APPENDIX 3

CLASSIFICATION OF CROPS

A new crop classification, the Indicative Crop Classification (ICC) has been developed for the 2010 round of agricultural censuses, and is given at the end of this appendix.

The crop classification used in the 2000 agricultural census programme reflected various elements related to crops, including the growing cycle (temporary/permanent), crop species, crop variety (for example, hybrid/ordinary maize), season (for example, winter/spring wheat), land type (for example, wetland/dryland rice), crop use (for example, pumpkin for food/fodder), type of product (for example, fresh/dried beans), how the crop is processed (for example, industrial crops), and cultivation methods (for example, crops grown under protective cover).

ICC has been developed based on the Central Product Classification (CPC) (UN, 2004a). CPC classifies goods and services into categories based on the nature of the product and industry of origin. Crop products are classified mainly according to the type of crop. CPC itself is based on the Harmonized Commodity Description and Coding System (HS), a classification of the World Customs Organization. CPC is also broadly compatible with ISIC, in that the industry of origin is related to ISIC. ICC is also consistent with the classification of commodities used in FAO's on-line database, FAOSTAT.

From a statistical point of view, the crop classification should be closely related to the product classification, and to some extent to the economic activity classification (ISIC). The crop classification refers to which crops are grown, whereas the product classification refers to the product(s) generated from that crop. Thus, "mustard" is an oilseed crop, whereas "mustard seed" is the oilseed product. There is not always a one-to-one correspondence between a crop and a product. The same crop may yield two products – for example, cotton may yield cotton fibre and cotton seed.

The current version of CPC, Version 1.0, is currently being revised. ICC is based on the draft of the revised CPC, to which FAO has provided input. ICC classifies crops into categories based on three main elements:

- Product type. The product type is provided in the structure of CPC, especially at the group and class level. Thus, under ICC, crops are first divided into groups such as cereals, vegetables, etc., and each group is further sub-divided by crop type, such as leafy/stem vegetables, fruit-bearing vegetables, etc.
- Crop genus or species. At the lowest level of the classification, each crop can be described by its botanical name; thus, "Lentils" (Class 75) is identified as the species "Lens culinaris". However, it should be noted that ICC is not a botanical classification, as the groupings are based more on the agricultural use of the crop than the botanical similarities between crops. Thus, "Oilseed crops" (Group 4) is a grouping of crops of many different botanical types that produce the same type of product: oil.
- Whether the crop is temporary or permanent. CPC does not always permit a temporary/permanent split, because this is not important in a product classification. However, this distinction is fundamental to a crop classification. Because of this, some CPC classes are divided into temporary and permanent sub-classes. In ICC, a separate code is provided to indicate whether the crop is temporary or permanent.

A major change in ICC from the previous crop classification is that, as a general principle, a particular crop is classified only once in the classification, regardless of how the crop is used. Thus, pumpkin is assigned to Sub-class 226 under Group 2 (vegetables). Previously, pumpkins were shown in different parts of the classification as "Pumpkin for food" or "Pumpkin for fodder". Also, pepper is assigned to Order 6211, regardless of whether it is used for fresh or dried produce.

If a country wishes to separately identify the different uses of a crop – such as food or fodder, fresh or dried, fruit or oil, and industrial or non-industrial – it has two options:

- Further sub-divide the crop in the crop classification, as required. Thus, Sub-class 226 could be subdivided into: 2261 (Pumpkin for food) and 2262 (Pumpkin for fodder). If data on fodder crops are required from the agricultural census, the relevant fodder crop codes can be grouped.
- Include an item in the agricultural census on end-use of the crop.

The following examples illustrate how to handle multiple-use crops in developing a crop classification based on ICC:

- All grain and vegetable crops should be assigned to Groups 1 or 2, regardless of whether they are used for human consumption or as animal feed. Note that Class 91 (Grasses and other fodder crops) refers to crops that are solely fodder crops.
- The same principle applies to sugar crops. Maize should be designated as a cereal crop (Class 12), even if it is used as a sugar crop. Note that Group 8 (Sugar crops) refers to sugar beet, sugar cane and other specific sugar crops.
- Crops such as coconut that are grown either as a fruit crop or as an oil crop should be classified according to its primary use in the country. In ICC, it has been shown as an oil crop (Sub-class 441).
- Problems arise where the same physical crop is used for harvesting two products. The use of cotton to produce cottonseed and cotton fibre is one example. Such a crop should be shown only once in the harvested area data (harvested area relates to the area of the principal crop harvested – see paragraph 11.105), but could have a secondary use in production data. The crop should be classified according to its primary use in the country. In ICC, cotton has been defined as a fibre crop (Order 9211), as an illustration.

ICC provides only a broad-level structure for the classification of crops. For Groups 1–8, ICC is consistent with CPC at the group level, and generally consistent at the class level. At the sub-class level, the two classifications are similar.

To help countries use ICC, an alphabetical list of crops with botanical names and crop codes is shown in Appendix 4. More information on the definitions of crops is contained in *Definition and Classification of Commodities* (FAO, 1996c).

Note that the different levels of ICC – namely, groups, classes, sub-classes and orders – do not relate in any way to the same terms used in the botanical taxonomic hierarchy.

As in the past, the crop classification needs to be adapted by countries to take account of national conditions. Not all crops are applicable to all countries. Countries will also wish to separately identify crops not shown in ICC or to show crops in more detail than given in ICC. In particular, countries may wish to provide more detail for important national crops; for example, a rice-producing country may wish to show rice classified by variety, season or land type.

Indicative Crop Classification Version 1.0 (ICC)

Group	Class	Sub-class	Order	Title	Crop type[1]
1				**Cereals**	**1**
	11			Wheat	1
	12			Maize	1
	13			Rice	1
	14			Sorghum	1
	15			Barley	1
	16			Rye	1
	17			Oats	1
	18			Millets	1
	19			Other cereals, n.e.c.	1
		191		*Mixed cereals*	*1*
		192		*Other*	*1*
2				**Vegetables and melons**	**1**
	21			Leafy or stem vegetables	1
		211		*Artichokes*	*1*
		212		*Asparagus*	*1*
		213		*Cabbages*	*1*
		214		*Cauliflowers & broccoli*	*1*
		215		*Lettuce*	*1*
		216		*Spinach*	*1*
		217		*Chicory*	*1*
		219		*Other leafy or stem vegetables, n.e.c.*	*1*
	22			Fruit-bearing vegetables	1
		221		*Cucumbers*	*1*
		222		*Eggplants (aubergines)*	*1*
		223		*Tomatoes*	*1*
		224		*Watermelons*	*1*
		225		*Cantaloupes and other melons*	*1*
		226		*Pumpkin, squash and gourds*	*1*
		229		*Other fruit-bearing vegetables, n.e.c.*	*1*
	23			Root, bulb, or tuberous vegetables	1
		231		*Carrots*	*1*
		232		*Turnips*	*1*
		233		*Garlic*	*1*
		234		*Onions (incl. shallots)*	*1*
		235		*Leeks & other alliaceous vegetables*	
		239		*Other root, bulb, or tuberous vegetables, n.e.c.*	*1*
	24			Mushrooms and truffles	1
	29			Vegetables, n.e.c.	1
3				**Fruit and nuts**	**2**
	31			Tropical and subtropical fruits	2
		311		*Avocados*	*2*
		312		*Bananas & plantains*	*2*
		313		*Dates*	*2*
		314		*Figs*	*2*
		315		*Mangoes*	*2*
		316		*Papayas*	*2*
		317		*Pineapples*	*2*
		319		*Other tropical and subtropical fruits, n.e.c.*	*2*
	32			Citrus fruits	2
		321		*Grapefruit & pomelo*	*2*
		322		*Lemons and Limes*	*2*
		323		*Oranges*	*2*
		324		*Tangerines, mandarins, clementines*	*2*
		329		*Other citrus fruit, n.e.c.*	*2*

1. 1 = temporary; 2 = permanent.

Group	Class	Sub-class	Order	Title	Crop type[1]
	33			Grapes	2
	34			Berries	2
		341		*Currants*	*2*
		342		*Gooseberries*	*2*
		343		*Kiwi fruit*	*2*
		344		*Raspberries*	*2*
		345		*Strawberries*	*2*
		346		*Blueberries*	
		349		*Other berries*	*2*
	35			Pome fruits and stone fruits	2
		351		*Apples*	*2*
		352		*Apricots*	*2*
		353		*Cherries & sour cherries*	*2*
		354		*Peaches & nectarines*	*2*
		355		*Pears & quinces*	*2*
		356		*Plums and sloes*	*2*
		359		*Other pome fruits and stone fruits, n.e.c.*	*2*
	36			Nuts	2
		361		*Almonds*	*2*
		362		*Cashew nuts*	*2*
		363		*Chestnuts*	*2*
		364		*Hazelnuts*	*2*
		365		*Pistachios*	*2*
		366		*Walnuts*	*2*
		369		*Other nuts n.e.c.*	*2*
	39			Other fruits, n.e.c.	2
4				**Oilseed crops**	
	41			Soya beans	1
	42			Groundnuts	1
	43			Other temporary oilseed crops	1
		431		*Castor bean*	*1*
		432		*Linseed*	*1*
		433		*Mustard*	*1*
		434		*Niger seed*	*1*
		435		*Rapeseed*	*1*
		436		*Safflower*	*1*
		437		*Sesame*	*1*
		438		*Sunflower*	*1*
		439		*Other temporary oilseed crops, n.e.c.*	*1*
	44			Permanent oilseed crops	2
		441		*Coconuts*	*2*
		442		*Olives*	*2*
		443		*Oil palms*	*2*
		449		*Other oleaginous fruits, n.e.c.*	*2*
5				**Root/tuber crops with high starch or inulin content**	**1**
	51			Potatoes	1
	52			Sweet potatoes	1
	53			Cassava	1
	54			Yams	1
	59			Other roots & tubers, n.e.c.	1
6				**Beverage and spice crops**	
	61			Beverage crops	2
		611		*Coffee*	*2*
		612		*Tea*	*2*
		613		*Maté*	*2*
		614		*Cocoa*	*2*
		619		*Other beverage crops, n.e.c.*	*2*

1. 1 = temporary; 2 = permanent.

Group	Class	Sub-class	Order	Title	Crop type[1]
	62			Spice crops	
		621		*Temporary spice crops*	*1*
			6211	Chilies & peppers (capsicum spp.)	1
			6212	Anise, badian, and fennel	1
			6219	Other temporary spice crops, n.e.c.	1
		622		*Permanent spice crops*	*2*
			6221	Pepper (piper spp.)	2
			6222	Nutmeg, mace, cardamoms	2
			6223	Cinnamon (canella)	2
			6224	Cloves	2
			6225	Ginger	2
			6226	Vanilla	2
			6229	Other permanent spice crops, n.e.c.	2
7				**Leguminous crops**	1
	71			Beans	1
	72			Broad beans	1
	73			Chick peas	1
	74			Cow peas	1
	75			Lentils	1
	76			Lupins	1
	77			Peas	1
	78			Pigeon peas	1
	79			Leguminous crops, n.e.c.	1
8				**Sugar crops**	**1**
	81			Sugar beet	1
	82			Sugar cane	1
	83			Sweet sorghum	1
	89			Other sugar crops n.e.c.	1
9				**Other crops**	
	91			Grasses and other fodder crops	
		911		*Temporary grass crops*	*1*
		912		*Permanent grass crops*	*2*
	92			Fibre crops	
		921		*Temporary fibre crops*	*1*
			9211	Cotton	1
			9212	Jute, kenaf, and other similar crops	1
			9213	Flax, hemp, and other similar products	1
			9219	Other temporary fibre crops	1
		922		*Permanent fibre crops*	*2*
	93			Medicinal, aromatic, pesticidal, or similar crops	
		931		*Temporary medicinal, etc. crops*	*1*
		932		*Permanent medicinal, etc. crops*	*2*
	94			Rubber	2
	95			Flower crops	
		951		*Temporary flower crops*	*1*
		952		*Permanent flower crops*	*2*
	96			Tobacco	1
	99			Other crops	
		991		*Other crops – temporary*	*1*
		992		*Other crops – permanent*	*2*

1. 1 = temporary; 2 = permanent.