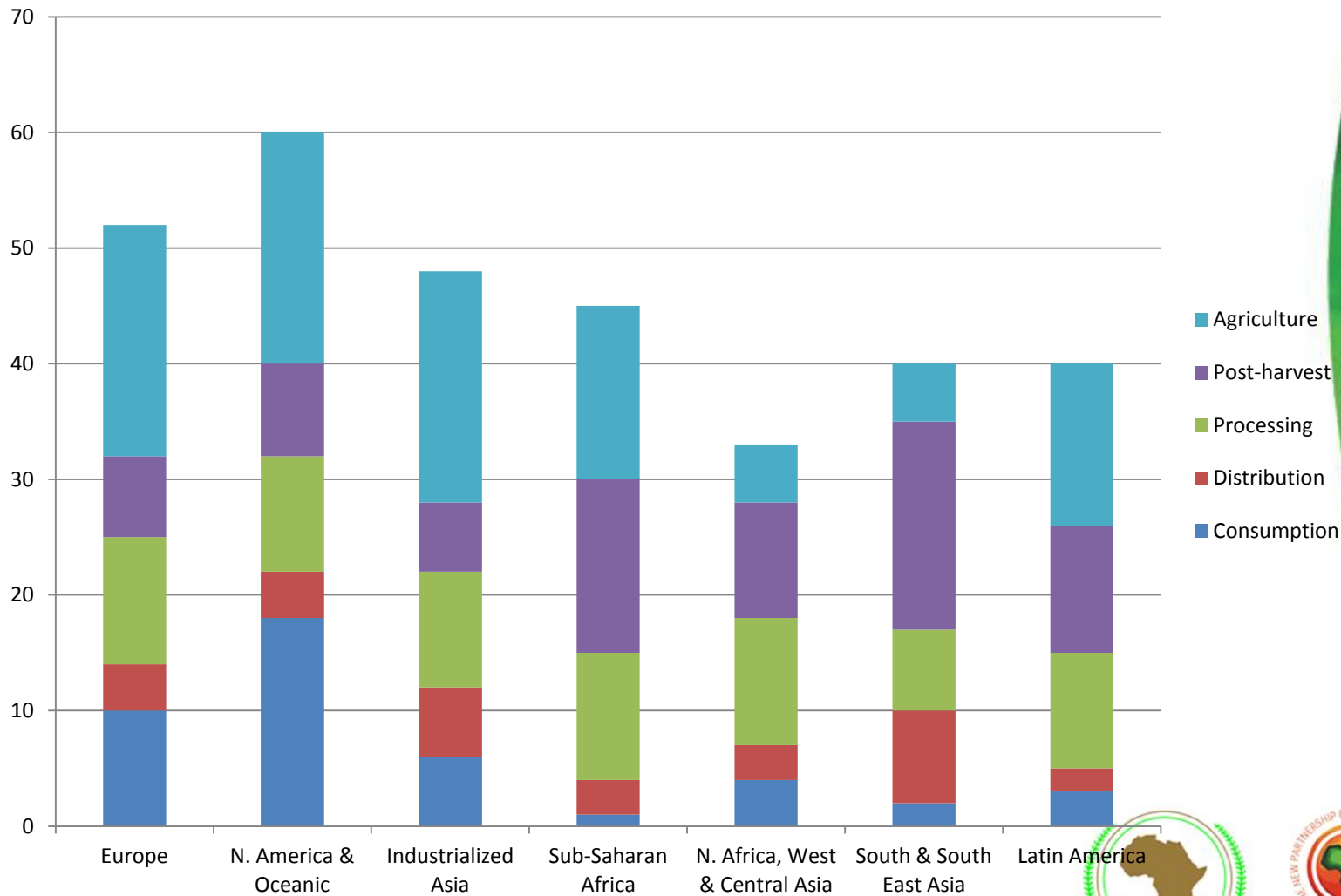
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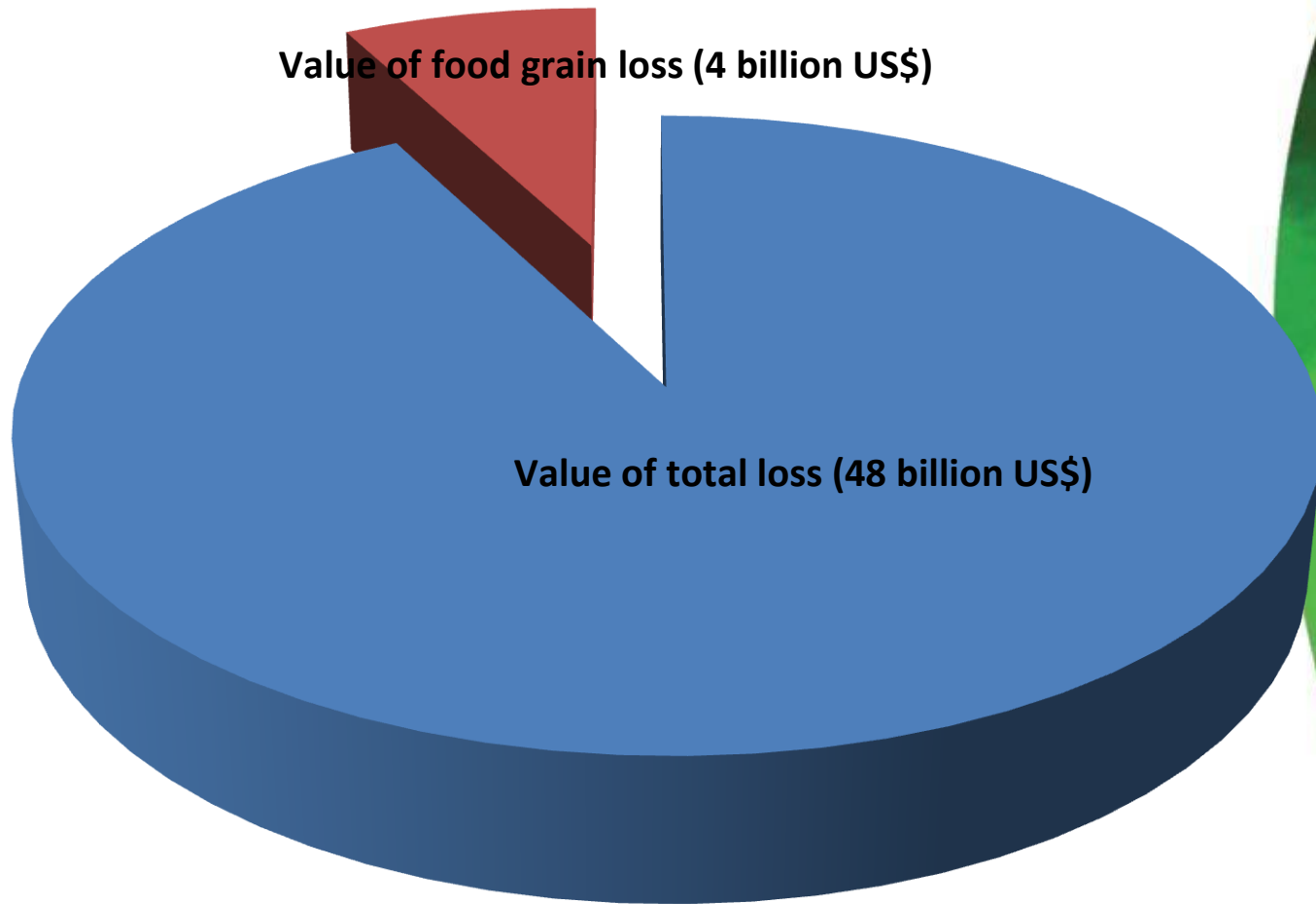
Part of the initial production and lost or wasted (%) at different Food Supply Chain Stages for Cereals in different regions [Source FAO 2011]



Part of the initial production lost or wasted (%) at different stages of Food Supply Chain for Root and Tuber Crops in different Regions [Source FAO 2011]



Estimated total food loss (billion \$)



Monetary value of food losses in Africa

- AfDB in 2010 estimated monetary value of annual **quantitative** post-harvest losses of cereals, roots and tuber crops, fruits/vegetables, meat, milk and fish **@\$48 billion (Total annual ODA = \$50 billion)**.
- Exact value of total losses is higher because stated estimate is based on the minimum quantitative losses, does not include qualitative post-harvest losses even though they result in reduced market value of produces and loss of market opportunities.
- This lost food could meet the minimum annual food requirements of at least 48 million people



Estimates of Africa's Post-Harvest Losses

- PHL of Food grains @ 25%
- PHL of Root crops/tomatoes/banana @ 50%
- PHL of Fisheries @ 10% of capture
- PHL monetarily valued @ **\$48 billion**
- Qualitatively PHL is inestimable!

A 50% reduction of this wastage **could** guarantee food security;
ensure sustainable rural economic growth

Rural Growth Opportunities in Post-Harvest

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Growth Opportunities of Post-Harvests

- Opportunities for growth for investors – e.g cassava-based glue for wood industry; sorghum in brewing; biofuels (ethanol); etc
- Opportunities for increased revenue for actors/producers of the value chain
- Opportunities for industrialization
- Nutrition/health – improving nutritional values of agro-products - fortification of products

Opportunities for Rural Industries

- Cold-chain system – over 1000% boom in Mali mango export - 2003-2008
- Cassava mechanical processors – increased starch production in Malawi
- African Sorghum in Nigerian beer breweries
- Post-harvest treatment – boosting Kenya's flower trade – US\$1.7 billion in 2008
- Grape fruits processing contributed R26.2 billion to South Africa's economy in 2008

Technology & Innovation for Post-Harvests

- Pre-harvest sprays
- Radiation treatment techniques
- Application of biotechnology
- State of the art packaging
- Control of post-harvest environment
- Chemical coating of fruits
- Processing of agricultural produce

NPCA's Proposed Intervention

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NPCA's Post-Harvest Program

- **Specific objective**: *Post-harvest losses reduced by 50% in twenty-five African countries by 2020*
- **4 Outputs**
 - Technologies & innovations adapted, up- and out-scaled
 - Regional centres of excellence, strengthened & coordinated
 - Knowledge on innovations, commercialization & market access
 - Policy options explored and developed

NPCA's Post-Harvest Program 2

- **7 Thematic Areas**

- *Agro-processing machinery*
- *Agric-produce storage & ware-housing*
- *Agric-produce packaging*
- *Biotechnology for enhanced agric-produce shelf-life*
- *Post-harvest **policy***
- ***Market** Access*
- ***Capacity** strengthening for extension staff and producer organizations*

Delivery of Expected Outputs

- Scoping study commissioned to identify technologies
- 5 Centres of Excellence to lead adaption of identified technologies – regional knowledge integration
- Promote PPP in technology adaptation – entrepreneurs, producers, extension & scientists
- Ensure Post-harvest knowledge permeates rural communities
- Promote value addition; intra-African trade in produce
- Keep PHL on Policy agenda – liaise with Champion countries

Program implementation phases

- Phase I: Technologies identification/up- and out-scaling & Commercialization
 - Capitalize on proven technologies - Adapt, up- and out-scale
 - Agro-processing and technology commercialization
 - Human and material capital development
- Phase II – Consolidation of commercialization

Program Niche

- Anchored in CAADP Pillars II, III & IV
 - Rural infrastructure, processing,
 - Trade, markets and agribusiness
 - Storage infrastructure, packaging, handling
 - Food availability,
 - Research, Technology development, delivery and use

Cross-cutting Issues

- Gender considerations – women's predominance in harvesting, handling, transportation, processing
- Focus on target groups & marginalized actors
 - access to resources for post-harvest
 - Reduce physical demands on vulnerable groups
 - Labor saving processes and methods – reduce drudgery

Partnerships for Africa's Post-Harvest

- Mobilize stakeholders/actors
 - apply the principle of subsidiarity
- NPCA needs long-term partnerships
 - ensure increased stakeholders' ownership of Program
- Technical; Strategic; development partnerships;
 - Jointly identify actions and ready to implement projects – short and long-term
 - Establish strong M+E team on post-harvest

Partnerships contd

- Examples:
 - **Scoping study on Post-harvest technologies and applications**
 - Economic analysis on tangible benefits of identified technologies to users and on market knowledge systems
 - Identification of regional centers to facilitate technology up- and out-scaling
 - Action plan for resource mobilization

Target Groups and Beneficiaries

- African countries
- NEPAD Agency and partners
- Regional and specialized national centers
- Producer organizations
- SMEs
- Those demanding effective solutions to PHL and food security challenges

Thank you

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