Classification and Correspondence Table

EAC/FAO Advanced Training Workshop of CountrySTAT

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Lusaka, 12 – 16 November 2012

Introduction

- Need to have a national nomenclature which includes all variety products (for example Irrigated rice and rain fed rice paddy, etc.)

- Need to use a classification with the purpose to elaborate SUA / FBS and other indicators relevant for the agriculture and food security

- Create a correspondence between the national and international classifications

- Harmonize national data with international classifications in order to be able to link and compare national statistics time series in long period and between countries.

Nomenclature and Classification Definitions

"A **nomenclature** is essentially a convention for describing observations"

……"The nomenclatures are created to be able to name, describe and classify / organize activities to manage and handle a system, for example the rural sector. ….."

Fabienne Benninghoff

A **classification** is a set of discrete, exhaustive and mutually exclusive observations which can be assigned to one or more variables to be measured in the collation and/or presentation of data"

….."A statistical classification is a classification having *a set of discrete categories, which may be assigned to a specific variable registered in a statistical survey or in an administrative file, and used in the production and presentation of statistics……*"

Eivind Hoffmann

Purpose

The nomenclature allows to harmonize the concepts and definitions.

The classification activities are designed mainly to facilitate the organization of economic and social information.

Why international classifications are important?

To ensure data comparability and harmonization at the global level, international classifications should be taken as reference for the development of regional and national classifications

Examples of Uses of classifications

50 Statistical classifications are used for a variety of purposes, such as:

1.   The collection of information and/or organization of information already collected;

2.   Aggregating and disaggregating data sets meaningfully for purposes of complex analysis, including the construction of indexes; e.g.the use of COICOP (Classification of individual consumption by purpose) for describing the basket of individual goods and services purchased by households and used for standardizing estimates in the calculation of the Consumer Price Index;

3.   The construction of a classification for a different variable on the basis of the classifications for two or more component variables; e.g. the socio-economic status classifications which typically have categories defined by reference to categories found in classifications for occupation, status in employment, industry, size of enterprise and/or educational attainment.
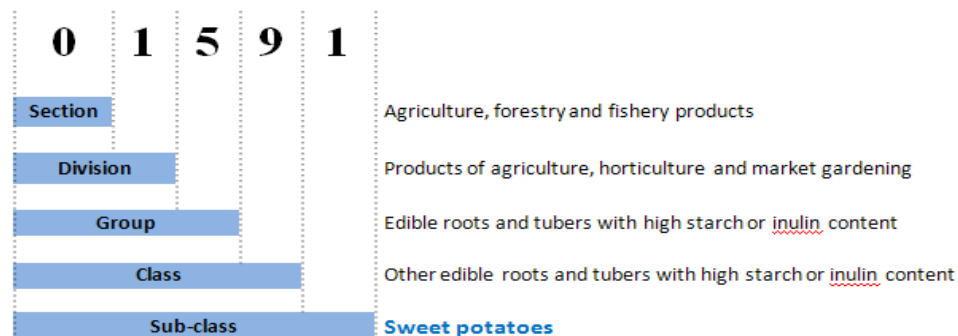
4.   ……..

Example

CPC, Central Product Classification is a classification of Products defined by the United Nations Statistics Division.
The CPC is to serve as a "central" classification of products and to provide classifications of all outputs of economic production activities as defined in the Statistics National Account.

Section	Title
0	Agriculture, forestry and fishery products
1	Ores and minerals; electricity, gas and water
2	Food products, beverages and tobacco; textiles, apparel and leather products
3	Other transportable goods, except metal...
4	Metal products, machinery and equipm...
5	Constructions and construction services...
6	Distributive trade services; accommoda... electricity, gas and water distribution se...
7	Financial and related services; real estat...
8	Business and production services
9	Community, social and personal service...

Example: CPC code

0 1 5 9 1

Section	Agriculture, forestry and fishery products
Division	Products of agriculture, horticulture and market gardening
Group	Edible roots and tubers with high starch or inulin content
Class	Other edible roots and tubers with high starch or inulin content
Sub-class	Sweet potatoes

FCL
0122 - Sweet potatoes

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Classification Structure

The **observation units** generally refer to people of a particular social group, animal or plant species, particular objects, specific subject area concepts, the terms used for certain purposes, etc. which are in relation with each other.

The **relationships** are established according to superiority, greater or lesser sub-set inclusion, dependency and dominance.

The **connections** are expressed by classes, sections, categories, species, subspecies, groups, etc.

The purpose of FAOSTAT Classification (FCL)

What is the FCL

- developed in the '60s
- based on SITC - Standard International Trade Classification of the UN
- 683 commodities organized in 20 groups
- **crops, livestock and derived products**
- fishery and forestry products excluded
- FAOSTAT collects data also on some 130 agriculture inputs such as fertilizers, pesticides and machinery but not included in the FCL

Purpose

to provide a framework for the harmonization of production and trade data and the compilation of SUA/FBS and to calculate various index (Agricultural Production Index Number – food and non food).
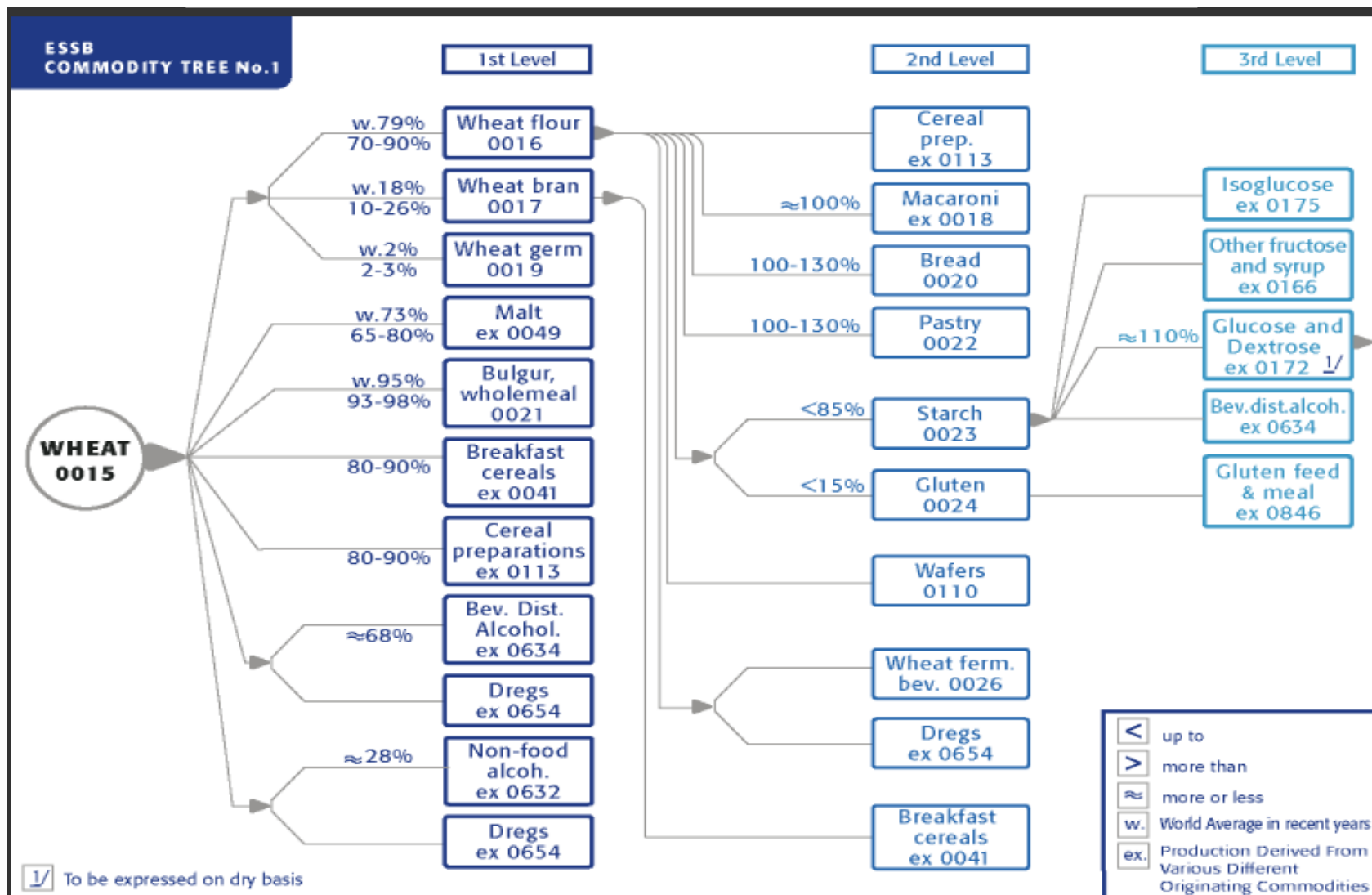
Structure

- tailored on the current FBS methodology
- reflects the "commodity trees"

Definitions

commodities definitions are structured in a way to combine data from the production and the trade domain

Commodity tree of FCL

FAOSTAT CLASSIFICATION

FAO Commodity Groups

- 1. CEREALS AND CEREAL PRODUCTS
- 2. ROOTS AND TUBERS AND DERIVED PRODUCTS
- 3. SUGAR CROPS AND SWEETENERS AND DERIVE
- 4. PULSES AND DERIVED PRODUCTS
- 5. NUTS AND DERIVED PRODUCTS
- 6. OIL-BEARING CROPS AND DERIVED PRODUCTS
- 7. VEGETABLES AND DERIVED PRODUCTS
- 8. FRUITS AND DERIVED PRODUCTS
- 9. FIBRES OF VEGETAL AND ANIMAL ORIGIN
- 10. SPICES
- 11. FODDER CROPS AND PRODUCTS
- 12. STIMULANT CROPS AND DERIVED PRODUCTS
- 13. TOBACCO AND RUBBER AND OTHER CROPS
- 14. VEGETABLE AND ANIMAL OILS AND FATS
- 15. BEVERAGES
- 16. LIVESTOCK
- 17. PRODUCTS FROM SLAUGHTERED ANIMALS
- 18. PRODUCTS FROM LIVE ANIMALS
- 19. HIDES AND SKINS
- 20. OTHER LIVESTOCK PRODUCTS

FAOSTAT CODE	COMMODITY	
0015	**WHEAT** *Triticum spp.:* common *(T. aestivum)* durum *(T. durum)* spelt *(T. spelta)*	Common and durum level, different varieti
0016	**Flour of Wheat**	Defined broadly to in flours from soft whea
0017	**Bran of Wheat**	See Chapter 11.
0018	**Macaroni**	Pasta made from ser various forms. This h
0019	**Germ of Wheat**	The seed embryo. W and in pharmaceutica
0020	**Bread**	A baked product of
0021	**Bulgur**	Whole wheat grains
0022	**Pastry**	All baked products fruit, seeds, etc.
0023	**Starch of Wheat**	Starch is the carbohy used for human cons
0024	**Wheat Gluten**	A by-product of the pasta, etc.
0026	**Wheat-Fermented Beverages**	See Chapter 15.

Observations and variables in FCL

Livestock Production refers to **observation units** composed of live animals (the production units) and the livestock products. To create the classification, these observations are categorized *by the transformation process from the primary product to the final one,* according to one or more *variables* assigned for the production *purpose,* as follows:
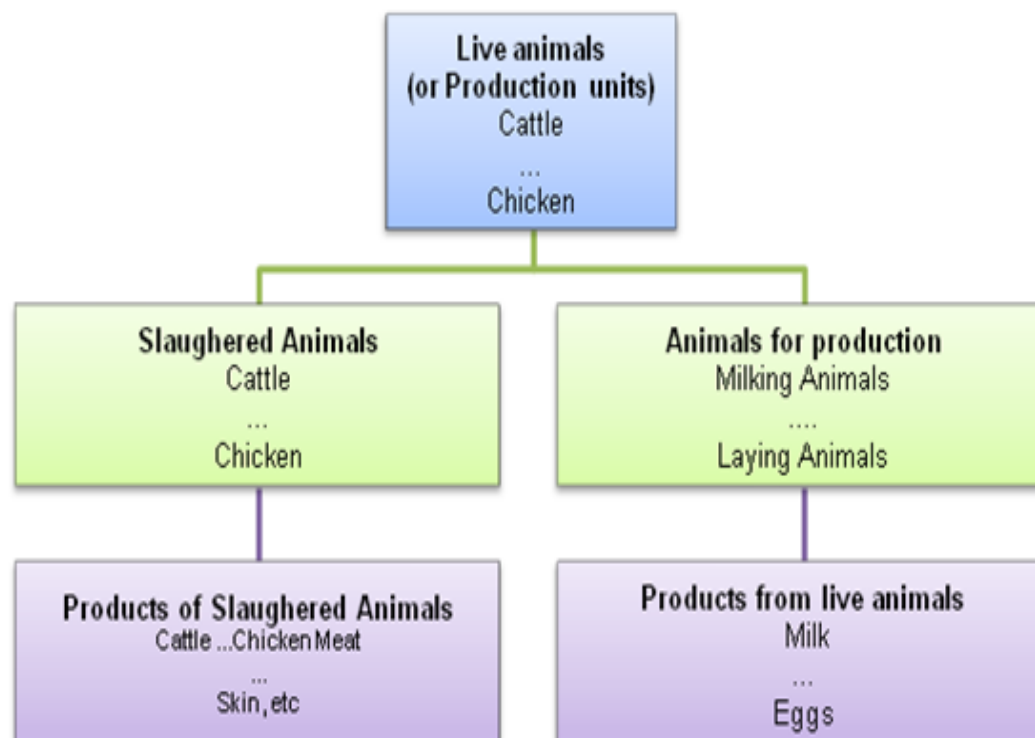
Variables:
1-a Slaughered Animals
2-a Animals for production

1-b Products of Slaughered Animals
2-b Products from live animals

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How to proceed

A. Creation of national nomenclature for those Countries with missing nomenclature

- Identify the local commodity names which associate the item characteristics

- Associate a commodity code (of six positions) for the national variety products, composed of :
  - four positions (XXXX) that refer to FAOSTAT root base
  - adding two positions (YY) for the local product variety

FCL Item Code	FAOSTAT Nomenclature	Local code	local nomenclature
27	Rice, paddy	002700	Rice
		002701	Irrigated paddy rice
		002702	Rain-fed upland rice
		002703	Rain-fed lowland rice

- Create the correspondences with FAO classification

B. Creation of the correspondences with FAO classification, for those Countries with an existing national nomenclature

This structure and coding system predispose the easy access to data comparison and aggregation for:

- the local statistics to the national statistics;

- the national statistics at region level

Domains of to create the correspondence table

- FAOSTAT Classification (FCL)
- Fisheries
- Machinery
- Pesticides
- Fertilizers
- Forestry
- Land

Example of correspondence table

FCL Item Code	FAOSTAT Nomenclature	Local code	local nomenclature
15	Wheat	001500	Wheat
16	Flour of Wheat	001600	Wheat Flour
18	Macaroni	001800	Macaroni
19	Germ of Wheat	001900	Germ of Wheat
20	Bread	002000	Bread
21	Bulgur	002100	Bulgur
22	Pastry	002200	Pastry
23	Starch of Wheat	002300	Starch of Wheat
24	Gluten of Wheat	002400	Gluten of Wheat
27	Rice, paddy	002700	Rice
		002701	Irrigated paddy rice
		002702	Rain-fed upland rice
		002703	Rain-fed lowland rice
28	Rice Husked	002800	Rice Husked
29	Milled/Husked Rice	002900	Milled/Husked Rice
31	Rice Milled	003100	Rice Milled
32	Rice Broken	003200	Rice Broken
33	Rice gluten	003300	Rice gluten
34	Starch of Rice	003400	Starch of Rice
38	Rice Flour	003800	Rice Flour
39	Rice Flake	003900	Rice flakes
40	Rice wine	004000	Rice wine
41	Breakfast Cereals	004100	Breakfast Cereals

Fisheries

HS 2012					
Heading	**H.S. Code**	**Description**		**Local code**	**local nomenclature**
3.01		Live fish.			
03.02		Fish, fresh or chilled, excluding fish fillets and other fish meat of heading 03.04.			
		- Salmonidae, excluding livers and roes :			
	0302.11	-- Trout (*Salmo trutta, Oncorhynchus mykiss, Oncorhynchus clarki, Oncorhynchus aguabonita, Oncorhynchus gilae, Oncorhynchus apache* and *Oncorhynchus chrysogaster*)		03021101 03021102	Trout 1 Trout 1
	0302.13	-- Pacific salmon (*Oncorhynchus nerka, Oncorhynchus gorbuscha, Oncorhynchus keta, Oncorhynchus tschawytscha, Oncorhynchus kisutch, Oncorhynchus masou* and *Oncorhynchus rhodurus*)			
	0302.14	-- Atlantic salmon (*Salmo salar*) and Danube salmon (*Hucho hucho*)			
03.03		Fish, frozen, excluding fish fillets and other fish meat of heading 03.04.			
		- Salmonidae, excluding livers and roes :			
	0303.11	-- Sockeye salmon (red salmon) (*Oncorhynchus nerka*)			
	0303.12	-- Other Pacific salmon (*Oncorhynchus gorbuscha, Oncorhynchus keta, Oncorhynchus tschawytscha, Oncorhynchus kisutch, Oncorhynchus masou* and *Oncorhynchus rhodurus*)			
	0303.13	-- Atlantic salmon (*Salmo salar*) and Danube salmon (*Hucho hucho*)			
	0303.14	-- Trout (*Salmo trutta, Oncorhynchus mykiss, Oncorhynchus clarki, Oncorhynchus aguabonita, Oncorhynchus gilae, Oncorhynchus apache* and *Oncorhynchus chrysogaster*)			
03.04		Fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen.			
		- Fresh or chilled fillets of tilapias (*Oreochromis spp.*), catfish (*Pangasius spp., Silurus*			

Machinery

HS code	FAOSTAT code	FAO Nomenclature	Local code	local nomenclature
8432.80	2455030	Other soil preparation or cultivation machines	245503000	
8433.11,..19,20	2455025	Grass harvesting machines (tedders, rakes, mowers)	245502500	
8424.81	2455038	Irrigation system	245503800	
8432.21	2455028	Disc harrows	245502800	
8433.5(51,.52, .5	2455019	Harvesting and threshing machine	245501900	
8432.29	2455029	Other harrows, scarifiers,cultivators,weeders and hoes	245502900	
8433.59	2455020	Other harvesting machines	245502000	
8432.30	2455031	No-till direct seeders, planters and transplanters	245503100	
8432.30	2455032	Other seeders, planters and transplanters	245503200	
8432.40	2455033	Manure spreaders	245503300	
8432.40	2455034	Fertiliser distributors	245503400	
8424.81	2455035	Sprayers	245503500	
8424.81	2455036	Operator carried sprayers for agriculture and horticulture	245503600	
8424.81	2455037	Tractor sprayers	245503700	
8701.90	2455013	Other agricultural tractors (two-axles tractors)	245501300	
8432.10	2455001	Ploughs (e.g. reversible ploughs and non-reversible ploughs)	245500101	Plow mechanical coupling
			245500102	Plow hitch animal
8432.40	2455003	Manure spreaders and fertiliser distributors	245500300	
8434.10	2455008	Milking machines	245500800	
8433.53	2455006	Root or tuber harvesting machines	245500600	

Pesticides

A - Classification to be used for publication of statistical tables on the consumption of phitosanitaires according to the active ingredient

Classifications by activity	HS code	FAOSTAT code	Products	Local code	Products (local nomenclature)
Use of the products according to the active ingredient phitosanitaires	-	1309	Insecticides (including acaricides, molluscicides and nematicides)	130900	Insecticides (sum of active substances used as insecticides)
	-	-			*Examples of pesticides - common names (insecticides)*
	-	-		130901	acetamiprid
	-	-		130902	triazophos
	-	-		130903	endosulfan
	-	-		130904	deltamethrin
	-	-		130905	chlorpyrifos ethyl
	-	-		130906	emamectin benzoate
	-	-		130907	chlorpyrifos ethyl
	-	-		130908	profenofos
	-	-		130909	emamectin benzoate
	-	-		130910	bendiocarb
	-	-		130911	malathion
	-	-		130913	cypermethrin
	-	-		130914	Lamdacyhalothrine
	-	-		130915	spinosad
	-	-		130916	carbosulfan
	-	-		130924	endosulfan
	-	-		130925	novaluron
	-	-		130926	triazophos

B - Classification to be used for publication of statistical tables on imports and exports

Produits en commerce (Valeur du commerce des insecticides, fongicides, herbicides, désinfectants et autres produits antiparasitaires identifiés par le Système Harmonisé (SH) code 3808))	HS code	FAOSTAT code	Products	Local code	Products (local nomenclature)
	3808	1357	Pesticides (trade)	135700	Pesticides
	3808.10	1416	Insecticides (tot value. Of Commerce)	141600	Insecticides
				141601	ALPHACAL EC P218 (Profenofos)
				141602	ATO IBI 01 (ethyl Chlorpyrifos 300g / l)
				141603	CALFOS 500 EC (Profenofos 500 g / l)
				141604	CALIF 500 EC (Profenofos 500g / l)
				141605	CALLI-Sulfan (endosulfan)
				141606	CAPT 88 C
				141607	CHANGO 122 SE (cypermethrin 72g / l)
				141608	COBRA 120 (acetamiprid 64 g / l)

Fertilizers

Main category	HS code	FAOSTAT code	FAO Nomenclature	Local code	local nomenclature
MINERAL/CHEMICAL FERTILIZERS					
STRAIGHT NITROGEN FERTILIZERS					
	2814	2814	Ammonia, anhydrous	281400	Ammonia, anhydrous
	310230	310230	Ammonium nitrate	31023000	Ammonium nitrate
	310221	310221	Ammonium sulphate	31022100	Ammonium sulphate
	310240	310240	Calcium ammonium nitrate	31024000	Calcium ammonium nitrate
	310210	310210	Urea	31021000	Urea
	310280	310280	Urea and ammonium nitrate solutions	31028000	Urea and ammonium nitrate solutions

Forestry

FAOSTAT Code	FAO Nomenclature	Local code	local nomenclature
1601	Sawlogs and Veneer Logs (C)	160100	Sawlogs and Veneer Logs (C)
1602	Pulpwood, Round and Split (C)	160200	Pulpwood, Round and Split (C)
1603	Pulpwood, Round and Split (NC)	160300	Pulpwood, Round and Split (NC)
1604	Sawlogs and Veneer Logs (NC)	160400	Sawlogs and Veneer Logs (NC)

Where

(C) =	Coniferous : All woods derived from trees classified botanically as Gymnospermae - e.g. fir (Abies), parana pine (Araucaria), deodar (Cedrus), ginkgo (Ginkgo), larch (Larix), spruce (Picea), pine, chir, kail (Pinus), etc. These are generally referred to as softwoods
(NC)=	Non-Coniferous: All woods derived from trees classified botanically as Angiospermae - e.g., maple (Acer), alder (Alnus), ebony (Diospyros), beech (Fagus), lignum vitae (Guiaicum), poplar (Populus), oak (Quercus), sal (Shorea), teak (Tectona), casuarina (Casuarina), etc. These are generally referred to as broadleaved or hardwoods.

Land

FAOSTAT code	FAO Nomenclature	Local code	local nomenclature
6600	Country area	660000	Country area
6601	Land area	660100	Land area
6610	Agricultural area	661000	Agricultural area
6611	Agricultural area irrigated	661100	Agricultural area irrigated
6620	Arable land and Permanent crops	662000	Arable land and Permanent crops
6621	Arable land	662100	Arable land
6630	Temporary crops	663000	Temporary crops
6631	Temp. crops irrigated	663100	Temp. crops irrigated
6633	Temporary meadows and pastures	663300	Temporary meadows and pastures
6634	Temp. meadows & pastures irrigated	663400	Temp. meadows & pastures irrigated
6640	Fallow land	664000	Fallow land
6650	Permanent crops	665000	Permanent crops
6651	Perm. crops irrigated	665100	Perm. crops irrigated
6655	Permanent meadows and pastures	665500	Permanent meadows and pastures
6656	Perm. meadows & pastures - Cultivated	665600	Perm. meadows & pastures - Cultivated
6657	Perm. meadows & pastures Cult. & irrig	665700	Perm. meadows & pastures Cult. & irrig
6659	Perm. meadows & pastures - Nat. grown	665900	Perm. meadows & pastures - Nat. grown
6661	Forest area	666100	Forest area
6662	Other wooded land	666200	Other wooded land

Thank you!