# AGRODEP DATA COMPONENT

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# DATA COMPONENT: CONTEXT

- Lack of good quality data to support research and policy analysis
  - Weak capacity at statistical office
  - Inadequate data collection and management
  - Outdated computer systems
- Several recent data initiatives, examples:
  - International Household Survey Network (World Bank)
    launched 2004, survey data in developing countries
  - African Symposium on Statistical Development
    convened 2006, collection\dissemination of census data
  - African Charter on Statistics (adopted 2009)
    adopted 2009, coordination of statistical activities
  - Living Standards Measurement Study-Integrated Surveys on Agriculture, LSMS-ISA (BMGF, World Bank)



# DATA COMPONENT: MAIN GOALS

AGRODEP will develop a central data clearinghouse with a Web data portal

### Main Goals:

- To bring together dispersed and disparate statistical, economic, and geospatial data in Africa;
- To provide links to existing key data sources;
- To develop shared standards, formats, and exchange protocols;
- To train AGRODEP members on database construction to ensure future developments;



## DATA COMPONENT: CROSS-CUTTING ACTIVITIES

 Priority setting in data collection efforts
 Data stocktaking – identification of available data and sources

 Development of data standards and protocols on data acquisition, archiving, metadata, quality control, dissemination
 Contact data sources \ negotiate access
 Identification of data experts\collaborators



 Prioritization \ Collaborate with model and network component

• Develop datasets for specific models, e.g.:

- multi-market models hhld survey data, prices, params
- gravity models trade, transport costs, distance, etc,
- CGE models I-O, SAMs, parameters
- Development of data methodology, e.g.
  - harmonization of agric surveys & SAMs
- Bring I-O tables into global CGE database



# DATA COMPONENT: NEXT PRESENTATIONS

# Social Accounting Matrices and challenges for Africa - Ismael Fofana

oGTAP Database for global CGE and data gaps in Africa – Terrie Walmsley

 oWTO Trade and Tariffs data and data gaps in Africa – Hubert Escaith



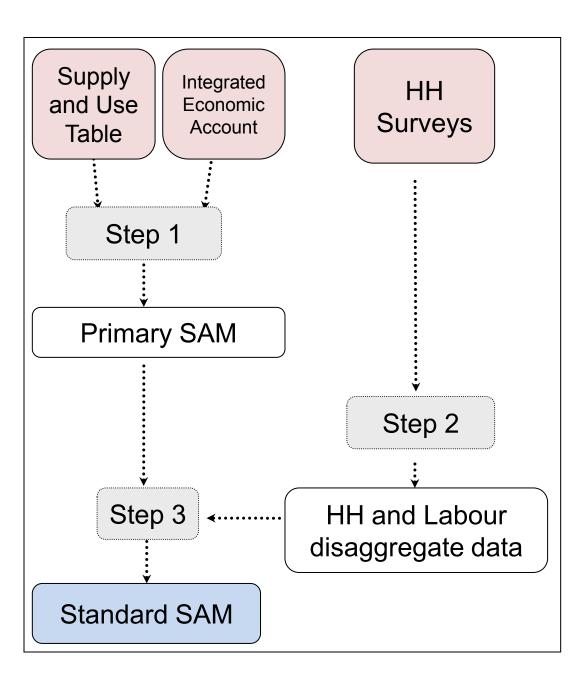
### SOCIAL ACCOUNTING MATRICES AND CHALLENGES FOR AFRICA

Ismael Fofana, IFPRI

## **SAM** DEFINITION AND STANDARD STRUCTURE

"The presentation of SNA accounts in a matrix which elaborates the linkages between Supply and Use tables and institutional sector accounts" (SNA, 1993)

	Factors	Institutional Sectors	Activities	Commodities	Savings/ Investment
Factors			Compensation for employees, GOS and mixed income (SU-tables)		
Institutiona I Sectors	Compensation for employees, GOS and mixed income (SU-tables)	Inter- institutional transfers (IEA)	Tax receipts on production (SU-tables)	Imports, Duty and other tax on products (SU-tables)	
Activities				Production at basic prices (SU-tables)	
Com- modities		Final consumption and exports, at purchasing prices (SU- tables)	Intermediate consumption at purchasing prices (SU- tables)		fixed capital formation and changes in stocks at purchasing prices (SU-tables)
Savings/ Investment		Savings (IEA)			



## STEPS IN DEVELOPING A STANDARD SAM

**SUT**: presentation of the national accounts in term of origin and destination of goods and services

**IEA**: synthesis of the economic transactions of the institutional sectors



# SAMs IN IFPRI

Country	Year
Ghana	2005
Kenya	2001; 2003
Malawi	1998
Mozambique	1994/95
Nigeria	2006
South Africa	1993 (updated to 98-99;2000)
Tanzania	1992
Uganda	1999
Zambia	1995; 2001
Zimbabwe	1991



# CHALLENGES FOR AFRICAN COUNTRIES

• Availability of more recent IO tables Nigeria: IO table 1989 (SAM 2006) Guinea: IO table 1998 (SAM 2005)

### Production of IO tables <10 years</li>

Primary data source	Production time
SUT (except IO table)	< 5 years
IO table	>10 years
IEA/National Account	< 5 years
HH Surveys	5 years



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### THE GTAP DATABASE (FOR GLOBAL CGE MODELING)

**Terrie Walmsley** 



# **GTAP 7.1 DATA BASE**

#### **o** 2004

#### o 112 regions and 57 commodities

#### o New

- Services Trade
- Updated Energy
- Income taxes
- New regions: Armenia, Azerbaijan, Belarus, Bolivia, Cambodia, Costa Rica, Ecuador, Egypt, Ethiopia, Georgia, Guatemala, Iran, Kazakhstan, Kyrgyzstan, Laos, Mauritius, Nicaragua, Nigeria, Norway, Pakistan, Panama, Paraguay, Senegal and Ukraine
- Updated: 27 EU countries, Australia, China, Korea, Indonesia, Philippines, Vietnam, India, Sri Lanka, Canada, USA, Mexico, Chile, Colombia, Peru, Uruguay, Morocco, South Africa.



# **GTAP 8 DATA BASE**

- Two base years 2004 and 2007
- Updates expected:
  - Protection
  - Goods and Services Trade
  - Energy
  - 5 skill types
  - Improved International margins
  - Commodity taxes

# DEP COVERAGE OF AFRICA

FACILIT	ATED BY IFPRI				
MAR	Morocco	2004			
EGY	Egypt	2003			
TUN	Tunisia	1995			
BWA	Botswana	1994			
ZAF	South Africa 2005				
XSC	<b>Rest of South African Customs Union</b>				
MWI	Malawi	1994			
MUS	Mauritius	1997			
MOZ	Mozambique	1995			
TZA	Tanzania	<b>1992</b>			
ZMB	Zambia	1995			
ZWE	Zimbabwe	1991			
COD	Congo, Dem. Rep of	1987			
XSD	Rest of Southern African Development				
	Community				
Black: Afr	ica Data Base				
Dad. Cha	nning Diag				

**Red: Chopping Bloc** 

African Growth & Development Policy modeling consortium



# **COVERAGE OF AFRICA**

Madagascar MDG 1999 NGA Nigeria 1999 Senegal **SEN** 1996 Uganda UGA 1992 **Cote d'Ivoire** CIV 1998 **Rest of WAEMU** XWA GHA Ghana 2005 **Rest of ECOWAS XEW** CMR 2003 Cameroon XCA **Rest of CAEMC KEN** 2001 Kenya **Ethiopia** ETH 2002 **Rest of COMESA** XCS **SDN** Sudan 2004 Rest of Sub-Saharan XSS Africa Black: Africa Data Base **Red: Chopping Bloc** 



# OTHER DATA AND SATELLITE DATA

- o Trade
- Protection
- Water
- $\circ$  CO<sub>2</sub> and non-CO<sub>2</sub> Emissions
- Migration
- Land Use
- o FDI
- Energy Volumes



### WTO TRADE AND TARIFFS DATA AND DATA GAPS IN AFRICA

**Hubert Escaith** 



#### World Trade Organization: African trade and tariff profiles

INTERNATIONAL TRADE AND TARIFF DATA

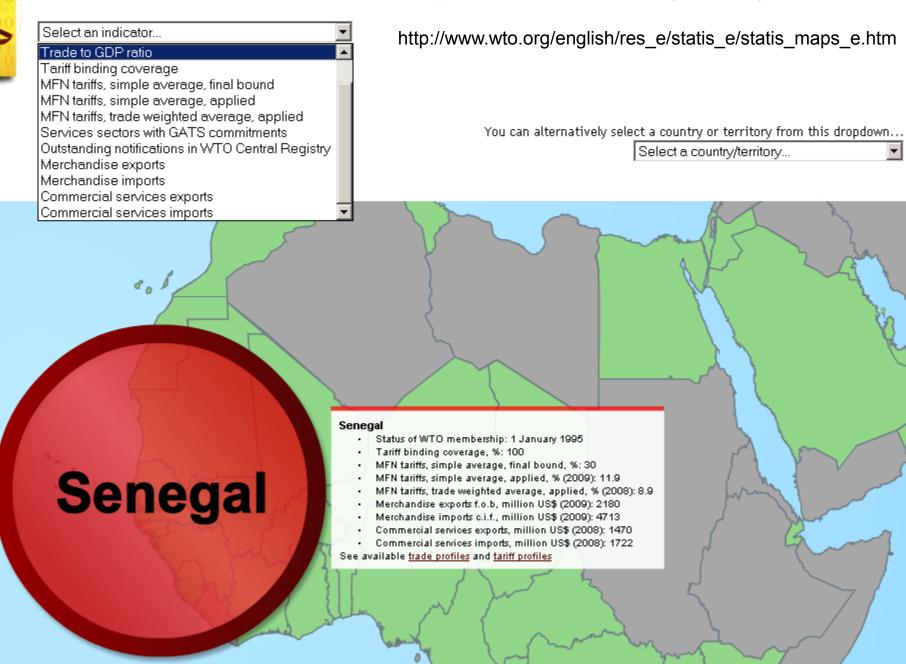
Where to find WTO trade and tariff statistics?

http://www.wto.org/english/res\_e/statis\_e/looking4\_e.htm#summary

#### Summary table back to top

Available resources	Database	<b>Tables</b> (Excel format)	Publications (PDF format)
What are you looking for ?		,,	(
Trade and tariff information by economy			
Tariff profiles			
Trade profiles	-		
Services profiles			
Merchandise trade statistics			
Short-term merchandise trade (quarterly and monthly data)			
Total merchandise trade values			
Total merchandise trade indices			
Merchandise trade <b>by commodity</b>			
World merchandise <b>exports by main product, origin and</b> destination			
Trade of selected regional integration arrangements			
World and regional export profiles 2009			
World commodity profiles for 2009			
Trade in commercial services			
International Trade Statistics report			-
Highlights			
Metadata			
Table of contents			
Appendix tables			
Charts			
World maps			

Select one of the trade or tariff indicators from the drop-down list and click on a country or territory for further details.



# WTO STATISTICS GROUP : FLAGSHIPS

### • INTERNATIONAL TRADE STATISTICS:

The "statistical yearbook" of WTO: data on recent and historical trends in merchandise and trade statistics; highlights on emerging patterns.

Data can be downloaded free in Excel and pdf formats and from the searchable database.

#### • WORLD TARIFF PROFILE:

At country level, provides a synthetic data on bound and applied tariffs in agriculture and NAMA, trade structure and tariffs faced in major markets (Joint publication ITC/UNCTAD/WTO).

The statistical tables are also available in Excel spreadsheet format.

#### Associated Tariff Data Bases: <u>Tariff</u> Analysis Online <u>Tariff</u> Downloads Facility

#### • TRADE PROFILE:

At country level, provides a snapshot of most salient economic and trade features, including some WTO related aspects.

New on WTO Statistics webpage:

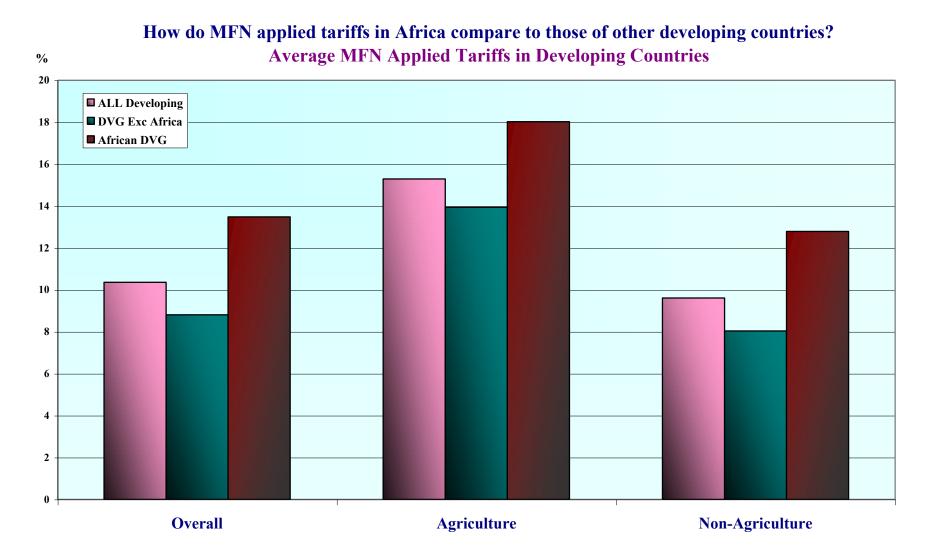
**World and Regional Export Profiles** 

World Commodity Profiles: World trade 2009 profiles of Agriculture, Fuels and Mining and Manufactures are now available in pdf format

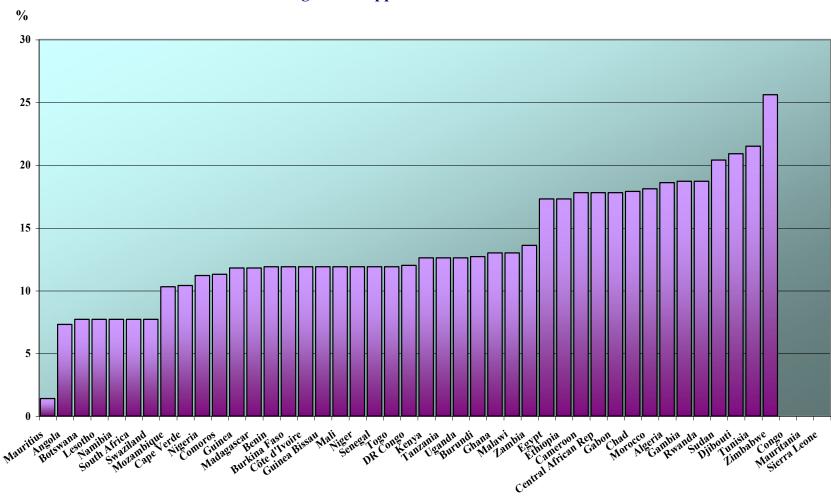
#### **Example of Summary Statistics on African Trade in Merchandises**

MERCHANDISE TRADE	Value, mn \$	Sha	are	Annual P	ercentage	Change	
	2009	2000	2009	2000-09	2008	2009	
Merchandise exports f.o.b.	383 940	100	100	11	28	-31	
Exports by destination a							Exports by destination, 2009
By region							
Europe	148 842	50	39	8	31	-34	North
Asia	85 273	17	22	15	37	-26	America
North America	65 681	17	17	15	20	-20	Africa
Africa	44 913	9	12	14	38	-44	
Middle East	11 512	2	3	14	43	-27	Asia Middle East
South and Central America	9 254	2	2	10	43 53	-27	South and Central
CIS	5 254 1 260	0	2	18	53 60	-29	America
By economic grouping	1 200	0	U	10	00	-29	
Developed Economies	218 571	69	57	9	27	-38	
Developing Economies	146 904	29	38	15	39	-30	
LDC (Least developed countries)	9 702	29	30	6	39	-24 -53	Europe-/
LDC (Least developed countries)	9702	4	5	0	29	-55	
Exports by product b							
By major product group							<b>E</b> ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
Agriculture products	39 101	12	10	9	18	-7	Exports by product, 2000-2009
Fuels, mining products	245 748	59	64	12	32	-38	450
Manufactured goods	73 794	24	19	8	23	-25	400 -
Manufactured goods	15154	24	15	0	25	-23	350
Agreement on Agriculture	31 057	9	8	10	23	-3	9 300 8 250
0	352 883	91	92	11	29	-33	5 200
Industrial goods By product group	352 005	51	52		25	-55	a 150
Fuels	212 387	52	55	12	34	-39	100
Other food products	27 284	52	55	10	23	-2	50
Non-ferrous metals	17 017	4	4	12	23	-26	2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Ores and minerals	16 344	3	4	12	49	-20	2000 2001 2002 2000 2000 2000 2000 2000
	15 098	7	4	5	45	-20	Agricultural products
Other semi-manuf.	15 050	'	4	c	10	-25	Fuels and mining products
Fastest growing product group In 2009: EDP and office equipment	504	0	0	17	10	7	Manufactures
Since 2000: EDP and office equipment	504	0	0	17	10	7	manwacures
Since 2000. EDP and onice equip.	504	0	0	17	10	/	

#### **Examples of Summary Statistics on African Tariffs on Merchandises**



# **Examples of Summary Statistics on African Tariffs on Merchandises** *(cont.)*



Latest Average MFN Applied Tariffs of African Countries

Applied tariff is for either 2008 or 2009.

Source: World Tariff Profiles, 2010.



### DATA COMPONENT OPEN DISCUSSIONS