# COMPILATION OF SUT IN ESCWA Member States

August 2018

**Supply and Use Tables** 

Size and Structure

## Supply and Use Tables: Overview (1/4)

- SNA framework includes SUTs, in addition to the flow accounts and balance sheets
- SUTs record how supplies of different products originate from domestic industries and imports and how those supplies are allocated between intermediate or final uses, including exports
- In the commodity flow approach, different sources of supplies of a product are traced to its subsequent uses under various categories
- Both SUTs and Commodity flow approaches follow the same concept of product balances. The commodity flow approach provides a description of the supply/use balance for a single product, whereas a generalization of this for all products in the economy gives rise to SUTs.
- SUT framework thus provides for balancing the supply and uses of each product, without leaving scope for discrepancies in the national accounts
- The SUTs are one of the recommended tables under the minimum required data sets (MRDS) for implementation of SNA



## Supply and Use Tables: Overview (2/4)

#### **Supply and use tables**

- A pair of tables in the form of matrices that record how supplies of different kinds of goods and services originate from domestic industries and imports and how those supplies are allocated between various intermediate or final uses, including exports.
- They are an extension of goods and services account with detailed products
- Supply table: presents supplies from domestic production and imports, for each
  of the products included in the table
- **Use table:** presents the use of each of these products by the categories of intermediate consumption, final consumption expenditure of government, households, and NPISHs, gross fixed capital formation, changes in inventories, acquisition less disposals of valuables, and exports.
- The two tables together ensure that supplies=uses for each product; and total output=total input, for each industry, included in these tables
- The two tables are presented in the form of matrices with products shown in rows; and industries, imports, valuations and final uses in columns.



# Supply and Use Tables: Overview (3/4)

#### Simplified supply/use equation

Supply of a product/group of products	=	Use of the same product/group of products
Domestic production + imports	=	Intermediate consumption + final consumption expenditure of government, households, and NPISHs + gross fixed capital formation + changes in inventories + acquisition less disposals of valuables + exports

- •In the above equation, the two sides are on different valuations
  - supply is valued at basic prices meaning farm-gate or factory gate prices for domestic products and at their c.i.f. values for imports;
  - Uses, on the other hand, are valued at purchasers' prices
- •For product balancing, it is necessary to bring both sides to the same valuation, either at basic prices or at purchasers' prices



# Supply and Use Tables: Overview (4/4)

- In order to bring the supply of a product at basic prices to purchasers' prices, the trade margins and transport costs, and taxes less subsidies on products need to be added
  - This is because the goods produced in the units have to go through the trade and transport chain and pay product taxes (less subsidies) before they reach the purchasers.
  - Services will not go through the trade and transport chain, as they are delivered to the users at the time of their production. They may, however, have to incur taxes on products (less subsidies on products).

#### Supply/use equation with valuation adjustment

Supply of a product/group of products at purchasers' prices	=	Use of the same product/group of products at purchasers' prices
Domestic production+ imports + trade margins + transport costs + taxes less subsidies on products	II	Intermediate consumption + final consumption expenditure of government, households, and NPISHs + gross fixed capital formation + changes in inventories + acquisition less disposals of valuables + exports



Figure 1. Illustrative Supply and Use Table. **SUPPLY USES** Fransport cost and trade Manf, utilities, constrn c.i.f./f.o.b. adjustment Taxes less subsidies on products Imp. c.i.f. Total inter-industry Fotal dom. supply **Fotal supply at BP** Total supply at PP Total use at PP Exports, f.o.b. HFCE/ NPISH Agriculture Agriculture (totalf.o. b.) margins Industry Services Services GCF (20)=((15) =15)+(1 (8)=(5)(5)=((11)=((12)+(18 6)+(17 (1) (2) (3) (4) 2)+(3 (6) (7) )+(6)+ (9) (10)8)+(9) (12)(13)(14)(16)(17)(19)(13)+)+(18))+(4)(7) +(10) (14)+(19) 222 1. Agrl 3245 3245 23 3268 30 10 3308 400 450 130 980 57 15 27 3308 2. Manf, 516 85 127 13 utilities 5163 6013 100 5998 160 2050 1000 3210 513 874 5998 -115 3 0 0 constrn 659 24 121 136 282 245 81 275 3. Servs 6594 94 -10 6678 885 7433 1064 7433 130 7 4 2 7 6 4. c.i.f./ f.o.b.ad -10 10 0 0 5. PRA 10 10 10 10 10 6. -20 -20 **PNRDM** 516 659 1500 96 594 96 7. Total 3245 0 15969 780 16749 802 3717 2492 7011 865 1965 16749 0 3 4 7 6 2 2



### Commodity flow method

Useful in establishing product balances with supplies = uses

Total supply	Domestic production + imports + taxes less subsidies on products
Total uses	Intermediate consumption + household final consumption expenditure + government final consumption expenditure + consumption expenditure of NPISHs + gross fixed capital formation + change in inventories + valuables + exports

- Also useful to estimate any one item missing in the above equation, either at product level or at the level of total economy
- Several developing countries use commodity flow method to estimate household consumption and/or the gross fixed capital formation.
- An example of Poultry meat
  - Mainly for household consumption but a part of it also may be intermediate consumption (food processing industries, restaurants)



Poultry	
Domestic production (value at farm gate)	6,500
Imports (c.i.f.)	0
Taxes on poultry	0
Subsidies on poultry	0
Trade margins (on household consumption)	130
Trade margins (on intermediate consumption)	10
Transport charges	65

Final consumption expenditure by households	Unknown
Gross fixed capital formation	0
Change in inventories	0

1,000

45

Intermediate consumption

**Exports** 

Commodity Flow calculation for Poultry	
Supply	
Domestic production (value at farm gate)	6,500
plus Imports (c.i.f.)	0
plus Taxes on poultry	0
less Subsidies on poultry	0
plus Trade margins (on household consumption)	130
plus Trade margins (other)	10
plus Transport charges	65
equals Total supply	6,705
Uses	
Intermediate consumption (for pet food)	1,000
plus Household final consumption expenditure	Unknown
plus Government final consumption expenditure	0
plus Gross fixed capital formation	0
plus Change in inventories	0
plus Exports	45
equals Total known uses	1,045
Residual calculation	
Total supply	6,705
less Total known uses	1,045
equals Final consumption expenditure by households	5,660

#### Size and Structure of the SUT

- Dimensions of the SUT should be determined taking into account:
  - needs of user;
  - data sources; and
  - staff resources
- Industry Dimension:
  - Need to support benchmarking of published industries: GDP(P)
  - Ideally should be based on ISIC Rev. 4
- Product Dimension:
  - Need to have separate categories for the key products in the country economy
  - Ideally should be based on CPC v.2
- Final Demand Categories:
  - Will pick up this discussion in later session



#### Discussion - Size and Structure of the SUT

- Current experience of ESCWA members
  - What are the important products to be identified?
  - What size (number of industries and products) tables are produced?
  - Are these sufficiently detailed?
  - What limitations does staffing place on the size?
- Working within the region and within global system
  - Use of ISIC and CPC, any issues?
  - Would it be desirable to have a common size and structure for SUTs in the region?

