



Agriculture Cost of Production

Sangita Dubey
Statistics Division, FAO



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Food and Agriculture Organization
of the United Nations

Outline

Objectives

Uses of cost of production statistics/Examples

Outputs and indicators/
Examples

Key methodological questions

Progress & achievements

Next milestones

Proposed Recommendations



Objectives

Provide developing countries with relevant and implementable **guidelines** on the:

- Collection;
- Compilation; and
- Dissemination of **CoP statistics**



**Internationally comparable statistics
on agricultural CoP**



Uses of cost of production statistics

Government level

- Basis for economic analysis
- Basis for effective policy-making
- More efficient resource allocation
- Better program-targeting of farmers

Economic operator level

- More efficient markets
- Better decisions by farmers (input use, commodity specialization etc.)
- Better decisions by input producers

Uses of cost of production statistics

Examples

Taxation

- Morocco introduced a **tax on agricultural activities**. CoP statistics are essential to set tax rates, estimate distribution effects (winners, losers) and costs & benefits (to the treasury and economy).

Price support schemes

- **India** uses its annual CoP estimates **as a basis** to set the level of **price support mechanisms** for the different crops.

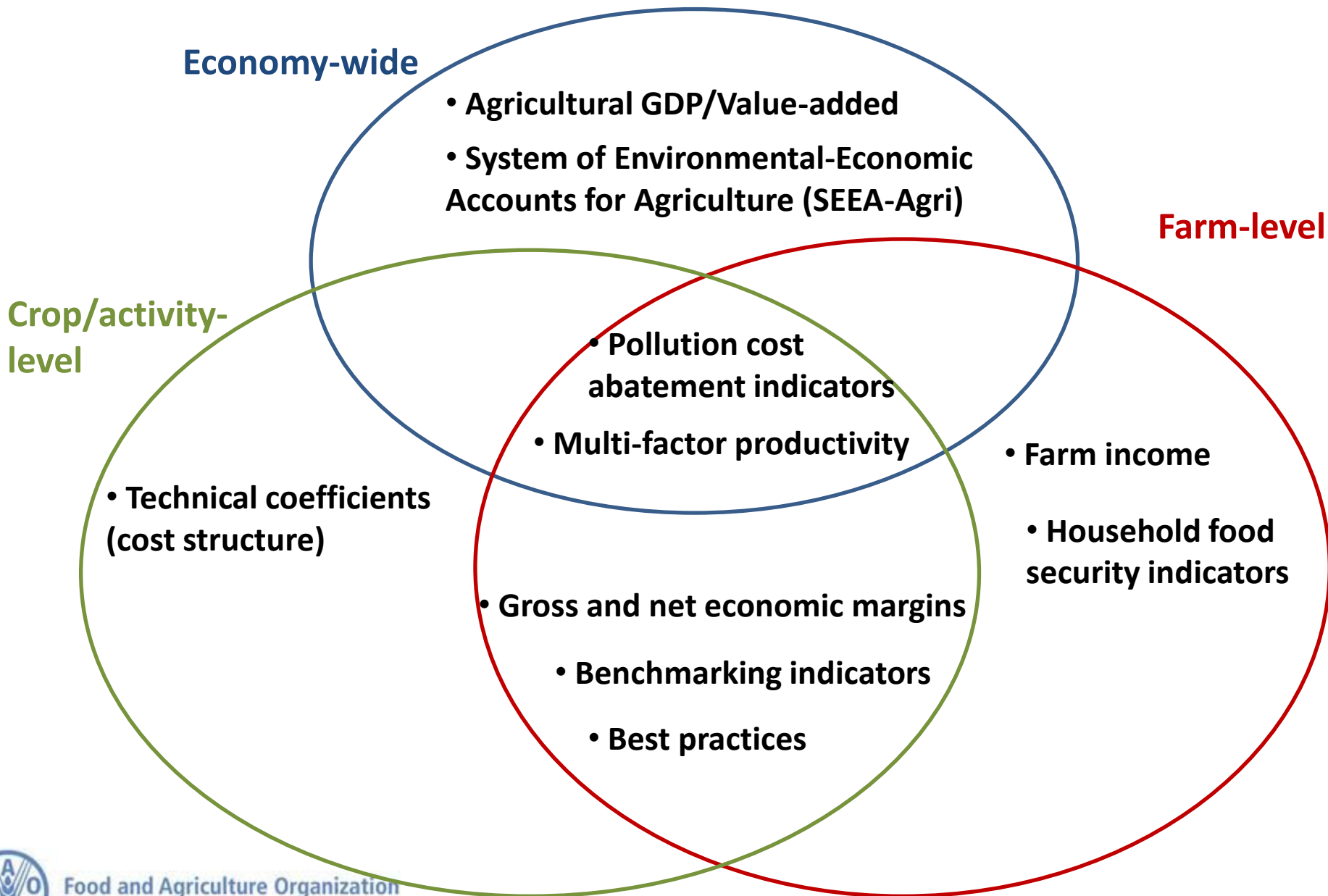
Subsidies

- CoP estimates are one of the main information sources for the setting of **EU direct subsidies** within the Common Agricultural Policy.

Total Factor Productivity (TFP) index

- the EU started to compile a TFP index as one of the main indicators to evaluate the new Common Agricultural Policy (CAP). Data on intermediate consumption and input costs are critical for such and indicator.

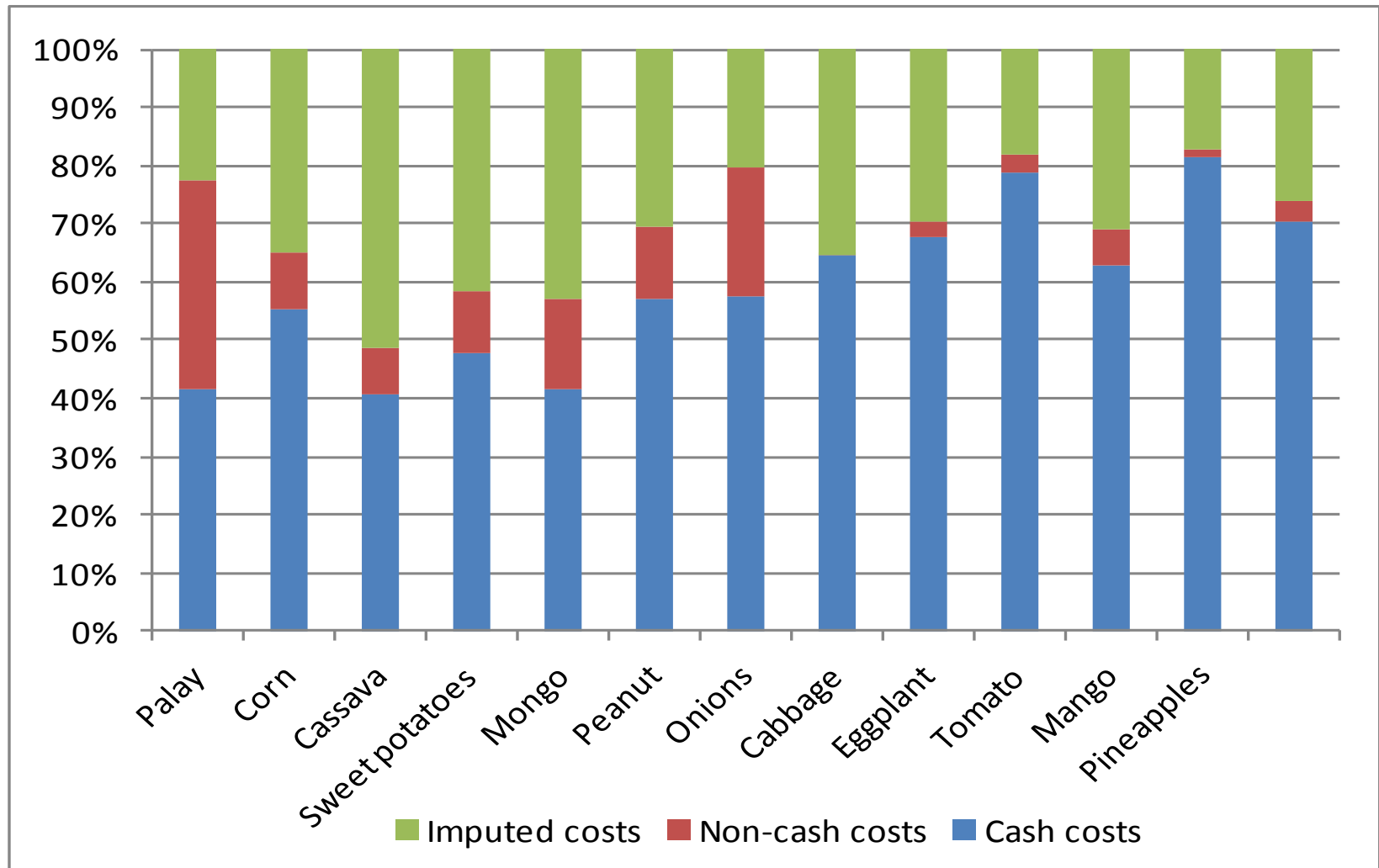
Outputs and indicators



Outputs and indicators

Examples

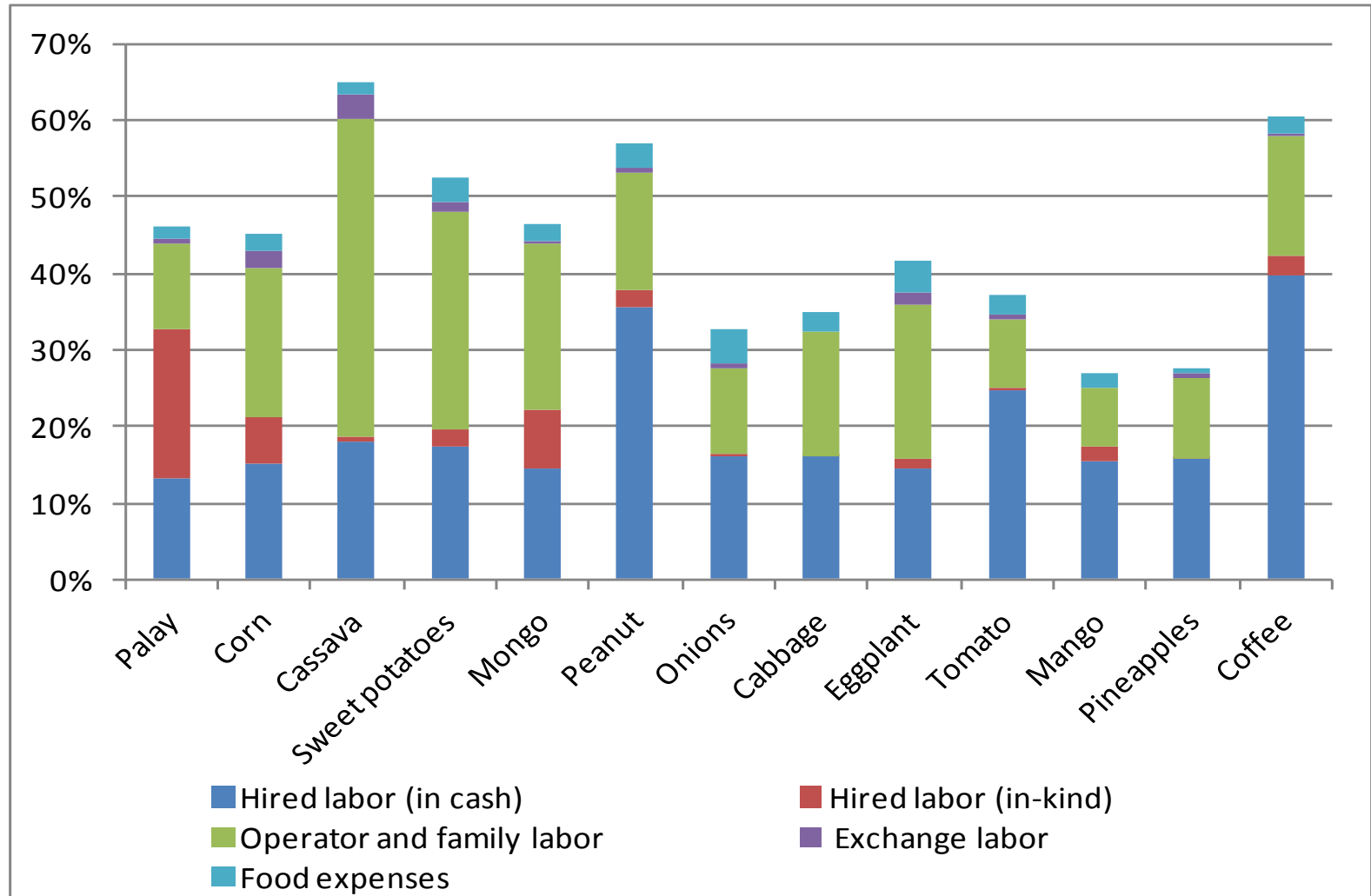
Structure of costs – Philippines (2012)



Outputs and indicators

Examples

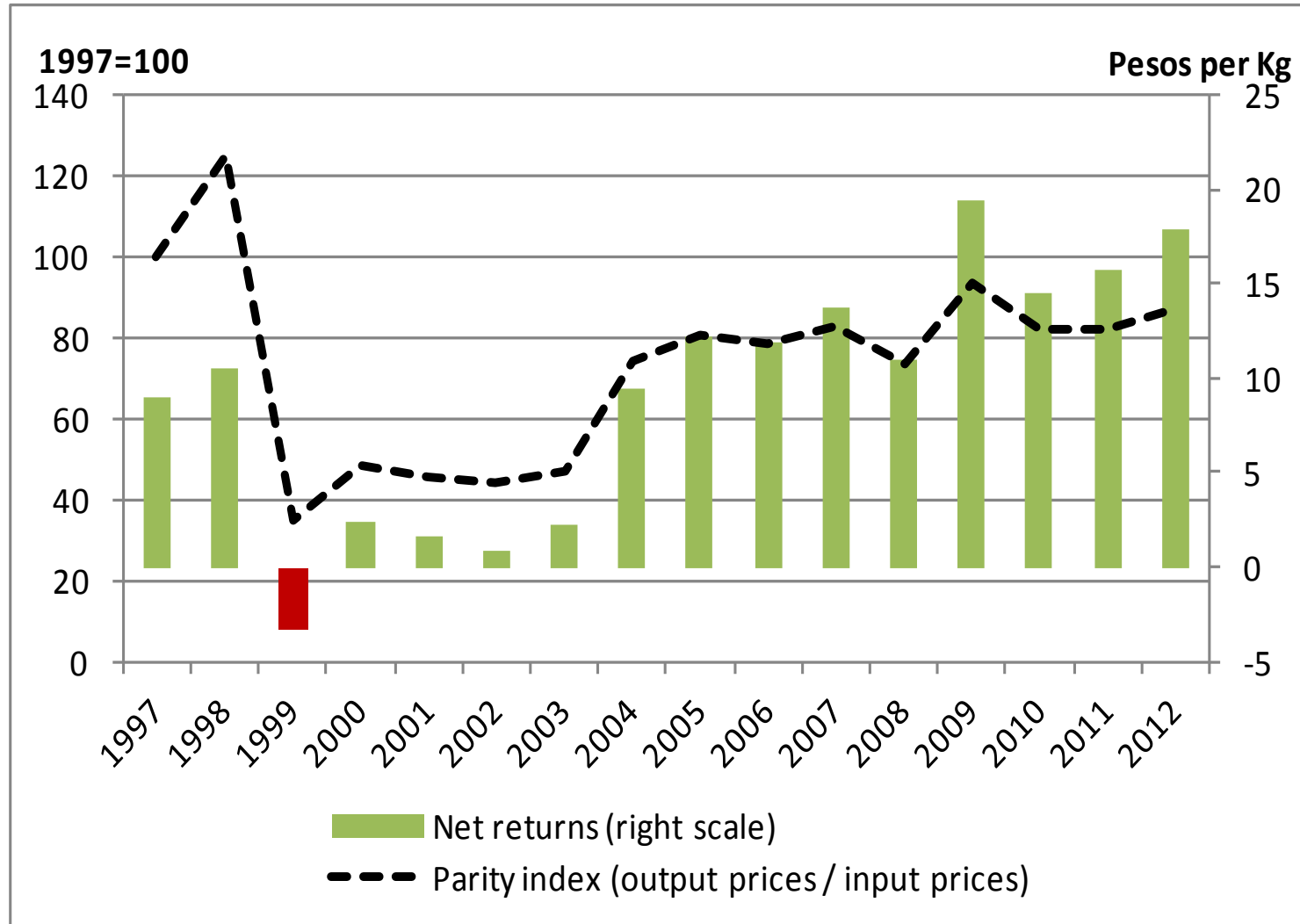
Labor costs (share in total costs) – Philippines (2012)



Outputs and indicators

Examples

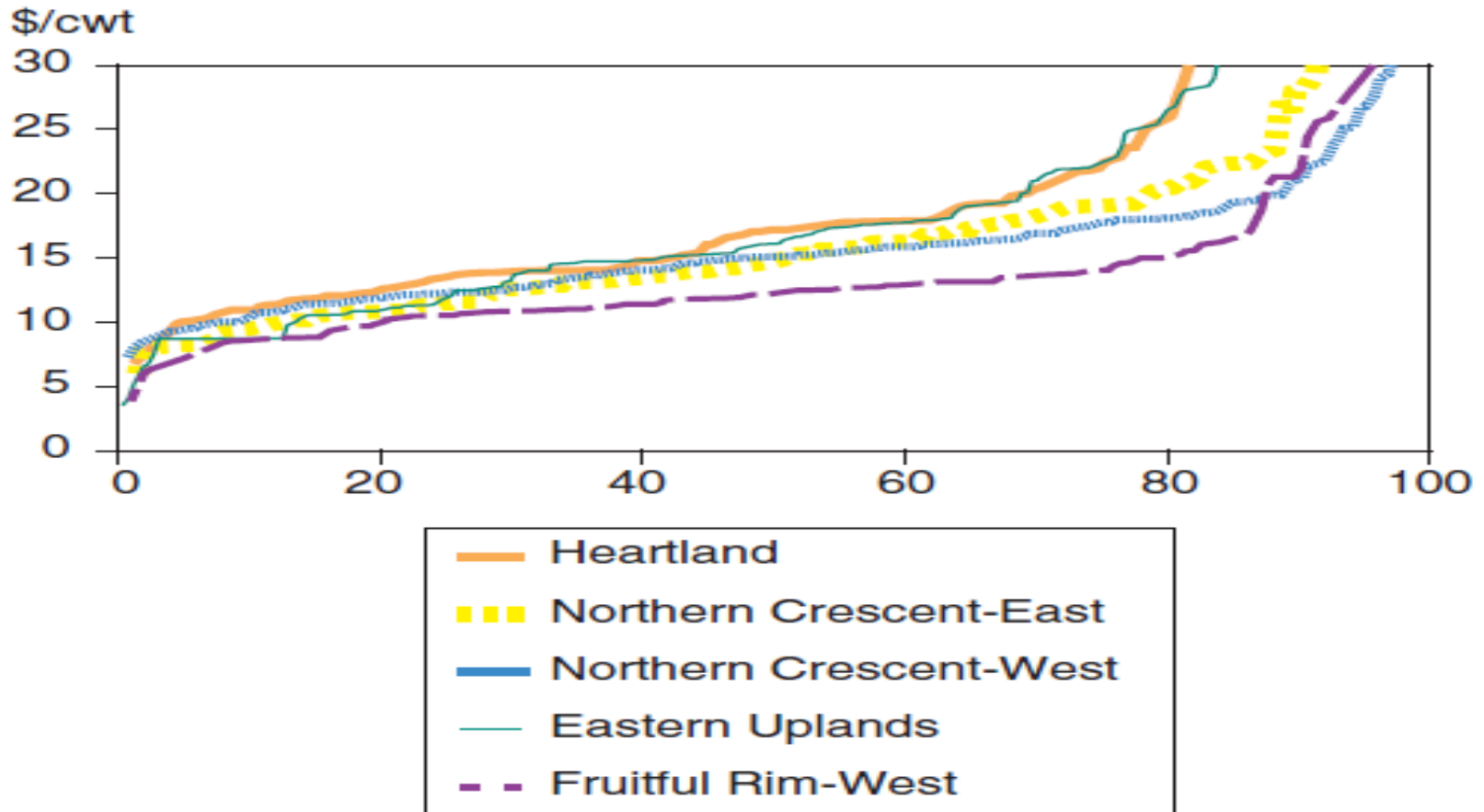
Economic profitability (Peanuts) – Philippines (2012)



Outputs and indicators

Examples

Cumulative distribution of Cost of milk operations, by US region, 2000



Main methodological questions

Data collection strategies

Collection of farm-level data

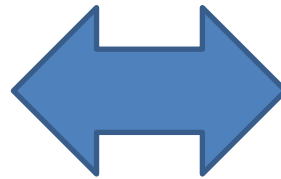
Sampling survey approaches

Typical farm approaches

Administrative information

Combination of data sources

TRADE-OFFS



Costs of the program

Relevance and accuracy of the data

Representativity of the indicators

CoP Dimensions & estimation of costs

Total costs	=	Variable costs	+	Fixed costs	.	
		Cash Costs		Capital costs		
		Purchased seed, feed fertilizers, etc.		Depreciation costs and opportunity costs of capital on owned machinery, buildings and farm equipment		
		Paid labour				
		Custom services (machinery, etc.)				
		Non Cash Costs		Farm overhead costs		
				Unallocated fixed costs		
				Farm – level taxes, permits licenses, etc.		
		Unpaid (family) labour		Land Costs		
		Farm – produced inputs		Land rents and imputed rents, land related taxes		
		Owned animals and machinery				

... and what about joint inputs?



Main methodological questions

Estimation of costs

Imputation of costs for inputs when

Inputs are produced on the farm (feed, manure, etc.)

Inputs are owned by the farm (family labor, land, etc.)

Payments are made in-kind

Information on costs is not available or usable

Principle

Use of **market prices** for similar inputs

Question : what to do when markets for these inputs do not exist ?

Main methodological questions

Allocation of costs

Farm-level costs need to be allocated to each activity/commodity when:

The farm produces more than one commodity

Inputs are jointly used by multiple activities



Multiple allocation methods

Based on area harvested

Based on gross revenues, ...

Based on econometric techniques

Questions : should costs be always allocated? What are the negative implications of these allocations?



Process and organization

Project team

Combined effort

Statistics Division of FAO

Friends of the Chair (group of experts)

National and international consultants

Country participants (NSOs, agriculture departments, etc.)



Progress & achievements to date

2009 (AFCAS Ghana)

- Study of country experiences in cost of production and price statistics; request to initiate work on CoP

2011 (AFCAS Ethiopia)

- 1st EGM on CoP with country case-studies (Mali, Zambia, Ethiopia)
- FAO mandated to: administer a global survey on country CoP practices; prepare a Handbook on CoP statistics focused on developing countries

2012

- CoP included as research activity of the Global Strategy
- APCAS Viet Nam : 2nd EGM on country practices in CoP; presentation of an annotated outline of the Handbook

2013

- Literature review on CoP prepared by the EU-JRC
- 3rd EGM in Rome: discussion of the first draft of the Handbook and preparation of the field tests
- AFCAS Morocco: presentation of the outputs and objectives

Progress & achievements to date

2014

- APCAS Lao PDR: presentation of CoP outputs and objectives
- Testing CoP at country level: 3 Country Case Studies:
 - Philippines: Overview of existing CoP program
 - Colombia: test of Private sector Coffee CoP
 - Tunisia: development and focus group testing of questionnaires for cereals, dairy, olives
- On-line publication of draft CoP Handbook/guidelines, for feedback



2015

- Final EGM on CoP Handbook and country case-studies
- Presentation to Global Strategy's Scientific Advisory Committee
- Revisions to CoP Handbook and Case Studies

Next milestones

2015

- Publish CoP Handbook
- Public Country Case Studies
- Develop training materials
- Deliver regional workshops
 - In Africa - led by African Development
 - In Latin America and the Caribbean

Future
Opportunities

- Develop CoP module for AGRIS



Proposed Recommendations

It is recommended that:

1. Member states endorse the Agricultural Cost of Production Guidelines as recommendations for implementing and estimating Cost of Production statistics, and FAO continue production of CoP training materials.
2. FAO, in collaboration with a regional organization, deliver a Cost of Production workshop in Latin America and the Caribbean in the next year.



For more information ...

... please contact

FAO Statistics Division

Sangita Dubey (Senior Statistician/Team Leader): sangita.dubey@fao.org

International Consultant

Peter Lys (Canada): peterlys@rogers.com

*Thank
You*

