

## Contributing to International Classification of Agricultural Products

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**Abstract:** A common classification is a powerful infrastructure and tool for coordinating and integrating official statistics as well as to ensure the comparability of statistical data over time and across sections and countries. For a long time, however, there had not been a common international classification for agricultural products in the world before the Central Product Classification (CPC) version 2.0 was approved by the 37<sup>th</sup> United Nations Statistical Committee in March 2006. The old CPC was not fully applicable, and, as a result, was not really used in agricultural statistics. The FAOSTAT Commodity List, which was used by FAO and its member countries for collecting and reporting agricultural statistics, was not fully compatible with other international classifications such as CPC and the Harmonized Commodity Description and Coding System (HS). It was obsolete and needed to be updated.

The efforts of aligning agricultural classifications with the overall international classifications have been made in various fronts. The recent revision and update of several international classifications including CPC have provided a rare opportunity for such efforts to be productive and fruitful. The adoption of FAO Proposal for CPC has made the new version of CPC to reflect much better the reality and needs of agricultural statistics than even before. The FAO Proposal for CPC was built on the experience, expertise, and specialty accumulated in FAO through its involvement and contribution in the development of agricultural statistics at both global and national levels. Equipped with sound principles and structure, the new international classification of agricultural products in CPC has been applied to the World Programme for the Census of Agriculture 2010 (WCA 2010) and the new FAOSTAT data collection questionnaire.

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## Introduction

Common classifications are a powerful infrastructure and tool for coordinating and integrating official statistics. They ensure the comparability and consistency of statistical data sets produced from different surveys over time and across sections, agencies, and countries. In other words, they promote “communication” among datasets. This is achieved through providing a common and standardized name, title, definition, and description for the individual item listed and a common and standardized way to group data in order to reduce the amount of unmanageable detail. Having internationally comparable data constructed to fit economic concepts promises substantial gains in the usefulness of the data for economic analysis. For instance, there has been an increasing demand for more coordination on the design and implementation of population and agricultural censuses. Establishing an international common classification in agriculture related areas would be a prerequisite and contribution to such an effort.

However, there had not been a common international classification for agricultural products in the world before the adoption of CPC v.2.0 in spite of the importance of common classifications. Although CPC had been revised and updated periodically, the basic structure and list of items in the areas of food, agriculture, fisheries, and forestry have remained intact. Since they did not reflect the actual situation, they therefore were not used by the food and agricultural statistics. The one used by FAO and its member countries for collecting and reporting agricultural statistics was the FAOSTAT Commodity List (thereinafter the “FAOSTAT List”). The FAOSTAT List itself had several problems: it was designed sometime ago, thus needed to be updated, and not fully compatible with other international classifications such as CPC and HS.

The effort of FAO to fill in the gap in the international classification of agricultural products was started in mid 2004 when a taskforce on classifications was set up within the FAO Statistics Division and a network on classifications was established among different departments and divisions within FAO to prepare for the FAO Proposal for CPC to be submitted to the United Nations (UN) Expert Group and Technical Subgroup (EG/TSG) for final inclusion in the new CPC. Before it was accepted, the FAO Proposal has been discussed and consulted through several rounds among different technical departments and divisions within FAO, as well as in the international statistical community through the UN EG/TSG under the auspices of the UN Statistics Division. The FAO Proposal for CPC was designed to rationalize both the structure of the groupings and the inclusion of commodities in terms of listings in the classification of agricultural products in CPC.

For the rest of this paper, we will describe how the new international classification of agricultural products was established through reviewing the problems associated with the old CPC and the FAOSTAT List, and their relationship in Section 2 “Background”; highlight the principles applied and the structure embedded in the new classification of agricultural products in Section 3 “FAO Proposal for CPC: Principle and Structure”; brief the implementation and application of the new CPC in the World Programme of Agriculture Census (WCA) 2010 and the new FAOSTAT data collection questionnaire in Section 4 “Implementation and Application of New CPC”; and summarize as well as outline the current and near future activities in this area in the last, Section 5 “Summary and Conclusion.”

## 1. Background

The problem in the past was that classifications used for agricultural statistics were not fully compatible with classifications used in other areas of statistics. The FAOSTAT list of agricultural products was inspired by SITC and adapted it by adding additional details. The List has been used by FAO and member countries to collect agricultural data in the last 40 years. Over the year, however, the list remained static and was not updated with new technological advances and changes. Gradually its concepts and definitions became outdated compared with HS and CPC. As a result, it impaired the comparison and integration of agricultural statistics with others.

CPC is based on HS but has a different view on aggregates of individual products in order to accommodate various statistical purposes. In general, HS is considered to contain sufficient detail and thus the aggregates in CPC to be meaningful. For the purpose of agricultural statistics, however, the structure and detail of HS are not completely suitable. This is especially for the case of raw agricultural products. They are important to be measured in terms of domestic production but not always internationally traded in large amounts. Because of this, they are typically combined with the further processed forms of these products or with other products in HS. Therefore, in the context of domestic production in order to obtain CPC subclasses meaningful enough, it may be necessary to split the related HS code to make the CPC structure to be more responsive to the needs of agricultural statistics.

Comparing and examining the relationship between the FAOSTAT List and CPC through HS is possible as HS is the building block for both of them. The old CPC is less detailed than HS which is equally or less detailed than the FAOSTAT List. It is also noted that HS and CPC are comprehensive classifications, while the FAOSTAT List – even though almost complete – is a list of the most important agricultural products, not drawing on completeness. Table 1 below shows that the FAOSTAT List and HS are related but not fully correspondent to each other.

Table 1: Linkage between FAOSTAT List and HS

Link Type	Link Count	%
1:1	155	13.9
1:n	205	18.4
m:1	152	13.6
m:n	605	54.2
Total	1117	100

where,

- 1:1 → 1 FAOSTAT item corresponds to one HS item;
- 1:n → 1 FAOSTAT item corresponds to n HS items, i.e. FAOSTAT item is less detailed than HS;
- m:1 → m FAOSTAT items correspond to 1 HS item, i.e. FAOSTAT is more detailed than HS;
- m:n → m FAOSTAT items correspond to n HS items; this occurs when different concepts are used and can lead to relatively large blocks if single splits build bridges between otherwise cleaner concepts (UNSD, March 2004).

This reflects the incompletely correspondent relationship between the FAOSTAT List and CPC:

- Some FAOSTAT codes without correspondence in HS and CPC.
- Some FAOSTAT codes with correspondence in HS and CPC but without clear definitions of the contents or the definitions are different.
- Some definitions in FAOSTAT are not completely consisting with those in HS thus many of the links between FAOSTAT and HS are just partial.
- From the FAO definitions alone, sometimes, it is hard to tell which products are included and which are not (UNSD, March 2004).

## **2. FAO Proposal for CPC: Principle and Structure**

### **2.1. Increasing Proper Details in CPC**

One of the main problems with the old CPC is that it provides insufficient detail for food and agriculture products, that is, they are not properly separately identified at the most basic 5-digit level, the individual product level. The listed items are biased toward the economy and production in Europe but not in the rest of the world especially in the developing world. After adopting the FAO Proposal for CPC, the number of detailed items has dramatically increased. Compared with the total number of items at five-digit level in CPC v.1.1 of 221 items, the number of items for the same areas in the new CPC v.2.0 is 506. Thus, a total of 285 new items has been added to the new CPC v.2.0, a little more than double the size in these areas of the old CPC. It covered agriculture, fisheries, forestry, food products, and major inputs of agriculture, including fertilizers, pesticides, and agricultural machinery.

The main consideration for items to be selected is in general to adhere to the criteria and principles in classifications such as the economic significance in terms of production, trade, and nutrition; collectibility or availability of data, i.e. to be included when data are available; historical continuity to ensure consistent time series in the 5-digit items; and international comparability.

In agricultural statistics, in particular, one of the major difficulties is to get good data on non-commercial and subsistence agricultural production. Because of insignificance in trade across the border and thus insignificance in monetary terms, they are not well presented in HS. Still they can form a large part of the total production mainly for domestic consumption in many developing countries. To include a reasonably detailed list of both outputs and inputs of agricultural production of such nature would strengthen the central role of CPC in the compilation of national accounts and trade statistics from both production and income perspective.

Besides, data required for the analysis of food consumption go beyond the guiding principles used in HS. Two similar products in HS can be very different in terms of their nutrient contents. The nutritional breakdown of food related data is indispensable for better understanding the dimensions of malnutrition and hunger in the world. To include a reasonably detailed list of agricultural products of such nature in CPC would facilitate the analysis of food consumption in relation to food production, food trade, and other economic and social statistics, which are used in the monitoring of the

progress of the Millennium Development Goals in the context of fighting against hunger and alleviating undernourishment.

Among the total about 500 items, about half of them are HS-compatible items; the other half are with split HS codes which can be characterized into four groups:

- Type I Commodities with world trade value (namely data for either import or export) exceeds 50 millions of USD.
- Type II Commodities with high volume of domestic production: these are the agricultural products are deemed important and measured in terms of domestic production but not always internationally traded in large amounts. They have been compiled and disseminated in FAQSTAT and used by the agricultural research and policy-making community for more than 45 years. They are typically combined in the HS with the further processed forms of these products.
- Type III Seeds: One of the most important Inputs for agriculture production: they are produced under strict quality assurance systems in the field and later in terms of harvesting, storage, processing/conditioning, packaging, and labeling. Considerable research, breeding, selection and later sampling and testing are done to ensure the quality. Seed for planting should not be mixed with seed for consumption. In many countries there are strict rules that prevent grain being sold as seed. Seed for planting is not represented uniformly in the statistical classification system and the FAO Proposal will partially overcome this problem. E.g. seed for vegetable and forage crops were mentioned but not for the most important cereal crops of wheat, maize and rice. Also with oil seeds, there was no mention of the seed for planting used for these crops. Intellectual Property Rights (IPR) Regimes protect seed varieties and create the environment under which the seed industry has developed to have a multi-billions dollar yearly turnover. According to the Secretariat of International Seed Federation, the annual commercial world seed market is assessed at approximately US\$ 30 billion (updated in March 2007). The total export of the “agricultural seeds” was 3,172 millions USD, and that of the “Horticultural Seeds” was 1,632 millions USD in 2005
- Type IV Fat & feed and food safety: Reclassification of meat meals is important especially following the Bovine Spongiform Encephalopathy (BSE) crisis in Europe. It would enable the distinction to be made in country data between ruminant and non-ruminant by-products and hence the risk of BSE resulting from trade in potentially infected materials. It would enable more useful data to be obtained on the products of the feed industry which are currently lacking in the classification. Together with Types III, they contain a small group of items which do not have data available currently but are considered to be important to have them in the classification system in order for the future collection of data.

## 2.2. Creating Sound Groupings in CPC

While the listing is more for data collection, the grouping is for the purpose of international comparison with the recognition that not all the countries will be able to collect all the data for the individual items at the 5-digit level, they may be compared

at the 3-digit group level and 4-digit class level. The structure in terms of grouping the categories of agriculture related products in the old CPC is not rational. For instance, under “012 - Vegetables,” the only two items singly listed are “01210 – Potatoes” and “01231 - Locust beans,” while the former strictly speaking is not a vegetable and the latter in fact is not a significant item in terms of statistics. “Locust bean” is certainly not vegetable. It should be moved either to “Fruit” (01390) or “Stimulants and spices” (01690) or to the new sub-class of 019 “Miscellaneous crops.” More important products categories such as “dried leguminous” and “edible roots and tubers with high starch or inulin content” are lumped together without distinguishing their components under 012 - Vegetables side by side with “01210 - Potatoes” and “01231 - Locust beans,” making the structure bizarre and unbalanced. Another example is under “013 - Fruit and nuts,” the only singly listed item is “01330 - Grapes, fresh” and others are listed as combined/bundle products, such as citrus fruit, melons, etc, while melons arguably are classified by many countries as vegetables rather than fruits in agricultural statistics.

The experience from the review and update of agricultural products in CPC shows that to add and eliminate 5-digit items, the individual agricultural products, are the foremost important that the higher digits, i.e. the group. Data collection such as agricultural surveys and censuses are focusing on the individual agricultural products; calculation of the consumption of nutrition is based on each individual product as the nutrient convention factor has to be applied to each individual product; as a result, statistical dissemination is mainly organized by each individual product.

The 3-digit and 4-digit groupings have been thoroughly reviewed and examined while the 1-digit and 2-digit level sections and groups have been fixed and not supposed to be changed during this round of CPC update. A lot of changes have been made at these two levels of the categories in CPC to make them more rational and better reflecting the real situation of the economy. The 4-digit class level, especially in the vegetable and fruit categories, is designed more to accommodate and include as many types of vegetables and fruits as possible. The 3-digit group level has been carefully reviewed and revised to reflect the importance of different types of products. A lot of efforts have been made to properly define the residual items for the 4-digit classes.

In general, products are classified in CPC based on their physical properties, intrinsic nature, and industrial origin. Physical properties and intrinsic nature of products refer to the raw materials of which goods are made, the stage of production or the way in which goods are produced or services rendered, the purpose or user category for which products are intended and the prices at which they are sold. Here are some examples of the use of the “demand-side” or “commodity-oriented” marketing concept in the agricultural related products in the new CPC:

- The “agricultural machinery and parts” is to group together such dissimilar products as chicken brooders, hair clippers, and farm tractors, products that are produced by very different processes and that are linked together only the class of user.
- Fish caught in the ocean and fish produced on fish farms are very close substitutes from the view of the consumer, and they are distributed in similar ways, so they should be grouped together without distinction (Jack Triplett, 1993).



- The breakdown of fish into food and ornamental results from recent developments in aquaculture production that have brought an increase in production and trade in live fish for food, and ornamental fish production and trade are usually expressed in units rather than weight.
- Groups 032 and 039 are combined together and enlarged to encompass ALL non-wood forest products (NWFP) to avoid singling out only natural rubber in a separate group from the other (economically more important) NWFP. At the same time, lac, resins, balsams, and gums are put into separate subclasses as they are quite different products.

For the industrial origin, products in the CPC subclass are mainly the output of a single industry, which can be visibly found at the 1-digit Section level. The two major Sections 0 and 2 where all the products in Section 0 are considered as raw and primary products while all products in Section 2 are considered as processed products with more human intervention on top of the raw products. One of the uses of such a grouping is to relate the commodities here with the related activities, for most commodities in Section 0 are produced by agriculture, fisheries, and forestry, while most commodities in Section 2 are produced by food manufacturing industry although depending on the degree of processing, some of the products in Section 2 can still be produced in farms

### 3. Implementation and Application of New CPC

#### 3.1. Applying to World Programme of Agriculture Census 2010

The adoption of FAO Proposals for ISIC and CPC into the new versions, ISIC rev. 4.0 and CPC v. 2.0 has effectively facilitated their application. CPC and ISIC are very relevant for WCA as both sample frame development and estimates from sample surveys depend on classification systems. Among the 16 items of the core module of WCA 2010, many of them rely on classifications for defining their boundaries and contents as in Table 2 below. As a result, for the first time in its history, the lists of crops, livestock, and machinery and equipment recommended in WCA 2010 are now fully compatible with ISIC and CPC.

Table 2: Example Areas of Application of Classifications in WCA 2010

<u>Items of the Core Module of WCA 2010</u>	<u>Applicable Classifications</u>
Type of agricultural holding	ISIC
Main purpose of production	ISIC
Presence of temporary crops by crop type	List of Crop -> CPC
Presence of permanent crops by crop type and whether grown in a compact plantation	Crop List -> CPC
Number of animals by livestock type	List of Livestock -> CPC
Presence of aquaculture	ISIC
Presence of forest and other wooded land	ISIC & CPC
Other economic activities of the holding's enterprise	ISIC
Whether the holding is part of a household that is primarily a farming household	Principles of ISIC

The main problem with the crop list used in the previous WCA 2000 is that it puts too many dimensions of crops within one list, such as the growing cycle (temporary vs. permanent), crop species, crop variety (e.g., hybrid vs. ordinary maize), season (e.g., winter vs. spring wheat), land type (e.g., wetland vs. dryland rice), crop use (e.g., pumpkin for food vs. fodder), type of product (e.g., fresh vs. dried beans), how a crop is processed (e.g., industrial crops), and cultivation methods (e.g., crops grown under protective cover), etc. It does not have clear criteria and principles and mixes the “end-use” of crops with “supply-side” or “production-oriented” approach. As a result, a crop may appear in several places such as pumpkins shown in as both “pumpkin for food” or “pumpkin for fodder;” and pepper assigned to categories of using for fresh or dried produce. The new crop list does not include many of the characteristics and categories here but leave to countries if they like to include them in lower levels.

The principles and structures of both CPC and ISIC are applicable to the construction of crop list. While a crop list is closely related to the product classification (CPC), however, since products are output of economic activity or the result of production, strictly speaking, only harvested crops are products such as harvested maize. If crops are still growing in the fields while an agricultural census is conducted, they are not products yet in a precise sense. In this case, the economic activity classification, ISIC, is also applicable.

The new crop list applies principles of CPC to WCA by keeping its groupings (i.e. its structure) and expanding its listings (i.e. with more detailed category levels beyond the subclass level of CPC). Thus, the new crop list 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. In principle, a particular crop is classified only once in the new crop list regardless how the crop is used.

For every particular type of crop, it appears in one place only according to its main and primary use, regardless of its multiple end-uses. This is applied to all grain, vegetable, sugar, oil crops as well as crops that can be consumed in fresh or dried; and avoids the repetition and confusion in the past like pumpkin, for example, was shown as “pumpkin for food” or “pumpkin for fodder”, and cotton was coded under “cottonseed” or “cotton fibre”. In the new crop list, pumpkin is put under the vegetable and cotton is under the fibre crop. Class of “Grasses and other fodder crops” refers to crops that are solely fodder crops.

### **3.2. Applying to New FAOSTAT Data Collection Questionnaire**

As the FAO corporate statistical database, FAOSTAT, is the world’s largest online agricultural information system, with nearly 4 million time series consisting of over 150 million observations. Its data sources include trade data collected from customs offices for almost all countries: some 580 agricultural (primary and transformed) plus 120 fishery commodities. Production data for primary, not transformed, commodities for all countries (193 commodities), while vegetable oils and sugar production data are obtained mainly from specialized commodity organizations. The output of FAOSTAT includes online version database, two issues of Yearbook every year, one presenting indicators by topic for all countries (“topical tables”) and another presenting indicators by country (“country profiles”) for all topics. Both are provided



also in the form of CD-ROMs. Within these outputs, one of the important products is to compile Supply Utilization Accounts and Food Balance Sheets.

Change the classification system may cause the break of time series and thus create inconsistency for the time series data. One way to remedy or to reduce the negative impact is to create a concordance / correspondence table between the new and old systems. In early 2006, as a step to apply the new CPC, such a table of correspondences was built with the new FAOSTAT List, the old FAOSTAT list, and the new CPC, v.2.0. Through the Correspondence Table, the consistency of the new FAOSTAT Food (175 items) and Non-food (37 items) Commodity List was checked with international classifications (i.e. CPC). The Table is also helpful in assigning proper titles and codes to the items, evaluating the grouping, and identifying the gaps.

As it is found in the study of UNSD (March 2004) that the descriptions in HS were usually more detailed and specific than in the old FAOSTAT List, it is suggested that while maintaining the old FAOSTAT List as much as possible, it is also better to use the descriptions of HS for the new FAOSTAT List when appropriate. In fact, a preliminary analysis showed that the difference between the primary food items in the new FAOSTAT List and those in the old FAOSTAT List is very moderate. Among the 175 food items, only 18 items of old FAOSTAT List have been aggregated or combined into 9 items in the new FAOSTAT List. For other about 90 items, only their titles have been modified. The rest 68 items are identical in the new and old FAOSTAT List. To make it transparent of what have and have not been changed will help a lot to both the users and data providers of FAOSTAT.

In principle, wherever the contents are the same, CPC titles (which in fact were originally proposed by FAO and widely discussed and evaluated by other international / regional organizations and countries in the world) should be used to make the FAOSTAT list consistent with CPC and to avoid any unnecessary confusion. Apparently, once countries adopt the new version of CPC, it will facilitate data collection by aligning our new commodity list as closely as possible with CPC.

For a classification system, its coding system is very important for it provides the structure. The basic requirements for a coding system is that it should be simple and proper, in the sense that simple means that easy to be used, imposing minimal burden and proper means that no confusion and misleading. HS is basically a detailed listing of commodities, but not a classification for the purpose of organizing official statistics. That is exactly the reason why for statistical organizations overall the world need to have a classification system such CPC.

To facilitate the use of the new FAOSTAT List, a new eight-digit coding system is proposed to code consistently and systematically all FAOSTAT commodities, which combined the advantages of CPC grouping and the old FAOSTAT listing. The structure of the new CPC is the only and best structure currently available in the world to be used and improved in the future.

During the process of reviewing the old FAOSTAT List and presenting FAO Proposals to be included in the international classifications, it also helped find problems in the old FAOSTAT list and thus improve the clarity in the FAOSTAT data collection questionnaire.

One of these examples is with the list of fertilizers. It was found that if one tried to collect data directly based on the unit valuation of fertilizer nutrient, the links between the FAOSTAT list and HS codes were very unclear creating a lot of overlaps or cross-links in the sense that one HS code could be used and shared by different items in FAOSTAT List. The linkage between the new CPC and HS however is much clear. It thus prompted the discussion and thinking, and consequently recommendation that to obtain information only in products with both of their quantities and prices. Such information can then be used in calculation and estimation for the unit valuation of fertilizer nutrient to meet the needs of agricultural statistics. At the same time, some of the less significant items in the old FAOSTAT list were removed (e.g. sodium nitrate, calcium nitrate, ground rock phosphate, crude salts to 20% K<sub>2</sub>O, phosphoric acid, and ammonia) as shown in Table 3 in the appendix.

#### **4. Summary and Conclusion**

CPC v.2.0, approved by the 37<sup>th</sup> UN Statistical Committee and to-be-published in 2008, is a watershed in agriculture related statistics as it signifies that for the first time agricultural products are properly included in a common international classification, a critical step moving forward for agriculture statistics to be integrated into the overall official statistics. For this achievement, FAO has played an important role by taking the initiative to prepare and present the FAO Proposal for CPC to the UN Expert Group and Technical Sub-Group, by actively coordinating the review and consultation activities in the international community, and by providing needed expertise and technical supports during the whole process. FAO has also been a vanguard for the implementation and application of the new CPC v.2.0 by applying it directly in the World Programme of Census of Agriculture (WCA), by creating table of correspondences between the new CPC and the commodity list used in the new FAOSTAT for evaluation and quality control, and by using it in the FAOSTAT questionnaire distributed to member countries for data collection.

Currently, FAO is making efforts to coordinate with the HS Review Sub-Committee under the auspices of World Customs Organization (WCO) to review and revise HS in the areas of food, agriculture, and fisheries for the next version of HS 2012. With a detailed and exclusive list of commodities, HS has been widely used as a fundamental classification for data collection not only in trade statistics but also in production and even consumption statistics through the linkage of the statistical systems and frameworks, such as the Food Balance Sheet and National Accounts. Through presenting FAO Proposal for HS, the goal is for HS to be even more relevant to agricultural statistics by identifying and reflecting those items important for local economy including production and trade in general, and for food security and early warning data collection and analysis in particular; to facilitate and render more efficient data exchange and management; and to maintain a high degree of consistency and correspondence between CPC and HS.

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## APPENDIX

Table 3: Table of Correspondences – Fertilizers in CPC and Old FAOSTAT List

CPC v.2.0		Old FAOSTAT List		HS 2007
Code	Title	Code	Title	Code
<b>16100</b>	<b>Chemical and fertilizer minerals</b>			
16110	Natural calcium phosphates, natural aluminium calcium phosphates and phosphatic chalk	1382	GROUND ROCK PHOSPHATE	2510
<b>34600</b>	<b>Fertilizers and pesticides</b>			
<b>34610</b>	<b>Mineral or chemical fertilizers, nitrogenous</b>			
34611	Urea	1367	UREA	3102.1
34612	Ammonium sulphate	1361	AMMONIUM SULPHATE	3102.21
34613	Ammonium nitrate	1362	AMMONIUM NITRATE	3102.3
34614	Double salts and mixtures of calcium nitrate and ammonium nitrate			3102.6
34615	Mixtures of ammonium nitrate with calcium carbonate or other inorganic non-fertilizing substances	1372	CALCIUM AMMONIUM NITRATE	3102.4
34619	Other nitrogenous fertilizers and mixtures, n.e.c.			3102.29, .80, .90
<b>34620</b>	<b>Mineral or chemical fertilizers, phosphatic</b>			
34621	Superphosphate			3103.1
34629	Other phosphatic fertilizers, n.e.c.			3103.90*
<b>34630</b>	<b>Mineral or chemical fertilizers, potassic</b>			
34631	Potassium chloride (muriate of potash)			3104.2
34632	Potassium sulphate (sulphate of potash)	1387	POTASSIUM SULFATE	3104.3
34639	Camallite, sylvite and other potassic fertilizers, n.e.c.			3104.9
<b>34640</b>	<b>Mineral or chemical fertilizers containing at least two nutrients of nitrogen, phosphate and potash</b>			
34641	Fertilizers containing three nutrients: nitrogen, phosphorus and potassium	1370	OTHER COMPLEX FERT (N)	3105.2
34641	Fertilizers containing three nutrients: nitrogen, phosphorus and potassium	1381	OTHER COMPLEX FERT (P2O5)	3105.2
34641	Fertilizers containing three nutrients: nitrogen, phosphorus and potassium	1392	OTHER COMPLEX FERT (K2O)	3105.2
34642	Diammonium hydrogenorthophosphate (diammonium phosphate)	1368	AMMONIUM PHOSPHATE (N)	3105.3
34643	Monoammonium phosphate	1379	AMMONIUM PHOSPHATE (P2O5)	3105.4
34644	Fertilizers containing two nutrients: nitrogen and phosphorus	1370	OTHER COMPLEX FERT (N)	3105.51, .59
34644	Fertilizers containing two nutrients: nitrogen and phosphorus	1381	OTHER COMPLEX FERT (P2O5)	3105.51, .59
34645	Fertilizers containing two nutrients: phosphorus and potassium	1381	OTHER COMPLEX FERT (P2O5)	3105.6
34645	Fertilizers containing two nutrients: phosphorus and potassium	1392	OTHER COMPLEX FERT (K2O)	3105.6
34646	Potassium nitrate	1370	OTHER COMPLEX FERT (N)	2834.21
34646	Potassium nitrate	1392	OTHER COMPLEX FERT (K2O)	2834.21
34649	Other mineral or chemical fertilizers containing at least two nutrients (nitrogen, phosphate, potash), n.e.c.			3105.9
<b>34650</b>	<b>Other fertilizers</b>			
34651	Ammonia, anhydrous	1402	AMMONIA	2814.1
34652	Ammonia, in aqueous solution	1402	AMMONIA	2814.2
34653	Ammonium chloride; nitrites			2827.10, 2834.10
34654	Excreta of animals useful for manure/ fuel preparation			3101
34659	Fertilizers n.e.c.			3105.1