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Country Paper on Economic Activity Classification in India

Background

1.1   The task of evolving and maintaining statistical standards require development of standard classifications in various fields. These classifications help in data collection, data processing and analysis besides data harmonization and comparability over a period of time and also across the country, region and globe.

1.2   Over a period of time, India has developed a number of classification systems for classifying industrial activity, products & services, occupations, trade, to mention a few. These classifications have been developed keeping in view their relevance & compatibility with the international classification on the respective subject. These classifications are being used immensely by Government agencies, research institutions/organizations and researchers. These classifications have been revised from time to time in order to accommodate national needs within the framework of international systems of classifications.

1.3   The important international classifications available are Harmonized Commodity Description and Coding System (HS), International Standard Industrial Classification (ISIC), Central Product Classification (CPC), International Standard Classification of Occupation (ISCO), International Classification of Disease (ICD) etc.

1.4   The Central Statistical Organisation (CSO) in the Ministry of Statistics & Programme Implementation is responsible for coordination of statistical

activities in the country as well as for evolving and maintaining statistical standards.

1.5   This paper briefly presents the evolvement of economic activity classification at national level.

2.   National Industrial Classification of India

Background

2.1   In India, industrial classifications have for long been in use in the population census, enterprise surveys, labour statistics, national income estimation, etc. The Central Statistical Organisation (CSO), developed the first Standard Industrial Classification (SIC) in 1962 based upon the suggestions received from various concerned agencies of the Government of India such as Registrar General of India; Economic Advisers to the Ministries of Finance, Food & Agriculture, Commerce and Industry; Indian Bureau of Mines; National Employment Service; Labour Bureau; Planning Commission; Directorate of National Sample Survey and Indian Statistical Institute etc. This classification was based on ISIC Rev.1 (1958). It was revised subsequently and released in the form of National Industrial Classification (NIC). NIC 1970 and NIC 1987 brought out were based on ISIC Rev.2 (1968), NIC 1998 and NIC 2004 on ISIC Rev.3 (1990) and ISIC Rev.3.1 (2002) respectively. The revisions/updating took place following the changes in the ISIC as well as the changes in the structure of Indian industries.

Objective

2.2   The main objective of the Industrial Classification is to provide a set of economic activity categories that can be utilized for the production of statistics according to activities. This classification is an important tool for comparing statistical data on economic activities at the national, State and district levels and also their comparison with other countries and international level.

First Classification on Industrial Activities

2.3   The first classification on industrial activities was brought out in 1962 and called Standard Industrial Classification (SIC). The SIC was a 4-digit classification and consisted of 9 divisions, 55 major groups, 284 groups and 753 sub-groups. It followed the ISIC Rev.1 in its entirety at the division (1-digit) level with slight deviations at the major group (2-digit) level. While the ISIC stops at the group level, the SIC is extended by one more level in order to meet the national requirements adequately. At the group (3-digit) level, SIC retained

all the groups of the ISIC and provided some more groups to give due recognition to the special features of the Indian economy.

National Industrial Classification (NIC) 1970 – The first Revision

2.4   The SIC-62 was revised in 1970 by taking into account the principles enunciated in the International Standard Industrial Classification 1968 Rev. 2 and renamed as National Industrial Classification. In the NIC 1970, there was one-to-one correspondence at 1 digit level. At 2-digit level, many to one concordance was made. All the 3-digit categories, however, were matched or made equivalent to, all the International Classification categories upto 4-digit level i.e. 4-digit classification of ISIC were encompassed in NIC 3-digits structure. The 4-digit level of NIC 1970 was primarily meant to meet the national requirements of various user organisations.

2.5   The first three levels (i.e. one-digit, two-digit and three-digit) of NIC 1970 witnessed expansion, whereas at the ultimate digit level there was a compression of categories. The NIC 1970 consists of 9 Divisions with 2 special Divisions X & Y; 64   Major groups; 383 Groups and 590 Sub-groups as compared to 9 Divisions, 55 Major Groups , 284 Groups and 753 Sub-groups of SIC-62.

2.6   To accommodate coverage at 3-digit level, the NIC 1970 had a special code structure starting with '0' instead of '1' as was in ISIC 1968, which gave a provision of allowing for an extra class at each level of classification in NIC. Two Divisions viz. 2 & 3 had been given to Manufacture instead of one in ISIC 1968. Two additional Divisions incorporated in NIC were *Division 'X', for Activities not Adequately Defined* and *Division 'Y' for Personal and Repair Services.*

2.7   The NIC 1970 while accepting the major features of ISIC-68, departed from the latter in regard to certain aspects. For example, "restaurants and hotels" was shifted from "services" to "trade" and a new first digit classification was formed by clubbing Banking, Insurance, Real Estate and Business Services. Moreover, in ISIC 1968 attempt had been made to classify enterprises in addition to establishments up to fourth digit of the classification.

2.8   In NIC 1970 on the other hand it was not found necessary to extend beyond the third digit level for classification of enterprises type units. The fourth digit extension in NIC 1970 was made for a different reason altogether, namely, the need for more details in classifying establishments. Another differential feature in the NIC 1970 was the inclusion of *Repair Services* under manufacturing instead of *Household and Personal Services* as was in ISIC. In

fact, an option was provided in NIC 1970 to include *Repair Services* either in division 3 (manufacturing) or under division 9 according to convenience and requirement of users.

National Industrial Classification (NIC) 1987 – The Second Revision

2.9   The NIC 1970 was revised in 1987 within the ambit of ISIC 1968 Rev. 2, as there had been no corresponding revision in industrial classification in the international scenario.

2.10   At the one digit level there had not been any major changes in the NIC 1987 as compared to the NIC 1970 and the economy remained divided into 9 sections and the special section X *"Activities not Adequately Defined"*. The activities relating to *Repair Services,* which were provided for in two places viz. Division Y and 9 (major group 97) of NIC 1970, had been placed only at Division 97 of NIC 1987, thereby   dropping the special Division Y in the revised NIC. At the two digit level there had been an expansion of 8 divisions bringing it to 72 divisions as against 64 in NIC 1970. Of the eight additional two digit codes, three were in Mining and Quarrying Section, with one each in Manufacturing (*Repair of Capital goods)* and Electricity(*Generation of non-conventional energy) S*ections and the remaining three in the Section relating to Finance*, Insurance, Real Estate and Business Services*. Similarly, the three digit level categories were also increased to meet the requirement of more detailed activities which had become important in the intervening period. Finally, in order to differentiate the scale and/or technologies of operation and also to take into account the product specialisation, four digit classification appeared through out in NIC-1987; unlike in case of NIC-1970 where four digit classification was developed only for the sections dealing with mining and manufacturing. There was an expansion at the 3-digit level making a total of 461 as compared to 383 in NIC 1970. The number of four digit level categories in NIC 1987 was 918 as against 590 in NIC 1970.

National Industrial Classification 1998 – The Third Revision

2.11   The NIC 1987 was revised to NIC 1998 to enfold the changes in the organisation of economic activities on account of technological evolution and to capture the emergence of new activities especially in the services sector, since the last classification. The NIC 1998 was developed under the overall guidance of a Steering Committee under the Chairmanship of Director General, CSO.

2.12 ISIC Rev.3 (1990) codes at 4-digit level was followed in toto and extended them to 5-digit coding system in order to accommodate all major NIC 1987 codes and also to meet national requirements to cover or delete

emerging/obsolete activities. The major problem arose in case of "Cotton ginning and baling" which moved from Manufacturing to Agriculture section.

Salient Features of NIC-1998

2.13   The NIC-1998 does not draw the distinction according to the kind of ownership, type of legal organisation, type of technology and scale/mode of operation. This is because such criteria do not relate to the characteristics of the economic activity.

2.14   The NIC 1998 has followed the principles of ISIC Rev. 3 and unlike in NIC 1987, the scale of operation/technology has not been used as a criteria for classifying certain activities in the manufacturing sector. To meet the national requirements at the 5-digit level, efforts have been to restrict categories in such a manner that the resultant activity does not become a product classification.

2.15   One of the significant features of the NIC 1998 is that apart from being identical with the ISIC Rev.3 in structure upto the 4-digit level, the appropriate four-digit categories of NIC – 1987 and the national requirements have been incorporated at the five-digit level. For meeting the requirements of user organisations relating to disaggregated statistics the use of the additional information on type of organisation code alongwith NIC in identifying the frame and collection of data therefrom can be made.

2.16   Both the NIC-1970 and NIC-1987 had an entirely hierarchical system of categories arranged on a decimal coding system with four levels, which was similar to that of ISIC Rev. 2. The coding structure of NIC- 1998 is no longer the earlier 1+1+1+1 hierarchical system; it is now a 2+1+1+1 system identifying 99 categories at the 2-digit level of the classification. Further, at the primary level NIC-98 as in ISIC Rev.3. makes use of the so-called concept of 'tabulation categories' which makes it possible to identify more than 9 broad categories of the economy. The new NIC has 17 such tabulation categories, 'A' through 'Q'. The new tabulation categories can easily be converted into one digit major divisions of NIC 1987.

2.17   The NIC-98 has 17 tabulation categories. These tabulation categories have 60 Divisions, at 2-digit level, 159 groups at 3-digit level, 292 classes at 4-digit level and 1021 subclasses at 5-digit level.

2.18   The other features of the revision interalia included (i) Introduction of a new group *Growing of crops combined with farming of animals (mixed farming)* relating to *Agriculture, Hunting and Forestry; (ii)* Addition of a new

Division on *Recycling* in manufacturing Section; (iii) Addition of a separate division for all activities related to motor vehicles and motorcycles and retail sale of automotive fuel in Section relating to *'Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods'* etc.

2.19 Activities carried out by government units that are specifically attributable to other areas of classification were classified in the appropriate class of NIC and not in division 75 "Public administration and defence; compulsory social security".

2.20 A new division (72) has been created for all computer related activities. It includes activities such as consultancy of hardware and software configurations, software supply, data processing and data base activities as well as repair and maintenance of (mostly smaller) computers and office machines. Much of this repair and maintenance is carried out by independent units with no relationship with the units that produce or trade these machines. Upgrading or updating of main frames is to be classified under manufacturing.

2.21 Units that repair or overhaul capital goods are classified in the same class as the units that produce the goods. Three main exceptions exist to this rule; repair and maintenance of motor vehicles and motorcycles , which is classified in group 502 and 504, respectively; repair of personal and household goods, which is classified in group 526; and repair and maintenance of computers and office equipment, which is classified in class 7250.

2.22 Research and Development activities which have been now transferred from Section 9 (Community, Social and Personal Services) to the new section K (Real Estate, Renting and Business Activities). The tabulation category J relating to '*Financial Intermediation*' is more developed as compared to NIC 1987.

2.23 In NIC 1987 renting and leasing activities were scattered. Since all renting and leasing activities are similar regardless of the goods rented or leased, such activities are now all combined in a new division (71) relating to *'Renting of machinery and equipment without operator and of personal and household goods'*

2.24 For the purposes of maintaining international comparability of data and also to maintain the time series of the national data, it is necessary that the data compiled according to a classification is convertible to the corresponding international classification and also to the earlier version of the classification. As regards international comparability, there exists perfect one-to-one correspondence upto 4-digit level between NIC 1998 and ISIC Rev. 3. To meet the requirement of convertibility with earlier version (i.e. NIC-87),   two

concordance tables have been prepared and appear as a part of this publication : a concordance table between 4-digit level of NIC-98 and three-digit level of NIC-87 and the other between 2-digit level of NIC-87 and appropriate level of NIC-1998. The former is meant to enable translating NIC-87 based data in terms of the 4-digit classes of NIC-98 while the latter is to enable conversion of the NIC-98 based data in terms of 2-digit codes of NIC-87.

National Industrial Classification 2004 – The Fourth Revision

2.25   As a result of changes in the structure of economy during the last four-five years, many new activities have come in existence and similarly some of the old activities have either disappeared or become insignificant. Further, the United Nations Statistics Division (UNSD) undertook updation of ISIC Rev.3 and released ISIC Rev 3.1. In order to meet the national requirements on account of changes in the structure of economy after release of NIC-1998 and maintain consistency with the classification of economic activities released by UNSD, NIC 1998 was updated to NIC 2004.

2.26   The updation of NIC-98 has been taken with a limited objective of accommodating national requirements while maintaining international comparability with the updated ISIC Rev.3.1. The exercise does not effect any major changes in the structure of the existing classification i.e. NIC-98 except removing ambiguity/duplications/omissions etc. by suitably modifying the explanatory notes. The major structural changes required in the classification will be considered in the next revision of NIC in pursuance of new version of ISIC Rev.4 to be released in 2007.

2.27   The NIC 1998 was updated under the overall guidance of Standing Committee on Industrial Statistics (SCIS). The updating took place with the following broad framework:-

(i)   All the changes incorporated in ISIC Rev. 3.1 may be carried forward in the updated NIC-2004.
(ii)   All the 5-digit changes suggested by users may be incorporated where necessary in the updated NIC-2004.
(iii)   Shadow 3/4 digit groups/classes may be introduced in the structure of updated NIC-2004 in order to meet national requirements.
(iv)   Activities such as cotton ginning etc. may be classified distinctly, say at 5 digit level, to facilitate separation of such data through appropriate re-tabulation, and
(v)   The major structural changes required in the classification may be considered in the next revision of NIC in pursuance of new version of ISIC Rev. 4 to be released in 2007.

2.28   The draft NIC 2004, prepared on the basis of the comments received from various Departments of Government of India, all State DESs, user organisations and members of the Standing Committee was examined and the suggestions/comments thereon were deliberated threadbare in the meetings of the Sub-group of Standing Committee and finally the updated draft NIC-2004 was approved by the SCIS.

2.29   **Salient Features of Updated NIC-2004**

- The tabulation categories A to Q of NIC-98 have been replaced by sections A to Q in respect of NIC-2004. NIC-2004 has 17 sections, 62 divisions, 161 groups, 310 classes and 1191 subclasses.
- The updated NIC-2004 is also comparable with ISIC Rev 3.1 till four digits in totality. In other words, all the changes reflected in ISIC Rev. 3.1 including creation of new classes 0501 & 0502 under group 050 (Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing), classes 5151, 5152 & 5159 under the group 515 (Wholesale of Machinery, Equipment and Supplies), classes 7221 & 7229 under the group 722 (Software Consultancy and Supply), creation of division 96 and 97 under the Section P (Undifferentiated Production Activities of Private households and activities of Private Households as employers) have been incorporated in updated NIC-2004.
- To accommodate suggestions of the user organizations shadow 4-digited classes 1713 & 1714 under Group 171(Spinning, weaving and finishing of textiles), classes 1724 & 1725 under Group 172(Manufacture of other textiles) and classes 2711 to 2719 under the Group 271(Manufacture of Basic Iron and Steel) have been created.
- Sub-classes on activities of 'repair and maintenance' have been introduced under their related 4-digit classes. However, because of non-availability of space under certain classes, the newly introduced sub-classes are shown as ****8(A).
- While maintaining compatibility with ISIC Rev.3.1 upto 4 digit level (except shadow classes), the suggestions of users for changes at 5-digit (sub-class) level have been incorporated, wherever necessary, to meet national requirement. Against 1021 five digit subclasses in NIC-1998, the updated NIC-2004 has total 1191 subclasses.
- Explanatory notes of updated ISIC Rev. 3.1 along with inclusion/exclusion statements have also been incorporated in updated NIC-2004 to remove ambiguity in the scope of various 4-digit classes to facilitate distinct classification of all economic activities.
- Concordance tables between NIC-1998 & NIC-2004 and vice-versa are also annexed.

2.30   This classification has already been put to use by CSO (IS Wing) for collecting data on Annual Survey of Manufacturing Industries (ASI) 2004-05.

Alphabetic Index of NIC-2004

2.31   For the first time in India, alphabetic list has been prepared for NIC. While 4-digit classification was used for Fifth Economic Census 2005, a detailed 5-digit alphabetic list has been made for general use including data collection.

2.32   The Government of India now proposes to revise NIC-2004 to NIC-2007 based upon the ISIC Rev.4 approved in March, 2006 by UNSC. The revision will also take into account the suggestions emerged in the Workshop on Pilot Surveys on Service Sector held in May, 2006. These suggestions inter-alia included provisions of codes for specialized advertising agencies doing specific advertising jobs; separate codes for processing laboratories, camera and lighting equipment suppliers; separate codes for TV channels etc.

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