

ECONOMY

Core Indicators

Description

CONTRIBUTION OF CULTURAL
ACTIVITIES TO GDP

▶▶ Percentage of the contribution of private and formal cultural activities to Gross Domestic Product

CULTURAL EMPLOYMENT

▶▶ Percentage of persons engaged in cultural occupations within the total employed population

HOUSEHOLD EXPENDITURES
ON CULTURE

▶▶ Percentage of household final consumption expenditures on cultural activities, goods and services set against total household consumption expenditures



I. RELEVANCE OF THE DIMENSION FOR CULTURE AND DEVELOPMENT

Over the past 20 years, culture as a productive sector has played an increasingly important role in national economies. Cultural activities and industries are becoming drivers for growth, enabling the diversification of national economies, generating income and creating employment in developing, emerging and OECD economies.

For the most part, data that may support the above remains unconsolidated and with many gaps. Yet, the following estimates illustrate the global economic contribution of cultural and creative products. The sector, broadly considered, accounted for 3.4% of global GDP in 2007 and was worth nearly US\$1.6 trillion: this represents almost double international tourism receipts for the same year.¹ It is, for example, estimated that the cultural and creative industries contribute around 2.6% of the total GDP in the European Union and 6.4% in the USA.² In 2008, the value of world exports of creative goods and services reached USD 592 billion, indicating an annual growth rate of 14% over six consecutive years.³ Moreover, the creative and cultural industries are one of the most dynamic and rapidly expanding sectors in the global economy, with a growth rate of 17.6% in the Middle East, 13.9% in Africa, 11.9% in Latin America, 9.7% in Asia, 6.9% in Oceania, and 4.3% in North and Central America.⁴ The demand and consumption of cultural and creative products and media services is also expanding exponentially, driven by the increasing importance of digital and mobile distribution and the changes in the ways culture is being created and distributed.

In addition, the products and services generated by cultural activities and industries are a powerful vector for social and cultural development due to their dual nature – both economic and cultural. This dual nature adds value and goes beyond their capacity to create employment, revenues and incomes. By providing an outlet for creative expression, experimentation, and entrepreneurship, they foster the creative as well as the social capital of a country. In this regard, the culture and creative sectors are “risk takers”, investing in new talents and new aesthetics that contribute to the diversity of cultural expressions and enlarge consumer choices. They also produce multiple synergies and positive spill-over effects in areas such as the access and use of new information and communication technologies (NICTs) by the general public or the stimulation of research, product and service innovation. Importantly, the diversity and strength of the culture sector at the national level highlights the degree to which infrastructure and policies are in place to facilitate the translation of creativity and innovation to entrepreneurial skills and expertise as well as the production of positive social externalities.

+ The CDIS and the Millennium Development Goals (MDGs): This dimension is related to the MDG Goal 1 “Eradicate Extreme Poverty and Hunger” which includes targets for the achievement of full and productive employment and decent work for all, including women and young people. The CDIS seeks to demonstrate and highlight the potential of culture as a motor of economic development that can generate income and create employment. The results of its application at the country level could thus contribute to the measurement of the achievements obtained in the implementation of MDG 1.

Objective of the Dimension

This dimension examines the contribution of the culture sector to economic development through three core indicators:

- Contribution of cultural activities to GDP;
- Cultural employment; and
- Household expenditures on culture.

Through these three core indicators, the CDIS is contributing to obtain key data demonstrating the contribution of the culture sector to the economic development of countries. Moreover, through its methodology, it is also helping to initiate the alignment of national statistics related to the economy of culture with international standards.

1. The Creative Economy Report, UNCTAD (2008), p.25

2. The Creative Economy Report, UNCTAD (2010), p.23

3. The Creative Economy Report, UNCTAD (2010), p.23

4. Media and Entertainment Outlook, PricewaterhouseCoopers (2008)



Note: Taking into account the level of capacities in cultural statistics and the availability of data in most middle, middle-low and low-income countries, the CDIS adopts a simplified and pragmatic approach inspired by the UNESCO Framework for Cultural Statistics (2009). The elaboration of the core indicators of the Economic Dimension should, therefore, be considered as a first step in the process of reinforcing technical capacities and information systems on the measurement of the contribution of culture to development at the national level by pointing out priority areas of intervention and major potentials and gaps requiring further explorations for policy-making.

II. DEFINITIONS

The concepts and definitions used for the three core indicators are based on:

- UN System of National Accounts 2008 (SNA)⁵
- UNESCO Framework for Cultural Statistics (FCS)⁶
- International Labor Organization (ILO) standards and guidelines⁷

In order to establish a general understanding of the key terms related to the three core indicators, the following definitions and reference guidelines are suggested for use.

Cultural goods and services:⁸ products that are distinguished from other economic goods and services because they “encompass artistic, aesthetic, symbolic and spiritual values.”

Central cultural domains:⁹ common sets of culturally productive industries, activities and practices directly associated with the creation, production, distribution and enjoyment of central cultural content:

- Cultural and Natural Heritage;
- Performance and Celebration;
- Visual Arts and Crafts;
- Books and Press;
- Audio-visual and Interactive Media;
- Design and Creative Services; and
- Intangible Cultural Heritage (transversal domain).

Equipment and supporting cultural domains: supporting industries as well as ancillary services that facilitate or enable the creation, production and distribution of products that make part of central cultural domains (e.g. printing, television apparatus or iPods) as defined by the UNESCO Framework for Cultural Statistics (2009).

Cultural production activities: activities that are under the responsibility of an individual or group of people that transform inputs (labour force, goods and services, and capital) into goods and services (outputs), which are remunerated and fall within a cultural domain.¹⁰ Not all activities that are part of cultural domains are part of production. Cultural production includes market and non-market activities. Non-market activities include those of non-profit and government entities that offer their products free of charge or for non-significant prices.¹¹

However, for methodological reasons, the CDIS core indicator on the contribution of cultural activities to GDP only assesses the contribution of private and formal cultural production activities to GDP.

Establishments: the statistical units to measure production. Establishments are active in just one location and concentrate on a sole or main activity that generates at least half of the total value added. An enterprise can be made up of one or more establishments. The establishments that make up the enterprise may in turn develop differing main activities.

5. <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

6. UNESCO, *Framework for Cultural Statistics* (2009), http://www.uis.unesco.org/template/pdf/cscl/framework/FCS_2009_EN.pdf

7. <http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/lang--en/index.htm>

8. UNESCO, *Framework for Cultural Statistics* (2009), p.22

9. UNESCO, *Framework for Cultural Statistics* (2009), p.23

10. The System of National Accounts (SNA) includes all the activities performed for the production of goods and services and excludes all domestic or personal household activities (e.g. cleaning, house repairs and meal serving) that are not remunerated.

11. These play a very important cultural role in the performing arts, heritage or services such as libraries and museums.



The CDIS Economy Dimension focuses on establishments engaged in cultural activities related to central cultural domains (covering establishments such as publishing and broadcasting enterprises, theatre and dance companies, museums, libraries), and equipment and supporting cultural domains (covering establishments such as telecommunications enterprises).

Employment in cultural activities: includes persons employed in jobs within establishments operating in the culture sector. Establishments dedicated to cultural activities may comprise cultural but also non-cultural occupations, as happens in management, technical and commercial occupations. Indeed, in the same establishment dedicated to a cultural activity (e.g. a publishing company), there can be different people engaged in jobs linked to cultural occupations, such as illustrators, writers and editors, and other people with jobs associated to non-cultural occupations like managers, accountants, clerks and sales people.

Employment in cultural occupations: includes persons that perform tasks and duties “that are carried out: to generate, develop, preserve or reflect cultural or symbolic and spiritual meaning; to create, produce and disseminate cultural goods and services, which generally contain intellectual property rights; and for the purpose of artistic expression”.¹² Cultural occupations refer to people who had a productive cultural occupation during a given time. It includes persons that are employed in establishments dedicated to cultural activities but also by establishments belonging to other non-cultural sectors, for example, designers in the cloth industry or architects in the building industry.

For the purpose of the CDIS, employment in central cultural occupations is distinguished from employment in equipment and support cultural occupations.

III. DATA SOURCES

The sources (economic and household surveys and censuses), where data should be obtained for the construction of the three core indicators use activity, occupation and consumption classifications.

These classifications organize the information of activities, occupations and consumption according to purposes into codes, necessary for economic and social accounting and statistical purposes. The construction of the proposed indicators requires the identification of culture in these classifications.

The following International Standard Classifications for activities, occupations and consumption are guidelines for the national classifications used by countries.¹³

- **The International Standard Industrial Classification of Economic Activities (ISIC):** this classification consists of categories used to collect and report statistics according to productive activities.
- **The International Standard Classification of Occupations (ISCO):** this classification categorizes occupations according to the specific characteristics of job duties and tasks.
- **The Classification of Individual Consumption According to Purpose (COICOP):** this classification divides the purpose of individual consumption expenditures incurred by households. The classification units are transactions.

Most countries use adaptations of these international standards. Some countries may use a different model, but in most cases the national classification used can be harmonized or subsumed within the above international standard classifications.

12. UNESCO, *Framework for Cultural Statistics* (2009), p.40

13. Promoted by the UN Statistics Division (<http://unstats.un.org/unsd/cr/registry>) and the Department of Statistics of the International Labour Organization (ILO) <http://www.ilo.org/public/english/bureau/stat/isco/index.htm>



IV. STEP-BY-STEP APPROACH TO IDENTIFY CULTURE IN NATIONAL ACTIVITY, OCCUPATION AND CONSUMPTION CLASSIFICATIONS

The following three steps should be followed for the identification of culture in national activity, product and occupation classifications in order to construct the indicators of this dimension.

>> STEP 1: Identification of central and equipment/supporting cultural domains in International Standard Classifications. The FCS (2009) conducted a detailed selection of activities and occupations that make up part of central cultural and equipment/supporting cultural domains in the last versions of these classifications: ISIC Rev.4 (4 digits) and ISCO-08 (4 digits). Given the pragmatic approach of the CDIS, a more reduced selection of culture domains is employed for the construction of the Economy Dimension's indicators as explained in Appendix I. The codes selected for the indicators "Percentage of the contribution of private and formal cultural activities to GDP" and "Percentage of persons engaged in cultural occupations within the total employed population" are presented in Appendixes II and III respectively.¹⁴

Moreover, a specific selection of household expenditures that are part of central cultural and equipment/supporting cultural domains in COICOP is presented in Appendix IV in order to guide the construction of the indicator "Household final consumption expenditures on cultural goods and services".

>> STEP 2: Correspondence exercises between the codes selected from ISIC Rev.4, ISCO-08 and COICOP and national classifications. Most countries use adaptations of past or current versions of ISIC, ISCO and COICOP classifications or different national classifications related with these versions in their national data systems (e.g. industrial and household surveys, and censuses). On account of this, a comprehensive correspondence exercise is required between: a) the code selection of central and equipment/supporting cultural domains in the proposed versions of the International Standard Classifications (presented in Appendixes II, III and IV), and b) national adaptations or previous versions available at the country level. To this end, the establishment of three correspondence tables making the link between national and international activities, occupations and consumption classifications is necessary.

For instance, UNSTATS has made available correspondence tables between ISIC Rev.4 and ISIC Rev.3¹⁵ and ILO has made available correspondences between ISCO-08 and ISCO-88¹⁶, which can be taken as a first step for the correspondence exercise that is required to construct the proposed indicators. An example of a correspondence table for activity classifications follows:

			ISCO Rev.4	National classification	
2 digits	3 digits	4 digits	Activity class	Code	Activity class
		3211	Manufacture of jewelry and related articles		
	322	3220	Manufacture of musical instruments		
59	591	5911 5912	Motion picture, video and television programme production activities		
		

14. UNESCO *Framework for Cultural Statistics*, pp. 52-81

15. <http://unstats.un.org/unsd/cr/registry/isic-4.asp>

16. <http://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm>



Note: The Data Tables of each of the three indicators of the Economy Dimension provide a framework to undertake correspondence exercises. Please fill the Tables according to the relevant national classification paying special attention to its level of disaggregation (4, 3 or 2-digit level codes).

>> STEP 3: Construction of indicators depends on the digit level of available national classifications: as explained above, some cultural activities, occupations and types of expenditures are difficult to identify in national classifications, where the level of disaggregation is too low or insufficient. Some 3-digit level codes and even 2-digit level codes can also be directly taken but many other codes may present a high level of code aggregation in sources and they will require estimations to separate cultural activities, occupations and expenditures from non-cultural ones.

Thus, in order to reach a comparable understanding of results at the international level while still ensuring that data remains reliable, it is critical to:

- Provide the digit level of the national classification employed to construct the indicators in the Data Tables; and
- Closely follow the selection of codes proposed by the present Methodology Manual for the construction of the indicators with data at the 4, 3 and 2-digit levels.

Naturally, the precision and relevance of the final indicators are strongly reduced when digit level codes decrease. However, at the 3-digit level, final indicators will succeed in giving relatively accurate insights into the contribution of culture to the economy. At the 2-digit level, the indicators will only succeed in giving a first, basic snapshot of the contribution of culture to the economy and serve as a guide for further research and policy action in this area.



Note: In order to obtain accurate and relevant data to construct these indicators (ideally at the 4- or 3-digit code level) collaboration with national statistical institutes is essential. Thus, it may be useful to establish a Memorandum of Understanding or other formal agreement with such institutes for the implementation of the CDIS at the national level.

V. CORE INDICATORS

1. CONTRIBUTION OF CULTURAL ACTIVITIES TO GDP

Introduction

Culture contributes to national GDP. This indicator assesses the weight of the culture sector in the national economy by looking at the primary income of employees employed in the formal economy.¹⁷ This refers to those who carry out creative activities and produce symbolic products as well as those with responsibility for equipment and supporting materials that serve the creation, production and distribution of cultural activities, goods and services. By looking at the income and value added generated by formal and private cultural activities, this indicator shows that these activities contribute to a country's production, help to diversify the economy, generate income and sustain livelihoods.

>> Description: Percentage of the contribution of private and formal cultural activities to Gross Domestic Product

Purpose

This indicator assesses the contribution of central and equipment/supporting cultural activities to GDP. It intends to provide insights into the overall contribution of the culture sector to the economy in a given country.

¹⁷. Understood as the part of an economy that is taxed, monitored by some form of government, and included in the Gross National Product (GNP).



Note: This indicator looks at the added value provided only by private and formal cultural activities.

Data Sources

- National Accounts
- Industry surveys and censuses
- Service and commercial surveys
- Small establishment surveys
- Government records
- Household income and expenditure surveys
- Household enterprise surveys
- Labour Force Sources
- Cultural special surveys, artist registers, etc.
- Private sector sources. e.g. special surveys done by guilds or media announcers.

Calculation Method

There are two main options to construct this indicator: the production and the income approaches. Only the production approach is presented below since it is easier and more commonly used.

The following steps should be followed:

1. Calculate added value

Added value refers to the value of an industry's output after deducting the value of goods and services used in producing them. In the production approach, the value added is calculated from the production value minus the intermediate consumption (*IC*) that corresponds to the value of inputs. The result is the value that the establishment contributes to the total value of the product produced.

There are two types of added value that can be calculated: gross or net. Gross value added (*GVA*) is calculated by taking the value of the output or gross production value (*GPV*) and deducting the intermediate consumption (*IC*).

Formula # 1

$$GVA = GPV - IC$$

Where:

- *GPV* (*value of the output*) = sales + own account capital formation + changes in inventories of work in progress and finished goods
- *IC* (*intermediate consumption*) = operating expenses – depreciating expenses. It includes the value of goods and services consumed by a process of production.

The added value has to be applied for the central and equipment/supporting materials cultural activities selected in ISIC Rev.4 by closely following the selection presented in Appendix II, along with the necessary procedure of undertaking correspondence exercises between such selected codes and national classifications (See the "Step by Step approach" above in section IV).

Depending on the degree of precision of the available national classification, please consider the respective selection of codes presented in Appendix II for 4, 3 and 2-digit-level data.



Note: It is crucial to separate data produced for central domains and equipment/supporting domains since the latter are not linked directly with symbolic content but are an approximation to the indirect effect in the value chain.



2. Calculate the ratio of cultural activities within national gross domestic product

To obtain the ratio, add the value obtained from the selected central and equipment and support codes. Then contrast this sum with the gross domestic product (*GDP*) of the national economy.

Formula # 2

$$CGDP = \frac{\sum_1^n GVA_{isic\ codes}}{GDP}$$

Where:

- *CGDP* is the cultural gross domestic product that is the contribution of cultural activities to *GDP*.



Note: in addition to the composite indicator, it is recommended to separately present the data produced on the contribution of central cultural activities to GDP and the contribution of equipment/supporting cultural activities to GDP.

Example

Country X used the 2010 economic census at the 4-digit level to construct the indicator on the contribution of private and formal cultural activities to Gross Domestic Product (GDP).

	Data	Domains	
		Central	Equipment/support
Results (%)	4.76%	57.57%	42.43%

Guidelines for the interpretation of results

- This indicator on the contribution of cultural activities is descriptive and contextual.
- The CDIS aims to produce as reliable results as possible, and for this reason, it has adopted a pragmatic approach that recognizes both the methodological constraints and lack of data availability. This indicator measures only the contribution of private and formal central and equipment/supporting cultural activities to GDP, and thus the results reflect only the “tip of the iceberg” of the overall contribution of cultural activities to national GDP. That is, as cultural activities that take place in the informal economy and in non-market establishments are not included in the calculations due to issues of data complexity and/or unavailability, the results for this indicator represent only a small fragment of the larger contribution of cultural activities to GDP. Thus, this indicator should be presented as a first appraisal of the status quo, which will require follow-up investments in national information systems to refine, complete and update the overall contribution of cultural activities to GDP.
- In this regard, the interpretation of results needs to acknowledge that this indicator does not cover:
 - a. many of the cultural activities that, in practice, generate economic outputs in middle, middle-low and low economies, such as:
 - non-market cultural activities offered by non-profit institutions serving households (NPISHs) and government institutions;
 - cultural activities carried out in small/informal establishments that function in the underground or shadow economy and which are very significant in many countries; and
 - illegal activities, such as piracy.
 - b. indirect and induced impacts and externalities, such as:



- cultural attendees' spending on hotels, restaurants and transportation associated with cultural activities;¹⁸
- other potential benefits of culture, such as the region's attractiveness for people and businesses; and
- economic valuations that do not involve consumption, for example, the value given to cultural assets because of their impact on future generations and their value to society or for philanthropic reasons.



Note: To learn more about issues related to the calculation of the global contribution of the culture sector to the GDP, please refer to the Going Further section in Appendix V.

- Although only providing a partial picture, the indicator offers valuable information of the income generated by cultural activities at the national level, as well as a relevant disaggregation by central and equipment/supporting cultural activities. It will serve to quantitatively demonstrate how the culture sector contributes to growth, economic diversification, and helps to generate income and sustain livelihoods. For many countries, this will represent the first time that such an assessment of their culture sector's weight in the national economy has been undertaken.
- At the national level, it is highly recommended when presenting the results to compare the contribution to GDP of cultural activities (as well as of central cultural activities) with other economic sectors with similar or higher contributions. This will allow for a clearer picture of the weight of the culture sector in relation to other economic sectors within the national economy. Moreover, it would be also useful to compare the rates of growth over time (through a time series) between key economic sectors and the culture sector. In general terms, world trends in this sector indicate higher turnovers than for other sectors and industries, showing greater dynamism and overtaking more traditional sectors, such as manufacturing.
- As stated above, a restricted picture of the overall contribution of cultural activities to GDP is obtained with 4-digit level data. With 2 or 3-digit levels of data, the picture is even more restricted. This means that the interpretation of figures needs to be thoroughly contextualized.
 - For countries with 3-digit level data, the indicator will provide relatively accurate insights into the contribution of formal and private cultural activities to GDP, even if the following selected codes concerning central cultural activities (e.g. cultural education; renting of video tapes and disks; news agency activities; retail sale of books, newspapers and stationary in specialized stores; manufacture of jewelry and related articles) and equipment/supporting activities (e.g. retail sale of audio and video equipment in specialized stores and web portals) are not considered in the final calculation.
 - For countries with 2-digit level data, the indicator will provide a basic snapshot of the contribution of culture to the economy. This can serve to guide further research and policy action in this area. Indeed, at the 2-digit level the final results will have only considered 7 codes categorized as corresponding to central cultural activities and 2 codes categorized as corresponding to equipment/supporting cultural activities. In addition, "software publishing", which is considered at the 4- and 3-digit level data as an equipment/supporting activity, is embedded at the 2-digit level with other key central cultural activities and is thus counted as such.
- Finally, it is important to note that since this indicator is aligned with international statistical standards, it represents a significant investment in bringing national classifications in line with international classification systems and allowing a comparable understanding of results at the international level. However, comparisons can only be made between countries using exactly the same codes selected under the CDIS Methodology and the same digit level of data.



Note: If, according to the available data, the proposed methodology does not provide an approximate estimation of the contribution of culture to the economy, a multi-dimensional approach based on the experience developed to assess the cultural economy in Mali may be useful for your country. Please refer to Appendix VI for more details.

18. To give an indication of the importance of ancillary impacts of arts attendees, it is estimated that in the USA the impact of arts attendees was about one-and-a-half times the impact of the arts organizations' own expenditures. *Arts and Economic Prosperity, Americans for the Arts, June 2002.*



2. CULTURAL EMPLOYMENT

Introduction

This indicator is focused on the role of culture as an “employer” in order to better understand its impact on national economic and social development.

Occupations in cultural activities reflect the ability for individuals to participate professionally in cultural activities and are a sign of the vitality of the culture sector, which is an integral part of development. Employment in cultural activities contributes to job creation, income generation and the material welfare of those employed in these activities. These are key for both national and international development goals. Indeed, Goal 1 of the MDGs states that the international community should target the achievement of “full and productive employment and decent work for all, including women and young people” as a means to eradicate poverty.¹⁹ In addition, due to the characteristic of the culture sector and its reliance on locally run micro, small and medium enterprises, this area of employment can foster equitable development and facilitate the distribution of resources to those most in need. Thus, the employment provided by the culture sector should be recognized as both a sign of its vitality and as a means of poverty reduction.

>> Description: Percentage of persons engaged in cultural occupations within the total employed population

There are two types of cultural employment:

- a. *Persons who have a cultural occupation*, including those who work in establishments engaged in cultural activities and those who do not;
- b. *Persons who work in establishments engaged in cultural activities*, including persons who work in cultural and non-cultural occupations.

The following table shows the three possible combinations between employment in cultural and non-cultural establishments and in cultural and non-cultural occupations.

Occupations \ Establishments	engaged in cultural activities	not engaged in cultural activities Equipment/support
Cultural	A	B
Non-cultural	C	

Persons that have a cultural occupation corresponds to set A+B and *Persons who work in establishments engaged in cultural activities* corresponds to set A+C.

The ideal approach would be to obtain data for both types of employment (A+B+C). However, once you obtain data for persons that have a cultural occupation (set A+B) on the basis of ISCO-08 selected codes (as detailed in Appendix III) and for persons who work in establishments engaged in cultural activities (set A+C) on the basis of ISIC Rev.4 selected codes (as detailed in Appendix II), the data of both sets cannot be added since employment in cultural occupations in establishments engaged in cultural activities (A) makes part of the two sets, which would cause double counting.

As it is quite complex and demanding to cross-cast ISIC Rev.4 and ISCO-08 (or the correspondence tables created for the country according to these classifications) in order to cover both types of employment (A+B+C) while avoiding double accounting, **the CDIS adopts a pragmatic approach consisting in measuring the set A+B, meaning only cultural occupations.**

19. www.un.org/millenniumgoals/poverty.shtml



Note: The indicator on cultural employment is calculated on the basis of the selected codes of ISCO-08. If your country does not use this classification or adapting the national classification is not possible, it is recommended to calculate the number of persons employed in cultural establishments by using the selected codes of ISIC Rev.4 (as detailed in Appendix II) as a reference.

Purpose

To assess the role of culture as an “employer” at the national level as well as the vitality and dynamism of the culture sector and its potential in improving the material welfare of those employed in it.

Data Sources

- Population Census
- Labour Force and household employment surveys
- Administrative records (e.g. social security registers)



Note: Although most of the sources recommended use ILO guidelines and standards on employment definitions and concepts, there are some differences among countries. For example some include as employed persons those who work at least one hour in the last week and some use other reference periods. The starting working age also varies from one country to another, from 10 to 18 years old. The particularities in the definitions as well as the chronological period when the survey or census was carried out should be highlighted when presenting the results and included in the Data Table.

Calculation Method

The following steps should be followed to construct the indicator:

1. Number of persons having a cultural occupation:

The universe of the indicator is the number of people employed²⁰ in cultural occupations. It includes people with i) cultural occupations in cultural establishments (set A) and ii) cultural occupations in non-cultural establishments (set B).

This indicator refers to people who, at the time of data collection, had a productive cultural occupation during a given time (usually the last week). The calculation should be based on data obtained from the relevant codes in the national occupation classification, which correspond to the ISCO-08 selected codes presented in Appendix III (for 4, 3 and 2-digit level data). Recommended national sources (labour force surveys and population censuses) use occupation classifications and are generally based on ISCO.

The correspondence exercise between national classification and CDIS selected codes should thus be undertaken as explained in the “Step-by-Step approach” in Section IV.

2. Ratio of persons with cultural occupations within total employed population:

Add the number of people employed for each of the cultural occupation codes selected in Appendix III (for 4, 3 and 2 digits level data), taking into account the results of the correspondence exercise.

Depending on the degree of precision of the available national classification, please consider the respective selection of codes presented in Appendix III for 4, 3 and 2-digit level data.

Contrast the result obtained with the total employed population.

20. Employment includes: employees who work for wages or salaries in cash or in kind; employers who work for profit or family gain; own account workers who works for family gain, including producers of goods for own final use or in the family (inside SNA frontier); members of producers' co-operatives who work for family gains in cash or kind; contributing family workers who work for family gains in cash or kind.



Note: Following the CDIS selection of relevant ISCO-08 codes, it is important to separately present the “Ratio of persons with cultural occupations in central domains” and the “Ratio of persons with cultural occupations in equipment/supporting materials domains”.

Formula

$$CEP_o = \frac{\sum_1^n CE_{isco\ codes}}{EP}$$

Where:

- CEP_o is the percentage of persons engaged in cultural occupations;
- $CE_{isco\ codes}$ is the total number of the persons employed in cultural occupations according to the selected ISCO codes;
- EP is the total number of the employed population.

The aggregated parts of this indicator should be presented as a percentage (to a maximum of two decimal points) of the total number of people employed in the country. This allows for national comparisons and will demonstrate the share of cultural employment within total employment.

Example

Country X used the national census at the 4-digit level to construct the indicator on employed population in cultural occupations in respect to the total employed population.

Cultural occupations in dedicated cultural establishments or in non-cultural establishments (ISCO)					
	Data	Gender		Domains	
		Women	Men	Central	Equipment/supporting
Results (%)	2.6%	59.4%	40.6%	88.7%	11.3%

Guidelines for the interpretation of results

- This indicator is a descriptive and contextual indicator.
- Similar to the contribution of cultural activities to GDP, the global contribution of the culture sector to employment is underestimated in this indicator due to the difficulty of obtaining and correlating all the relevant data. For instance, non-cultural occupations in cultural activities and/or establishments as well as induced occupations with a strong link to culture, such as employees of hospitality (restaurants, etc) and hotelier services located in or close to heritage sites²¹, are not covered. Therefore, the indicator will only reflect the “tip of the iceberg” of the overall contribution of culture to job creation.



Note: For more information on how to construct a broader indicator on “persons engaged in non-cultural occupations in cultural establishments”, please refer to the Appendix V (“Going Further”).

- The level of precision of the final result will significantly decrease if classifications at 3 or 2-digit levels are used instead of the recommended 4-digit level ISCO classification.
 - Using 3-digit codes, the indicator will not be able to take into account employment in: i) important central areas such as cultural education (in arts, languages and music), advertising and marketing, web media development, sociologists, anthropologists and related professions, library clerks; ii) transversal intangible areas including religious professionals and traditional chiefs and heads of village; and iii) equipment and support professions such as software developers and broadcasting and audio-visual technicians.

21. See footnote 15.



- Using 2-digit codes, the indicator will only provide a very basic snapshot of cultural employment as only two ISCO-08 codes will be considered: i) code 26, which includes many core cultural professionals such as actors, musicians, dancers, translators, film directors etc, but also non-cultural professions such as lawyers, judges and economists, and ii) code 73, related essentially to artisan professionals. Moreover, no disaggregation between central and equipment and support cultural occupations could be made.
- Despite the above considerations, the indicator produced following the CDIS approach at the 4 or even 3-digit level offers valuable information on cultural employment at the national level. It provides a picture of its contribution and weight, demonstrating with quantitative data (for the very first time in many countries) how the culture sector contributes to job creation and the material welfare of those employed in this sector. In addition, it also allows for a detailed and disaggregated snapshot of employment in central and equipment/supporting cultural professions and gives some basic indications of the employment status of women and men in this sector.
- At the national level, it is highly recommended when presenting the results to compare the share of cultural occupations within total employment with other major sectors with similar or higher contributions. This helps to contextualize results and to obtain a better picture of the real weight of the culture sector as an employer.
- Moreover, to fully understand the importance of cultural employment for national development, it is highly recommended to go beyond the information given by the present core indicator. This can be achieved by collecting, whenever possible, additional data on key policy topics such as: social characteristics of employees (gender, ethnic group, age, education and training levels), job status, average working hours, job stability, secondary occupations, unemployment and underemployment. For this reason, it is requested to disaggregate the results by gender and cultural domains in the Data Table and to present them in the form of percentages of the total population employed in the sector. Moreover, country teams are strongly encouraged to take this opportunity to make additional disaggregations according to key demographic variables.
- Finally, since the indicator is aligned with international standards, its results will be comparable between countries using the same calculation methodology. However, it is important to keep in mind that comparisons can only be made between countries using exactly the same codes selected under the CDIS Methodology and the same digit level of data.

3. HOUSEHOLD EXPENDITURES ON CULTURE

Introduction

Expenditures on culture by institutions and residents in a given country are related to economic development since they reflect the allocation of income supporting national and foreign cultural production. Moreover, individual consumption expenditures in cultural activities, goods and services incurred by households provides an insight into the size and the potential of the national market for culture and demonstrates how much a society values culture through economic flows. Assessing expenditures is also an indirect way of approximating the positive influence of the modern economy on culture as it shows the extent to which society values the amount and quality of the supply offered by this type of economy. Finally, actual expenditures may also serve as an indication of the potential for expansion of the culture sector.

>> Description: Percentage of household final consumption expenditures on cultural activities, goods and services set against total household final consumption expenditures

Purpose

To assess how resident households of a given country value cultural goods and services through market transactions and the allocation of income supporting national and foreign cultural production; and to obtain insight into the size and the potential of the national market for cultural activities, goods and services.



Definition

Household final consumption expenditures on cultural activities, goods and services consists of all purchases incurred by resident households of a country²² on individual cultural goods and services provided at prices that are economically and non-economically significant.²³ It includes expenditures on cultural products such as books, commercial cinema tickets, theatre performances and chargeable entrances to museums. It covers household resident expenditures not only on cultural goods and services produced in the country but also those imported and bought abroad.



Note: This indicator will neither cover all cultural household consumptions nor the contribution of culture to national product from the perspective of spending since: i) it includes imports; ii) does not include the value of exports; iii) excludes the majority of non-market products; and iv) leaves out certain spending on cultural products that are not financed directly by households, such as design services and advertisements.

Data Source

- Household income and expenditure surveys

Household surveys are the preferred option. Many countries carry out income and spending surveys, which provide a disaggregation of spending on cultural products. The advantage is that it is easier to compile this information from household surveys than production data: they also tend to include expenditures that are difficult to capture by other means (such as online purchases). Some countries make these surveys annually and some sporadically (3-10 years). The chronological period reference has to be clearly noted if using this source.

Other sources that offer information from a supply perspective are:

- Industry surveys and censuses
- Service surveys
- Small establishment surveys

Data can be used from these other sources where production is registered. This requires taking the values of the final market products produced during the period, minus exports and plus imports. The disadvantage of this option is that it requires a detailed exploration of diverse industrial surveys and in many countries the levels of code disaggregation of product classifications in the existing industrial sources makes it difficult to identify cultural goods and services. Another weakness of these supply sources is that they are not able to distinguish whether expenditures are made by resident households or by non-resident households. In many cases, they will not reveal purchases made abroad by resident households. In countries where input/output or supply/use tables exist and are constructed in their national accounts, the levels of disaggregation for cultural products should be explored.

Calculation Method

1. Calculation of household final consumption expenditures on cultural goods and services:

This variable consists of the value of all expenditures of households during a year on central and equipment/supporting cultural goods and services according to the COICOP codes selection presented in Appendix IV.

Using the COICOP selection of central and equipment/supporting cultural expenditures (Appendix IV), follow the procedure outlined in the Step-by-Step Approach (see Section IV above) in order to identify culture in the national

22. A household is considered to be resident when it has a centre of predominant economic interest in a country. That is when it engages for an extended period (one year or more) in economic activities on this territory.

23. It also includes barter transactions, goods and services received in kind (different from government and on profit organizations NPISHs transfers), and goods produced by the same household.



classification system and to carry out the correspondence exercise with the recommended COICOP codes. Depending on the degree of precision of the available national classification, please consider the respective selection of codes presented in Appendix IV.



Note: It is recommended that statistics produced for selected central and equipment/supporting materials codes be kept separate since the latter are not linked directly with symbolic content, but to services, equipment and support materials that serve the creation, production and distribution of central cultural goods and services.

2. Calculation of household final consumption expenditures on cultural goods and services set against total household final consumption expenditures:

The sum of these values has to be contrasted with the total household final consumption expenditures using the following formula:

$$CHFC = \frac{\sum_1^n HCS_{COICOP\ codes}}{HFC}$$

Where:

- **CHFC** is the household final consumption expenditures on cultural activities, goods and services set against total household final consumption expenditures;
- **HCS_{COICOP}** codes is the total number of household expenditures in the selected COICOP codes;
- **HFC** is the total household final consumption expenditures.

It has been chosen here to follow the UN classification at the 4-digit level. However, if your country uses a more detailed classification on expenditures (at the 5-digit level or above), it is recommended to build a more accurate additional indicator. For this reason, using the available national classification and following the selection of codes presented in Appendix IV:

- a. exclude from the code 09.1.2, the optical instruments such as binoculars, microscopes, telescopes and compasses AND
- b. include from code 09.2.2 only musical instruments (paying special attention to not include major durables for indoor recreation such as billiard tables, ping-pong tables, pinball machines, gaming machines, etc.)



Note: Whenever possible, the indicator should be disaggregated by key variables, such as income quintiles and degree of urbanization as proposed in the Data Table. It would also be interesting to disaggregate results by cultural domains.

Example

Country X used a 2010 national data source to construct the indicator on household expenditures on culture (evaluation of the value in terms of consumption of national and foreign cultural goods and services and the potential national market for cultural activities, goods and services).

	Data	Income quintile					Geographical distribution		Domains	
		1	2	3	4	5	Urban	Rural	Central	Equipment/supporting
Results (%)	4.00%	2.97%	3.37%	3.65%	4.02%	4.75%	4.00%	-	41.06%	58.94%

Guidelines for the interpretation of results

- This is a descriptive and contextual indicator.
- The final results will sub-estimate the total actual final consumption of households of cultural goods and



services. For instance, it does not cover the value of cultural goods and services acquired by resident households and provided by non-profit institutions serving households (NPISHs) at prices that are not economically significant (eg. in-kind social transfers). It does not, therefore, include goods and services such as museum and public library services and free public cultural events, which may represent an important share of the final household consumption of cultural activities, goods and services.²⁴ Moreover, at the recommended 4-digit level, a central cultural expenditure such as “musical instruments” will not be included as it cannot be separated from “major durables for indoor recreation”.

- Despite these limitations, this indicator offers significant insights into how resident households value national and foreign cultural goods and services through market transactions, as well as concerning the size and the potential of the national market for cultural activities, goods and services.
- Whenever possible, it is recommended to analyze the results according to the disaggregation criteria proposed in the Data Table, namely by income quintiles, urban/rural, central and equipment/supporting cultural goods and services. This would help to obtain a more accurate picture of cultural consumption patterns of the overall population as well as that of particular social groups. For example, it may be interesting to explore the percentage of expenditures of different income groups in relation to total expenditures in cultural goods and services, but also the typology of cultural expenditures by each income group.
- It is recommended to explore how this indicator enhances the information obtained from the indicator on value added of cultural production. For instance, a country may create a lot of value added but export most of the products it generates. Value added shows how much culture contributes to income generation, but does not reveal how much the country’s residents enjoy and value the production it generates. Focusing on spending makes it thus possible to assess this valuation, as well as that of the production from other countries.

//////////////////// GUIDELINES FOR THE OVERALL ANALYSIS OF THE DIMENSION //////////////////////

- The three indicators of the Economy Dimension should be understood and analyzed as descriptive output indicators, as they refer to the whole country rather than to individuals, and help to assess the vitality and dynamism of the culture sector in general, and of cultural industries in particular.
- It is critical to establish a correlation of results between, not only these three indicators, but also with the other indicators of the CDIS in order to obtain a global and broader picture of the opportunities and challenges of the contribution of culture to development at the national level. Thus, cross-analysis should be established with indicators related to cultural infrastructure (Governance Dimension), freedom of expression and diversity of fictional content (Communication Dimension), investment in highly trained cultural professionals (Education Dimension) or cultural participation (Social Participation Dimension). The indicators of the Economy Dimension are also important to keep in mind when considering transversal themes, such as creativity or the cultural cycle.

24. The reason for not including the valuation of those consumptions is because in many countries it is difficult to track and disaggregate information of all of these government and non-profit institutions expenditures for a particular sector, such as culture. It would require highly demanding procedures and probably the application of special surveys.



APPENDIX I

Selection of central and equipment/supporting materials cultural domains in ISIC Rev.4 and ISCO-08

The Standard Industrial Classification of All Economic Activities ISIC Rev.4 at the 4-digit level and the International Standard Classification of Occupations ISCO 08 at the 4-digit level are the most convenient classifications, as stated by the UNESCO Framework for Cultural Statistics (FCS, 2009), to select the activities and occupations that belong to cultural domains. They are the current standards and they allow examining the culture sector in detail because of their levels of disaggregation, particularly for new media and services, designing and crafts occupations. Although these classifications still have problems identifying certain cultural activities, they are better than previous versions.

The FCS (2009) identified cultural, equipment and supporting materials and related domains in these classification versions²⁵. In the classification selection done by the FCS (2009) there are some codes that include cultural activities and occupations together with non-cultural ones (in the education and management codes for instance). FCS has also selected codes that are considered as a part of equipment and supporting materials domains that are required for cultural and non-cultural production processes. On the other hand, the two versions of ISIC Rev.4 and ISCO-08 are very recent. The great majority of countries still use adaptations of past versions of these classifications, mainly ISCO-88 and ISIC Rev. 3, and even some older versions. Also, the data collected in the sources that can be used to obtain cultural statistics, such as censuses, labor force surveys, industrial surveys and household expenditures surveys, is in some countries registered or available at only the 2 or 3-digit levels.

The identification of cultural domains in ISIC Rev.4 and ISCO-08 was the best option for the FCS (2009), since it is a framework expected to be useful in years to come, and because it also allows for the identification of culture in a clearer manner. However, because of the reasons above, in short-term initiatives, the total adoption of FCS (2009) selection will require many procedures and estimations that demand resources and time. This is why the CDIS adopts a pragmatic and operational approach selecting the central cultural and equipment/supporting materials activity and occupation codes presented in Appendices II and III. By themselves, these codes require estimations that could be demanding when countries use sources with classifications different from ISIC and ISCO or when they use classifications coded with fewer digit levels. Adopting this restrictive approach will not only be less expensive and manageable, but it is wide enough to offer valuable information around advocacy and policy issues related to the contribution of the culture sector to the national economy, since it extends to most of the central cultural domains and the most relevant equipment/supporting materials domains.

25. Related domains that "are linked to the broader definition of culture, encompassing social and recreational activities": this set includes cultural tourism and sports and recreational activities. These are also incorporated in the model as equipment/supporting materials cultural domains.



APPENDIX II

Selection of central and equipment/supporting cultural activities in the International Standard Industrial Classification of Economic Activities (ISIC Rev.4)

FOUR-DIGIT LEVEL	
Central cultural activities (four digits)	
<i>ISIC Rev.4 code</i>	Activity class
3211	Manufacture of jewelry and related articles
3220	Manufacture of music instruments
4761	Retail sale of books, newspapers and stationary in specialized stores
4762	Retail sale of music and video recordings in specialized stores
5811	Book publishing
5813	Publishing of newspapers, journals and periodicals
5819	Other publishing activities
5911	Motion picture, video and television programme production activities
5912	Motion picture, video and television programme post-production activities
5913	Motion picture video and television programme distribution activities
5914	Motion picture projection activities
5920	Sound recording and music publishing activities
6010	Radio broadcasting
6020	Television programming and broadcasting activities
6391	News agency activities
7110	Architectural and engineering activities and related technical consultancy
7220	Research and experimental development on social sciences and humanities
7310	Advertising
7410	Specialized design activities
7420	Photographic activities
7722	Renting of video tapes and disks
8542	Cultural education
9000	Creative, arts and entertainment activities
9101	Library and archives activities
9102	Museums activities and operation of historical sites and buildings
9103	Botanical and zoological gardens and nature reserves activities
Equipment/supporting materials cultural activities (four digits)	
<i>ISIC Rev.4 code</i>	Activity class
1811	Printing
1812	Services activities related to printing
1820	Reproduction of recorded media
2640	Manufacture of consumer electronics
4742	Retail sale of audio and video equipment in specialized stores
5820	Software publishing
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6312	Web portals



THREE-DIGIT LEVEL	
Central cultural activities (three digits)	
ISIC Rev.4 code	Activity class
322	Manufacture of musical instruments
581	Publishing of books, periodicals and other publishing activities
591	Motion picture, video and television programme activities
592	Sound recording and music publishing activities
601	Radio broadcasting
602	Television programming and broadcasting activities
731	Advertising
741	Specialized design activities
742	Photographic activities
900	Creative, arts and entertainment activities
910	Libraries, archives, museums and other cultural activities
Equipment/supporting materials cultural activities (three digits)	
ISIC Rev.4 code	Activity class
181	Printing and service activities related to printing
182	Reproduction of recorded media
264	Manufacture of consumer electronics
611	Wired telecommunications activities
612	Wireless telecommunications activities
613	Satellite telecommunications activities

TWO-DIGIT LEVEL	
Central cultural activities (two digits)	
ISIC Rev.4 code	Activity class
58	Publishing activities
59	Motion picture, video and television programme production, sound recording and music publishing activities
60	Programming and broadcasting activities
74	Other professional, scientific and technical activities
90	Creative, arts and entertainment activities
91	Libraries, archives, museums and other cultural activities
Equipment/supporting materials cultural activities (two digits)	
ISIC Rev.4 code	Activity class
18	Printing and reproduction of recorded media
61	Telecommunications



APPENDIX III

Selection of central and equipment/supporting cultural occupations in the International Standard Classification of Occupations (ISCO-08):

FOUR-DIGIT LEVEL	
Central cultural activities (four digits)	
ISCO-08 code	Occupation class
1113	Traditional chiefs and heads of village
2161	Building architects
2162	Landscape architects
2163	Product and garment designers
2164	Town and traffic planners
2165	Cartographers and surveyors
2166	Graphic and multimedia designers
2353	Other language teachers
2354	Other music teachers
2355	Other arts teachers
2431	Advertising and marketing professionals
2513	WEB and multimedia developers
2621	Archivists and curators
2622	Librarians and related information professionals
2632	Sociologists, anthropologists and related professions
2636	Religious professionals
2641	Authors and related writers
2642	Journalists
2643	Translators, interpreters and other linguists
2651	Visual artists
2652	Musicians, singers and composers
2653	Dancers and choreographers
2654	Film, stage and related directors and producers
2655	Actors
2656	Announcers on radios, television and other media
2659	Creative and performing artists not elsewhere classified
3230	Traditional and complementary medicine associate professionals
3431	Photographers
3432	Interior designers and decorators
3433	Gallery, museum and library technician
3435	Other artistic and cultural associate professionals
4411	Library clerks
7312	Musical instrument makers and tuners
7313	Jewelry and precious-metal workers
7314	Potters and related workers
7315	Glass makers, cutters, grinders and finishers
7316	Sign writers, decorative painters, engravers and etchers
7317	Handicraft workers in woo, basketry and related materials
7318	Handicraft workers in textile, leather and related material basketry
7319	Handicraft workers not elsewhere classified



Equipment/supporting materials cultural activities (four digits)	
ISCO-08 code	Occupation class
2512	Software developers
3521	Broadcasting and audio-visual technicians
7321	Pre-press technicians
7322	Printers
7323	Print finishing and binding workers

THREE-DIGIT LEVEL	
Central cultural activities (three digits)	
ISCO-08 code	Occupation class
216	Architects, planners, surveyors and designers
262	Librarians, archivists and curators
264	Authors, journalists and linguists
265	Creative and performing artists
323	Traditional and complementary medicine associate professionals
343	Artistic, cultural and culinary associate professionals
731	Handicraft workers
Equipment/supporting materials cultural occupations (three digits)	
ISCO-08 code	Occupation class
732	Printing trades workers

TWO-DIGIT LEVEL	
ISCO-08 code	Occupation class
26	Legal, social and cultural professionals
73	Handicraft and printing workers



APPENDIX IV

Selection of cultural and related goods and services in the Classification of Individual Consumption According to Purpose (COICOP)

FOUR-DIGIT LEVEL	
Expenditures on cultural goods and services (central)	
<i>COICOP code</i>	Expenditure class
9.1.4	Recording media
9.4.2	Cultural services
9.5.1	Books
9.5.2	Press
12.3.1	Jewelry, clocks and watches
Expenditures on cultural goods and services (equipment/supporting materials)	
<i>COICOP code</i>	Expenditure class
9.1.1	Equipment for the reception, recording and reproduction of sound and pictures
9.1.2	Photographic and cinematographic equipment and optical instruments
9.1.3	Information processing equipment
9.1.5	Repair of audio-visual, photographic and information processing equipment



APPENDIX V

Going Further

INDICATOR: CONTRIBUTION OF CULTURAL ACTIVITIES TO GDP

>> Description: Percentage of the contribution of private and formal cultural activities to Gross Domestic Product

Taking into account that most countries do not have any measurement of the contribution of cultural activities to GDP and that capacities and statistical systems still need to be reinforced to achieve accurate, comprehensive and comparable measures, it is recommended, in the framework of the CDIS initiative, to concentrate efforts on cultural market formal production.

In parallel, and whenever possible, an analysis of all other existing sources should be done to capture non-market, informal and own-account production activities. To this end, it would be recommended to make inquiries on the base year of each country's National Accounts and explore possibilities to obtain information from this benchmark exercise. After this exploration, feasibility may be determined and decisions taken in whether non-market, informal and own-account production activities could be partially or totally covered or not covered at all.

- a. For non-market activities** the value of the output (GPV) is obtained through adding the production costs, which include the compensation of employees and the intermediate consumption. The calculation of non-market production requires a careful revision of other existing sources that may involve some challenges. For instance, government records usually do not have disaggregated information which permits the identification of cultural domains in the different administrative levels of countries; household income and expenditure surveys are done sporadically in some countries (3 to 10 years); not all countries carry out small and household enterprise surveys; the size of the samples in these surveys is often too small to have representativeness of cultural domains.
- b. For informal, own-account and illegal production activities** (some of which makes part of what is called the non-observed economy) a demanding revision of other sources is required: household income and expenditures surveys, labor force surveys, household establishment surveys and small establishment surveys. In the implementation of National Accounts, countries regularly do a detailed revision of all these types of sources in a base benchmark year. During that year, economic establishment surveys are carried out in some countries. They are usually repeated every 5 to 10 years. According to the results, estimations are then done for the following years. In many countries the only surveys that are conducted annually are corporation establishment surveys and, in certain countries, the small establishment surveys. Typically, all other surveys are conducted only during the base year.

INDICATOR: CULTURAL EMPLOYMENT

>> Description: Ratio of persons with cultural occupations within the total employed population

If it is possible to cross data for occupations and for activities, it is recommended to also construct a broader indicator on cultural employment including "persons that have a cultural occupation" and "persons who work in establishments engaged in cultural activities with a non-cultural occupation" (set A + B + C) following these guidelines:

1. Number of persons engaged in cultural and creative employment:

The universe chosen to be taken for the indicator is now (set A+B+C). It can be seen as the sum of two components: the number of people employed in cultural occupations and the number of people with non-cultural occupations engaged in cultural establishments.

The formula to apply in this approach should be the sum of these two components.



$$CE = PCO + PNOCA$$

Where:

- **PCO:** includes people with: 1) cultural occupations in cultural establishments (set A); and 2) cultural occupations in non-cultural establishments (set B). The calculation has to be done with the data obtained from the codes in the occupation classifications used in sources based on the ISCO selected codes presented in Appendix III.
- **PNOCA:** includes people with non-cultural occupations who work in establishments engaged in cultural activities (e.g. persons that have administrative and management jobs in publishing enterprises). The calculation has to be done with the data obtained from the codes in the activity classifications used in sources based on the ISIC selected codes presented in Appendix II. Only those who are registered in the selected cultural activities codes and have non-cultural occupations have to be included (instead of all those who are registered in such selected codes). Indeed, persons with cultural occupations within establishments engaged in cultural activities are already included in the previous component (PCO).

2. Ratio of persons engaged in cultural and creative employment within total employed population:

To determine the ratio, add the number of people engaged in employment for each occupation and activity classification codes covered by both components. Then, contrast the sum of these values with the total employed population.

$$CEP = \frac{\sum_l^n CE_{n_codes}}{EP}$$

Present the aggregated parts of this indicator as a percentage (to a maximum of two decimal points) of the total number of people employed in the country. To facilitate analysis, it is important to also present the value of the three sets (A, B and C) of the indicator separately.



APPENDIX VI

Multi-dimensional approach

If, according to the available data at the national level, the CDIS methodology does not allow an approximate estimation of the contribution of culture to the economy, a multi-dimensional approach based on the experience developed in Mali may be used.²⁶

Such an approach:

1. isolates each cultural sub-sector and then
2. estimates its economic importance or weight using various sources of information, including national statistics and surveys, direct field investigations, gathering information directly from cultural operators and desk research of relevant previous studies.

To carry through this multidimensional approach, the following matrix of collected data by the culture sector should be filled in.

Domains	Creation	Production/ duplication	Support industries	Promotion/ Diffusion	Distribution/ Retail	Conservation	Total
Cultural and natural heritage							
Performance celebrations							
Visual arts and crafts							
Books and Press							
Audio-visual and interactive media							
Design and creative services							
Intangible Cultural heritage							

If you are interested in the multi-dimensional approach, please refer to the publication « *L'économie de la Culture au Mali, Mission d'étude de faisabilité pour un programme d'appui de la CE au secteur de la Culture au Mali dans le cadre du 10^{ème} FED* ».

However, please note that such an approach demands time-intensive research and the generation of new data that goes beyond the scope of the CDIS.

26. See *L'économie de la Culture au Mali, Mission d'étude de faisabilité pour un programme d'appui de la CE au secteur de la Culture au Mali dans le cadre du 10^{ème} FED*, Patricio Jeretic, Laurent Héau and Lassana Cissé, 2008.