MEASURING TRADITIONAL SKILLS TAKING STOCK OF WHAT WE HAVE BEFORE WE LOSE IT

CRAFT STATISTICS A WAY FORWARD

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3/1/2015

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EXECUTIVE SUMMARY

Rationale

• Craft
  - Represents unique skills and traditions which are important elements of national heritage, competitiveness and creativity
  - Is increasingly in demand in OECD countries
  - Is produced by artisans in developing economies who are mostly poor, rural, women
  - Purchases put money directly into some of the least developed communities in the world

But consistent quantitative evidence in support of such statements is lacking

• Data on levels of production and consumption are not only important market insight for the retail sector, but also help inform and shape public policy towards artisans

• Craft is not just an economic good. It also reflects the cultural and social milieu within which it was created. Expansion of craft activity can lead to strengthening cultural identities, empowering minorities and women

• Data on craft already exist in every country in the world. Unfortunately statisticians mostly do not understand the nature of art, culture, and craft activities, while artisans and artists mostly do not understand the technical nature of statistics

Model

• The consistent framework for craft statistics presented here addresses these problems by linking accepted statistical concepts to craft activities

• Production of quality statistics requires precise definitions and collection methods to build reliable trends over a number of years and monitor the sector in relation to the national economy and the changing social profile of a country

• The approach is based on international standards that are used in every national statistics office in the world and is rooted in the UNESCO Framework for Cultural Statistics (2009). Data based on these standards already exist in every country

• National statistical standards should also be applied in dedicated craft surveys which assess artisans’ particular needs in areas such as business skills, finance and distribution

• Integrating dedicated surveys and national statistics in a single standard reduces the cost of data collection by increasing comparability and providing ‘ready-made’ questions/definitions that require less testing and piloting

Implementation

• Data based on this approach that have been compiled from publicly available sources for countries worldwide. These data are only preliminary estimates and in every case can easily be refined using techniques suggested in the text

• The data and methods discussed in the text need to be refined through discussion with craft associations so that the data truly reflect their needs
• If the model is then to advance the objective of widespread publication of reliable craft statistics it needs to be adopted by national and international agencies
• The White House has called for a data-driven approach to trade policy in Africa and such an approach should surely be applied in Asia too. This paper sets out the place of craft in such policies.
• Similarly emerging US foreign policy suggests a string regional dimension. Several regional bodies in the developing world have an interest in craft, and this paper has also suggested a move towards regional figures for craft production
• Above all this paper has demonstrated how any national craft association, or aid agency can obtain data on craft from national statistics offices to support the development of the sector, and the evaluation of programmes.
• It has also demonstrated that by adopting standardised approaches to the statistics will result in cost savings, improved quality and comparability in the design and implementation of craft surveys which are widely used to establish sectoral needs and impacts
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Acknowledgements

This paper was prepared by Simon Ellis with important input from Joseph Lo my collaborator on craft statistics for over ten years.

A great many individuals and agencies have influenced the thought which has gone into this paper. I am grateful for discussions with staff of the Aspen Institute, especially Peggy Clark and Henna Wang. Recent meetings of the Artisan Alliance for Enterprise at Santa Fe 2014 provided much input, as well as participants at the World Crafts Council Chennai meeting 2012 and Tbilisi Conference in 2013. I owe special thanks to Karen Gibbs of ByHand Consulting, as well as Maka Dvalishvili and staff of the Georgian Arts and Culture Center, Tbilisi.
1. INTRODUCTION

In 2008 a US Aid survey of craft in Aqaba, a Jordan concluded

‘There is no one central place to find information about handicrafts in Jordan as no database of any kind exists. Information is scattered, segmented, and not organized. This makes it very hard to identify which products are most marketable, where to locate the workshops or businesses, and with whom to cooperate and coordinate’


This is a typical statement that is commonly heard from all countries in the world, but it is completely wrong! The relevant data is collected every three months, almost certainly for many years before 2008, and the latest data shows that in 2013 there were some 20,500 professional ‘crafts’ workers in Jordan. A quick visit to the National Statistics Office in Amman would allow one to verify which kinds of products they produced. Local property registers in Aqaba should enable one to compare this picture with retail outlets and workshops in the town.

In truth data on craft exist in every National Statistics Office (NSO) across the world, but they have no idea what is meant by ‘craft’ in statistical terms, while craft specialists do not know what statistics to ask for! One objective of this paper is to remedy this situation.

1. Why craft is important

The time has come for craft, broadly defined as handmade objects, to become a key element of economic strategy in developing countries, if not in all countries around the world. There are two major reasons for this both driven by globalisation. The first is an increase in demand and the second is increasing competition.

Demand drivers

Until recently demand for consumer goods in many markets in OECD countries was driven by mass production. Large retailers such as Ikea and Walmart have been using aggressive pricing to distribute mass produced goods very cheaply. The products sold often have a certain ‘style’, but that same style is now found in a great proportion of houses throughout Europe, North America, and beyond. It is not surprising that demand is shifting to identify more ‘unique’ offerings.

Globalisation in the shape of the Internet, and of increasing public interest in aid for the least developed countries, has meant that it is now quite possible to import hand-made village products from the least-developed countries into major global retail outlets at a reasonable price. Furthermore when the consumer sees a product which is clearly identified with an individual artisan in a developing country they have the sense that they are

1. Giving aid to a specific named individual
2. Providing aid directly, encouraging the artisan’s business, not just giving charity
3. Not passing money through any complex state or charity administration
4. Empowering the artisan, most likely a woman, in their local community

All these four features are elements of the purchase for which American consumers can feel proud.

**Supply drivers**

Many of these same factors are operating to increase production. Administrations in many countries have realised that craft production can be a way out of poverty, that it can create self-sustaining local growth, and that it can help empower disadvantaged communities, especially minorities. Survey evidence from Asia suggests that the earnings of craftspeople can be as much as four times that of otherwise similar members of their local community.¹

There is also a more strategic argument as to why countries should invest in craft. Currently the supplier of ‘simple’² products in the global market competes on the basis of cost of production. Countries with the cheapest labour, such as China and Bangladesh, are the winners. But the world is changing, and already there are big pressures in such countries to raise wages and improve working conditions. This will make it more difficult to compete on the basis of cost. If a country can no longer compete on the basis of cost it must compete on other elements of the offer, including superior marketing, but above all on quality.

Figure 1. Asia-Pacific and Latin America rising Labour Costs in manufacturing relative to US since 2000

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¹ Joseph Lo (2011).
² By ‘simple’ here is meant products that are not aimed specifically at the high end of the market, and that do not require advanced production techniques to manufacture, in other words products which may be made in developing countries without significant investment in either high level skills or advanced manufacturing equipment.
Notes: graph shows ‘total compensation’ i.e. labour costs including employers insurance contributions and additional labour-related expenses as well as wages, rebased to US$ and indexed to year 2000 for comparison.

Quality has many components, some of them are closely related to craft production such as highly skilled artisans, sourcing of top quality raw materials, and design. In this traditional craft production gives any country a unique competitive advantage. Craft products are to a greater or lesser extent based on the skills passed down over generations and they involve unique designs which are uniquely associated with the culture of the country. Such centuries old skills and designs cannot be copied by anyone else, and are immediately recognisable as belonging to a particular culture.³

In sum demand for craft is rising, the barriers for artisans to supply global markets are falling. Craft provides a unique element of competitiveness for local communities. Any country which allows its traditional crafts to die is sacrificing a major element of local development potential and future international competitiveness as well as potentially losing a major element of its cultural diversity which of itself could be seen as a loss of artistic inspiration and creativity.

2. Why statistics are important

It is a commonplace to say that you cannot know the effect of something you cannot measure. If one does not know how many traditional artisans exist in a country, then their knowledge will be lost. Craft surveys universally suggest that young people do not want to learn the skills of their parents and their ancestors.⁴ They want ‘modern’ jobs in the cities. Older craftspeople feel that their work is not recognised and they cannot make enough money from their skills, so they take other jobs to support their families.

Supply chains, from obtaining raw materials, to marketing finished products are not systematically documented.⁵ Artisans may produce quality products, but they are not supplied or marketed effectively.

Monitoring is required at the international level because of the relationship between craft and international competitiveness. The purpose of this paper is therefore to present a global project to develop craft statistics. It will involve

• A description of statistics which are already available for craft (these are much more extensive than many would believe)
• Formation of an international standard for national statistics offices. This will allow the maximum amount of craft data to be extracted from national surveys. Such data allow craft to

³ The World Intellectual Property Organization runs a scheme to provide international protection for such ‘geographical indications’ http://www.wipo.int/geo_indications/en/about.html
⁴ See for example Lo’s (2010) surveys of China pp. 8 and 11.
⁵ Though it should be noted that other ‘studies’ of craft certainly do consider supply chain issues
be monitored in the context of national economic and demographic trends. They also make sure that craft statistics, as part of national statistics, become a regular part of ministerial decision-making.

• Formation of an international standard for craft surveys. National statistics will only ever provide the ‘bare bones’ of the data needed. If we are really to help the artisan we need to understand his close relationship to his or her materials and markets. For this a dedicated survey is required. Use of a standard template, at least for initial development save time and money in implementation and provides comparative data with other surveys in different regions or countries (including national statistics), and in different years.
2. THE CURRENT ‘LANDSCAPE’ – WHAT IS AVAILABLE

This section examines some of the key dimensions of available statistical information on craft. It does not attempt to provide a complete picture of all available data (especially as there is a vast amount of data which has been collected but is not available), but rather uses examples of data to suggest what may be obtained. It does not attempt to analyse the craft sector which would involve accessing a large number of academic papers on craft and on economic development. It is hoped instead that by the end of this section the reader will understand what data do exist, the advantages and disadvantages associated with using them.

1. National statistics

**Numbers of Artisans (Occupation)**

Craft is perhaps most obviously an occupation. A ‘job is defined as a set of tasks and duties executed, or meant to be executed, by one person; a set of jobs whose main tasks and duties are characterised by a high degree of similarity constitutes an occupation’. Thus craft may be characterised by ‘hands on production’ using traditional skills, materials, and tools although the degree to which each of these elements is an essential attribute of ‘crafts’ is disputed between specialists.  

Occupations are classified in the International Standard Classification of Occupations (ISCO) that is maintained by the International Labour Organisation (ILO) and is currently used in the vast majority of National Statistics Offices in the world in its 2008 version (ISCO 08). Statistics on occupations so defined are generally collected through national Labour Force Surveys (LFS), which normally follow a standard international methodology. Surveys normally occur quarterly, following a rotating panel design. Since many occupations including craft are seasonally driven (e.g. ‘harvest’ of natural materials, tourist high season) quarterly data allows understanding of these seasonal patterns of work.

Occupations concerned with craft production are generally subsumed under major code 7 described as

‘Craft and related trades workers apply specific knowledge and skills in the fields to construct and maintain buildings, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods.’

Under this there are five subcodes at two digit level. 71 refers to construction workers. This would not be considered craft for most countries, although it includes building traditional buildings (houses, temples) workers in this area could be considered craft workers. 72 refers to metalworkers. These could include for example people working in garages assuming their main occupation is some manual manipulation of metal parts. They would certainly also include traditional blacksmiths, and indeed

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6 A complete paper could be written on definitions of craft. While some distinctions are considered here attention is concentrated on the potential of official statistical coding systems.
7 ISCO and current 2008 definitions can be found at www.ilo.org/public/english/bureau/stat/isco/intro.htm
8 Several buildings skills such as carpentry are for example included in Zorig Chusum, the traditional 13 skills of Bhutan
makers of jewellery and metal bowls/jugs/boxes using machines or by hand in any particular style or
plain functional items. 73 covers ‘handicraft’ and printing. This is probably the principal code for craft
occupations. Although it covers printing this would mostly be manual occupations which may cover the
printing of items such as business cards or advertisements, though arguably the majority of those
working in advertising or printing are included in completely different codes. 74 covers electricians and
should be excluded from counts of craft people. 75 covers workers in wood and textile. Most wood
workers are easily seen as craft workers, though some caution might be exercised with regard to for
example large scale manufacture of basic furniture. Textiles are one of the most complicated areas for
craft classification. On the one hand looms at various stages of mechanisation may or may not be seen
as craft. On the other hand mixes of natural or synthetic fabrics or dyes in various designs may or may
not be seen as craft. Moreover in all these ‘occupations’ we can find people who are one day making
very traditional products and on the other are producing mass markets goods, or ‘souvenirs’ for easy
profit. It is almost impossible to distinguish precisely between those who do make craft and those who
do not. Instead measurement should concentrate on a broad definition and attempt to refine as closely
as is practicable to the ideal.

Code 7 thus identifies those who produce craft products as their main occupation or job. It does not
cover other aspects of the craft industry. Certain retailers might also be said to be in a ‘craft occupation’,
though often crafts people are their own retailers.

Surveys are often responded to by the ‘head of household’, usually a man. In some surveys it can be that
over half the responses are collected in this way. This is a particular issue for a household industry like
craft. The head of household may minimise the contribution of other members of the household. It is
important that all members of the household are interviewed.

Despite these important corollaries and despite the need for some circumspection and careful
adjustment Code 7 of the Labour Force Survey allows a broad-based estimate of the relative size of the
labour force for those who spend most of their working week in ‘craft’. Such data it may be claimed
could be better obtained from a dedicated survey (which we examine below), but the advantage of the
LFS is that such craftspeople can be seen with the Labour Force as a whole (for example do craft workers
work longer hours than other occupations?).

**Numbers of products**

Production is usually measured through ‘industry’ statistics, based on distinctions such as
‘Manufacturing’ or ‘Services’ and measured through national or international Standard Industrial
Classifications. Craft falls under manufacturing. Unfortunately such classifications generally assign the
same coding to machine-made and handmade, individually crafted and mass manufactured goods. As a
result only two ‘sector’ codes of the International Standard Industrial Classification (ISIC) 2008 Revision
are useful to us. They are

7420 Photographic Services
3211 Manufacture of jewellery and related articles

Both of these codes themselves are not without problems that reflect the more general ‘sectoral’ issues mentioned above. 7420 might include photographic activities for commercial and industrial purposes such as insurance claims, advertising, or medical purposes. 3211 includes all jewellery such as mass-manufactured costume articles.

An international product classification the Central Product Classification (CPC)\(^9\) is more useful, though also prone to the same types of problems, and is to be preferred, but it is not commonly used by national statistical authorities.

However if we narrow our analysis to international trade then the classifications become much more relevant. Both the Harmonised Commodity Description and Coding System (HS) and the Standard International Trade Classification System (SITC) have a good number of codes which can be related to craft articles. Moreover national data organised under these international systems is readily available through the World Customs Organisation and downloadable from its website (comtrade.un.org). For a developing country exports indicate the degree to which a country is reaching the international market, and for an OECD country import statistics give a sense of the level of domestic demand for craft.

The international trade data under both classifications provides two fundamental measures; one is the weight of the items traded in kg, and the other is the value in US$. The latter is most useful. The $s concerned provide a clear comparative benchmark. They reflect quality as well as quantity and they place all goods of different kinds e.g. textiles and jewellery on the same scale, whereas the relative weight of a product may bear no relation to its economic value.

This is not to say that the trade classifications themselves are easy to use for looking at craft. The HS codes 442xxx dealing with wooden items are relatively easy to class as craft. The major problem is mass produced furniture, but in a developing country context it may be assumed that much of what is covered, especially if it has high value will be made by hand or with basic technology. Precious metal jewellery (HS 7113xx) while it may include mass manufactured items may be largely produced by hand and is likely to be dominated by higher value pieces.

The most problematic area of products is undoubtedly textiles. They are largely classified by fabric (e.g. cotton or synthetic) and by technique (knitted/crocheted, woven). This leaves it somewhat ambiguous whether they were woven by hand, by hand-powered loom or machine powered loom. Mixed fabrics, and the use of chemical or natural dyes cannot be resolved with ease. Thus for example El Salvador is a very large exporter of HS 580620 “Narrow woven fabrics containing 5% or more of elastomeric yarn or rubber thread”. The trade press gives some sense of the nature of the product

“The two vertical manufacturing operations, with 800 employees, start with cotton and take towelling into the marketplace, generating approximately $90 million in sales and export levels of 98 percent. Five apparel plants, with a sixth opening soon,  

started with robes and wraps using Hilasal towelling. The plants now employ 2,000 Salvadorans.

St. Jacks has its own brand and a full design staff, and operates 65 retail stores throughout Central America. St. Jacks also produces garments for brands such as Tommy Hilfiger and Gloria Vanderbilt. A Disney licensee for almost 20 years, the company has grown dramatically. Sim sees the firm as a manufacturer, retailer and distributor that now employs 2,500 and is poised to grow.”


This is a good example of the problems in using national statistics to talk about craft. National statistics allow a sector to be seen within the national and international contexts. They are collected frequently (in the case of exports every month) and using rigorous methodologies. The coding problems identified here can be addressed at least as far as narrowing the data to a closer focus on crafts. Mass manufacturers of wood, textiles and other products can usually be readily identified and the results excluded from the analysis. There may indeed be more problems with small companies, challenging us about what is meant by craft. For example is a one-person enterprise making towels with artificial fabrics and chemical dyes a ‘craft’ worker? What about if she uses traditional designs?

This issue makes two important points 1) craft statistics will never be 100% ‘accurate’ because experts themselves disagree on the definitions of what is ‘craft’, 2) national data can be refined, and when combined with craft survey data can produce a full profile in the context of the national economy. Local intelligence is vital for deriving craft data from national statistics.

Trade statistics may also be used to study demand. Figure 2 shows the top ten countries and value of their jewellery imports into the USA. Total annual jewellery imports into the USA at this time were valued at $8,237,014,239, and it can be seen that three countries China, India, and Thailand made up 54% of these imports.
Each of these three countries sent at least twice the value of jewellery into the USA of any other country in the world. It is worth then questioning exactly what these three countries were sending to the USA. The vast majority of this jewellery from the three countries falls under Harmonised System Code 7113 – ‘Articles of jewellery and parts thereof, of precious metal or of metal clad with precious metal’. It is clear from this that this was ‘precious metals’ (normally gold and silver) not simple costume jewellery. In the case of Indonesia, twelfth on the list, the National Statistics Office publishes monthly, and annual data to ten digits, allowing us to look at their exports in much more detail. Their 2013 exports are 46% 7113199000 – ‘jewellery of other [non-silver] precious metal’ and 43% silver jewellery (7113110000 and 7113119000), while 10% was probably ‘plated’ (7113209000 – ‘jewellery’ of base metal clad with precious metal’). If this break down is true for the other Asian countries we may assume that most of it consisted of solid gold and silver work, which as ‘high end’ material is more likely to have been handmade and individually crafted. It was not jewellery of non-precious metals (Code HS7117 – Imitation jewellery of base metal whether or not plated with precious metal).

Thus with some further investigation it is possible to get very close to overall figures for craft products. Although all that is commonly published is a figure for Code HS71 – ‘Natural or cultured pearls, precious...
or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin’ all National Statistics Offices hold data in much more detail. It just remains to obtain the data. Even a dedicated survey will have difficulty in defining craft products as closely as these nine digit codes of the Harmonised System. For example a craftsperson may make some precious metal and some base metal jewellery and an estimate of the precise balance in production is unlikely to emerge from talking to the craft producer. In the trade figures by contrast the Harmonised System gives a very precise estimate, and one that is comparable to any country in the world.

The data may not assume that this jewellery was entirely made in these countries. It is possible that the original metals were mined elsewhere in the region, and even that parts of the jewellery was prefabricated elsewhere or subsequent assembly in the exporting countries.

*Two industries with more or less complete national statistics – jewellery and musical instruments*

In considering the above national statistics two areas of craft production stand out as they are reasonably well-defined at all levels of national statistics.

**Table 1 Jewellery and musical instruments in national statistics**

<table>
<thead>
<tr>
<th>CODING</th>
<th>ISIC</th>
<th>CPC</th>
<th>ISCO</th>
<th>HS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTRY</td>
<td>Sector (industry)</td>
<td>Product</td>
<td>Occupation (job)</td>
<td>Trade</td>
</tr>
<tr>
<td>Jewellery</td>
<td>3211</td>
<td>38220 pearls, precious/semi-precious stones</td>
<td>7313 Jewellery &amp; precious metal</td>
<td>7113xx jewellery</td>
</tr>
<tr>
<td>Manufacture of jewellery &amp; related</td>
<td>38240 jewellery and precious metals/stones</td>
<td>7114xx articles of goldsmiths or silversmiths wares</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>38210 pearls (only include craft)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is useful to read this table across the columns to see the holistic picture of the two sectors that can be presented. To start with jewellery.\footnote{The UK Mapping Heritage Craft (2012; 133) study mapped each craft to a ‘best fit’ industrial code (SIC) which enabled them to create economic forecasts for each craft.} The coding allows some distinction between ‘costume’ jewellery and that made from precious metals/stones. Major mass production facilities can probably be identified fairly easily through business registers and eliminated from the figures where it is wished to exclude them as not ‘craft’. The sector represents a major craft contribution to cultural expression in a great many countries. It also presents a significant amount of ‘value added’; relatively small quantities of jewellery trade for high prices, as demonstrated by the trade figures included in this paper. National statistics can therefore, on a regular basis, monitor:

- the nature of jewellery companies (from 1 person to major manufacturers)
- what they produce
- trade; exports and imports by value and weight
- the nature of employment; full time, part time, and depending on the survey working hours contract workers, levels of education, age and sex of artisans
Musical instrument manufacture is arguably of lesser economic value than jewellery but has great cultural significance. Firstly musical instruments themselves can be extremely important cultural and craft objects. Secondly production levels of traditional musical instruments also reflect the vitality of traditional music in the country and indeed abroad through exports. One issue that emerges is to distinguish between craft or traditional production and the production of more mass-produced non-traditional instruments, for example electronic keyboards, or cheap guitars and drums. Where such objects are mass produced (e.g. Yamaha keyboards) they should be easily be recognised in business surveys – a company with 500-1000 or more employees can normally be safely ruled out from a craft statistic. Productions of plastic whistles, sports whistles, and bicycle bells might also be eliminated by identification of mass production facilities. The distinction between bells and gongs (HS 830610 above) is vital for example in Indonesia where gamelan is a vital form of music. If these classification issues can be resolved then regular data can be obtained on all aspects of musical instruments and their makers following the same categories we gave for jewellery above.

It can be observed that there is only one sector code for each craft sector, but there are several codes for products (CPC) and trade (HS). This means that the dimensions with most detailed coding can be used for making a more precise definition of the craft. For example ‘industries’ or self-employed working under ISIC can be distinguished by whether they make wind (CPC 38330, HS 9205xx) or keyboards (CPC 38310, HS 9201xx, 920710). In fact the ‘xx’ at the end of the codes indicates that an even finer distinction can be made e.g. 920510 is brass wind instruments and 920590 is ‘other’ wind instruments.

Discussion of jewellery and musical instruments shows what national statistics can do at its best. It can produce regular data using the same definitions year after year for accurate trends. It can monitor these trends within the context of the national economy, and social structures.

‘Cleaning’ national statistics

National statistics have much to offer craft but also many problems in their use. In particular they are not ‘fine grained’ enough; there are problems of classification, and they are not able to describe industries or products in sufficient detail. How then can they be made more effective?

There are four main routes for addressing these issues

1. comparing different statistical sources
2. refining the estimates using local information
3. combining the information from national statistics with the information obtained from dedicated ‘craft’ surveys
4. statistical modelling

We have already considered the first two of these techniques. The UNESCO Framework for Cultural Statistics relates the sectoral classification ISIC to the product classification CPC, and in the previous section we discussed musical instrument making and jewellery across several classifications. It is

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possible to examine the degree to which a particular sector under ISIC makes products under CPC which can be said to be craft products. Similarly one might assess the degree to which a sector under ISIC employs people who would be described as artisans under ISCO. It is important to note that this must be done within the same survey or between two closely related surveys. In practical terms we take the sample of firms identified in the survey under ISIC and reduce this sample to only those who produce craft products according to CPC, or employ craft personnel according to ISCO. Of course firms will employ a variety of different people and produce both craft and non-craft products. A decision must then be made based either on a pre-defined threshold, more than one half of employees are craft producers, more than half the products are craft products; or on a more subjective criterion, the main products are craft products, the core employees are craft. Firms which as a result are classified as craft should be included, in their entirety, in the craft statistics.

The use of local information comes in at a second level, after the datasets have been refined following the first procedure. Local knowledge that for example major employers are not ‘craft’ companies in El Salvador was used to eliminate them from the data. It is unlikely that many large employers’ main business is craft production, since craft is normally assumed to be hand production of an article by one person, or perhaps a ‘master’ and a few additional ‘apprentices’ or helpers/employees (usually friends or family). The problem with using such local information is that it can be difficult to co-ordinate for national data, and that inclusion or exclusion of a particular firm under a particular code can be a subjective decision which can be contested.

It is at this stage that the data from dedicated craft surveys come in. ‘Craft surveys’ provide much detailed information on the nature of craft production which can be used to refine definitions and help directly in excluding or including businesses in national statistical data. We reserve discussion on this approach until after detailed discussion of surveys in the next section.

Lastly statistical modelling. The large number of consultancy reports on craft in different countries follows this approach, which is generally not recommended by the current author. For the vast majority of people statistical modelling remains a ‘black box’. There are many such reports on national ‘craft’ industries in which one cannot tell how the estimates were produced or calculated. They can provide seemingly accurate figures on craft, but they are still founded upon the same data which we have questioned here – national statistics and dedicated surveys. They cannot improve on data they can only ‘smooth’ it by more sophisticated estimating procedures.

Consultancies which do not publish their detailed methods also create further problems. They have very limited comparability. It is almost certain that two studies five years apart will not use precisely the same model and so their result will not be comparable. Few countries can afford to pay for such detailed studies more frequently than every five or ten years, so it is almost impossible to produce statistical trends using such modelling exercises and reports. Some countries attempt to address this issue by having a copy of the model installed on their IT systems. Experience shows that this is not an easy solution. Often countries have to pay for the data to be imported into the model. Countries sometimes want to change the model to reflect changes in e.g. industrial structure, or to assess the impact of an
emerging sector. They have to pay for this adaptation, whether for a small change in coding or a major rewrite. It is common for civil servants or other agency staff involved in such modelling to leave as they realise they also have power to extract payment for changing the model or uploading data. In the fast changing IT world a few years is also often sufficient for a model to become incompatible with operating systems or other software, leading to the need for a further ‘system upgrade’. In practice it is rare for any statistical model outside the commercial arena, especially one in a developing country, to be still in active use five years after it has been introduced.

2. **Craft surveys**

Craft surveys are the complement to national statistics. National statistics must use definitions which can be adapted and applied across all areas of the economy. This is their strength, allowing craft to be placed within the overall economy of a country or region. It is also their weakness. National statistics cannot examine the detail of the craft production process, and they cannot ask questions which are specific to the craft sector such as addressing the difference between the ‘traditional’ and the ‘modern’.

An examination of available craft surveys across the world (see Appendix) identifies a range of common topics

- The demographic character of the crafts person and their household, including level of education and well-being
- Skills; how the crafts expert learnt their skills, years of experience (how old is the business?) other relevant skills (e.g. literacy), and how the master will pass on skills to the next generation including apprenticeships
- Membership of trade associations and other community groups
- Finance; issues of savings and loans, costs and pricing, income and profit
- The production process; hours worked, help from family friends and employees, sources of raw material, use of tools and machinery, sources of design, the nature of the workplace (home or business premises)
- Products; use of materials, non-craft production
- Distribution and marketing; sales points and how to get goods to them, participation in exhibitions fairs etc., sources of advertising and publicity especially ICTs and social media
- Problems that crafts people face

However almost all craft surveys use slightly different approaches to each of these topics. This reduces their effectiveness in several different ways

- Successive studies in the same country or in different parts of the same country are not comparable
- Studies are not comparable between one country and another
- Each study spends resources developing its own methodology, ‘re-inventing the wheel’, which could otherwise be used elsewhere to the benefit of the sector
- Issues of common interest to all artisans such as obtaining credit, or quality certification, are not
addressed in a comprehensive manner which will allow active discussion based on a common understanding and definitions

• The overall strength of the sector is under-estimated because studies have difficulty in estimating how complete and representative they are.

All of these problems can be addressed by working towards a common standard for craft surveys. Of course some elements of a survey will closely follow the needs of a particular country or district, but such diversity can lean on an overall ‘skeleton’ of standardised concepts and questions. These common elements cannot be ‘imposed’ but must be agreed on by organisations and experts representing the sector across a wide range of different countries and crafts. The structure of craft surveys must always provide data that are ‘useful’ to crafts people.

The following sections consider different elements of crafts surveys and propose which of them might be more or less standardised without losing important information and local ‘colour’.

One of the keys to this process is to align the surveys with national statistics. Comparison of all statistics depends on the use of common definitions and standards. For example defining jewellery workers in line with the statistical codes outlined above means that the survey result can immediately be placed within the context of the national economy e.g. how many people are jewellers compared to engineers. The degree to which jewellers add value to their products because of their creativity can be assessed. Crafts people often have high value added, and this in itself is a justification for investment.

**Topics covered**

Craft surveys cover a similar range of topics in slightly different ways. Encouraging a more standardised approach to such topics increase comparability while reducing the costs in developing a survey by the use of tried and tested questions. In this section we discuss some of these topics.

• **Skills.**

The common starting point for discussion of skills is the level of education of the respondent. Since education systems change over time and between countries this requires some standardisation. The accepted international standard for classifying education systems is UNESCO’s International Standard Classification of Education (ISCED).\(^{13}\) This is designed to be used with current schooling data. When household surveys use questions about the level of education they are based on the UN guidance for population Censuses.\(^{14}\) This standard asks about the last level of education a respondent has completed, or sometimes partially completed. A third alternative is to ask how many years have been completed, making it easier to compare education over time, but it may be objected that current education systems have a greater intensity of course content than education systems had for instance fifty years ago when a crafts master was a child.

\(^{13}\) UIS (2012) this represents the most recent version of the standard. Older data may be prepared under ISCED 1997.

\(^{14}\) Principles and Recommendations for Population and Housing Censuses Revision 2, United Nations (2008), pp. 149-50.
Figure 2 shows how national statistics can be used alongside craft surveys where common standards are used – in this case level of schooling. The Figure also shows that crafts people have very different educational profiles in different countries. In Andalucía (Spain) a majority have university qualifications, while in the UK the overall labour force is better qualified than the craft sector. In Bhutan over half have no qualifications though overall fewer crafts workers suffer from this than in the overall population. While the national statistics profile is a clear reflection of those employed, the profile from the craft surveys depends on how the status of craftsman or artisan was defined. So the Bhutanese data only concerns women who were weavers. This may explain the high percentage of ‘unknown’ qualifications, which may be due to uncertainty in the mind of the respondent or interviewer regarding the nature of their education. The large percentage of higher qualifications in the Andalucía survey is because professional and academic ‘higher’ qualifications were classified together, which should not be the case under the international classification ISCED.15 The nationwide data use the standard international ISCED classification making them comparable, whereas the craft surveys may not use ISCED. Use of standard definitions in craft surveys would clarify such questions and increase comparability.

**Figure 3. Highest level of education in craft and overall labour force**

[Bar chart showing education levels across different countries.]

Source; craft surveys and national labour force surveys

Another common question in craft surveys is to ask about level of literacy. This question may not be considered relevant in developed countries though even here ‘craft’ is often an important product for minority cultures which may not have the literacy levels, or schooling, of the majority/urban population. Literacy assessment has moved from self-response ‘Are you literate? Can you read?’ to skills testing

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15 This mixes together ISCED Level 4 and Level 5 under ISCED 1997 and the distinction is further extended under ISCED 2011.
which can range from asking respondents to read a sentence/passage of text, to a more comprehensive set of questions covering reading, writing, comprehension etc. The language used to assess literacy is critical, especially when testing minority populations.

Considering that even testing basic reading and writing accurately is now known to be so complex it is not surprising that few craft surveys actively test skills levels. A key question particular to craft surveys by contrast concerns who a craft master acquired their skills from. Classes of responses, as proposed to respondents, generally cover friends/family, parents, ancestors/traditions, another master. Care should be taken to make such categories as specific as possible and to reduce overlaps between categories. Thus ‘parents’ and ‘family’ may allow respondents who mean ‘parents’ to say the more general ‘family’ while in many societies there will be confusion between the meaning of immediate family and ‘ancestors’. On the other hand it may be very important to identify a crafts master’s feeling of having learnt traditional skills from their ‘community’ and having been the specific pupil of a particular family member or ‘master’.

Craft surveys also gather data about apprentices, if any, and concerns about the transmission of craft skills to the next generation. Apprentices may be engaged under a variety of different ‘contracts’ which may be paid or unpaid, formal or informal, including family obligations. Children or women may ‘have to’ work for an elder or ‘master’. Detailed questioning and careful documentation will be necessary on this point.

- **Social capital**

Social capital is an important but underdeveloped element of understanding of the craft sector. There is a well-developed theory of social capital and its measurement.\(^\text{16}\) Social capital is the degree to which a person has an active social, or professional, network. It is important for craftspeople as they tend, like many creatives to work on their own but seek inspiration from other artists. Furthermore as one person businesses they rely a great deal on other agencies and direct contacts for marketing. Assessing the social capital of a craftsman is an important way of considering their business model and what help they may need to reach new markets or expand.

The most common question is whether the respondent is a member of a crafts association. Some surveys extend this to membership of a broader selection of community groups and the level of happiness. Happiness is now recognised as a valid but relative concept closely related to wellbeing and social position.\(^\text{17}\) A simple count of the number of memberships of community groups has been shown to be an index of personal and business development.

- **Finance**

All surveys ask some questions about cost of production and income, but these questions are sometimes relatively imprecise. Questions about the cost of production are often mixed up with the price that the artist charges, while questions on income or revenue are mixed up with ideas of profit e.g. the income

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\(^{16}\) The classic text is Putnam (2000)

\(^{17}\) E.g. Layard (2005)
of a household does not indicate whether the costs of production have been met and there was a profit. If craft is to make serious progress in demonstrating its economic impact then these questions must be accurate.

Having accurate questions does not of course guarantee an accurate response. There is a huge literature on the overall calculation of income based on household surveys. For example many people in developing countries, especially in rural areas, and including craftspeople, received part of their income in ‘kind’. A farmer for whom one has made some blankets or carpets will repay in milk or grain. A teacher who has helped the craftsman fill in their government forms will be paid back in craft products such as jewellery or clothing. Craftsmen may also be reticent about such payments which may have been motivated by tax avoidance.

Further development of these questions could, as some surveys attempt at present, collect more concrete information about problems of savings and credit.

• Production process

The production process is often the core of the survey and thus the most developed section. Questions commonly cover

- Sources of raw material, how they are acquired, and sustainability (location, time spent)
- Source of design; friends family, other craftsmen, galleries
- Hours per week/month spent in production
- Number of ‘helpers’, employees, apprentices and their status
- Workplace; home, dedicated building, open air, market
- Age of business, usually number of years

All craft surveys capture some basic demographic information about producers and their workers – age, sex, ethnicity, and disability, as well as education which has already been considered above. There is no need to dwell on the importance of this information in establishing a profile of producers and their ‘helpers’. One simple chart of producers by sex will suffice.
As we have mentioned for education (Figure 3) the graph of gender split (Figure 4) as much reflects different surveys definitions of who should be counted as a craft producer, as it does any real difference in men and women practitioners. The two UK surveys undertaken at the same time produce the opposite profile. This may be because the ‘Heritage Crafts’ study includes some ‘crafts’ which might be considered as largely the preserve of men – restoring old cars, and old firearms. The Andalucía survey report\textsuperscript{18} makes the important point that their data varied both geographically (there was equality between the sexes in Valle del Guadalhorce), and with different products (leather all men, textiles 64% women). The Asian surveys all show a consistent pattern of a predominance of men, though we must be careful as surveys are often addressed by the ‘head of household’ i.e. a man. Cap Breton is the only survey in our database to have been repeated using the same design. It shows a small increase in the proportion of men working in crafts, perhaps reflecting increasing role of women as ‘bread winners’ in career positions in developed countries like Canada.

\begin{itemize}
  \item \textit{Distribution and marketing}
\end{itemize}

This section of the survey can be quite long and involved. Some elements are relatively clearly developed and comparable such as the geographical market where the craft is sold – local/home, regional, national, abroad. This should be differentiated from the nature of the sales outlet; workshop, roadside, local marketplace, shop, or web. There are a number of specific questions e.g. Do you sell

\textsuperscript{18} Algida (2007) p. 21.
through your own web site? Most surveys included some form of question on who distributed the products. This includes several types of response; the people who distribute (self, agents, shops), the place for sales (home, market, shops), the means of distribution (advertising, web, word of mouth, media, brochures), the use of advertising and other specialists (IT, legal, book keeper). This is an important area where standardisation would allow clear conceptualisation of the problems which craftspeople face in running their business.

**The survey process**

Most surveys are now conducted by telephone, or even on the Web. These approaches often do not work for craft. Craftsmen in developing countries, especially in rural areas, may have difficulty explaining the process of producing their work. Craft surveys require sensitive approaches. Rural artisans may not see the importance of their work and may under-estimate it. For urban artisans their craft may be seen as a ‘hobby’ undertaken in ‘free time’. Friends and family may contribute to the work but their contribution may not be recognised, being seen as a form of informal support. Financial information is key to promoting craft as a real ‘industry’ with earning power at national and international level, and yet craft is often seen as ‘supplementary’ income and may not be registered in much detail. For example, in Indonesia, when asked about their income/social status, most Javanese are very modest in their replies saying ‘Alla has provided or so-so’. It will allow the interviewer to see the products, to judge the extent to which production is truly ‘craft’ - are the materials truly traditional, no mechanisation, how many people involved – and to relate production to other home-based activities. Visits to houses/production areas can help to ascertain income/status through observing if they have electronic products (e.g. fridge), or personal transport (e.g. truck or motorcycle); categories which have been established beforehand as indicators of certain social class/income level.  

Surveys tend to take place in the household and begin with ‘background’ information on the household and family members. They then move on to more substantive modules about production, marketing etc. Explicit questions, especially about financial matters may then come across as too ‘formal’ making respondents feel uncertain how to respond or concerned about government intervention.

An alternative approach is to follow that used in time use surveys. Here, instead of adopting an approach dictated by a certain order of modules is to follow the craftsman’s day asking about how much time is spent on each activity from first thing in the morning until the end of the day. This approach can be less formal putting the respondent at their ease in a frame where he can think logically about his activities through the day and is thus less likely to forget anything. The time taken for each activity also provides a convenient analytical framework for the relative importance of different activities. Though precise answers are required it is often during more informal talk that one learns most – for example that although they are proud of their work as a personal product family members also help.

The disadvantage of a time use approach is that when the craftsman begins to consider his ‘day’ he may not pick a ‘typical’ day or may forget about more unusual activities which are only carried out on an occasional basis such as replacing stocks of raw material or marketing activities. In formal time use

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19 This paragraph based on observation by Joseph Lo during survey of Borobodur community.
surveys the respondent keeps a diary of all activity for at least one week to ensure that most forms of action are captured. This is very expensive both for collecting the data and for processing with analysis and is not likely to be possible for craft surveys.

Interviewers need some training on how the survey defines craft, how to encourage respondents, as well as on how to ensure that all respondents are treated equally (such as avoiding helping the respondent to read the sentence designed to test literacy, while recognising that she is short-sighted and has no glasses).

The 1990s UNESCO model for craft surveys\textsuperscript{20} made a classification by ‘material’ a core element of reporting. This was a mistake. Nobody apart from academics talks about ‘wood products’ or ‘textiles’. They talk about furniture, wood carvings, blankets, carpets... Furthermore very many products are ‘mixed’ material. If surveys are to have impact on the general public, or even in government and other agencies they must use concepts which ordinary people can understand.\textsuperscript{21} This is not to say that raw materials and production processes are unimportant and it is very important that they are elucidated in craft surveys, but it is suggested that these skills and raw materials are only important in relation to the product and it is the product (as the work of a particular person(s)) that is the prime focus of measurement.

Finally it is vital for respondents to know that the survey has produced results and that they have been passed on to agencies which could help them.

\textit{Business and professional registers}

One of the perennial problems in craft surveys is establishing the base from which to draw the survey sample. A business register is a fundamental requirement for statistical analysis in the more developed countries. It can provide details of production processes to ensure products are handmade or traditionally designed. Detailed information about how companies operate, their structure, their functional units, financial information, products, and numbers employed may all be collected.

There is a high turnover of very small companies which often take up new ideas that prove to be unviable. Sometimes government requires small businesses to register. Alternatively compilers of business registers, including government departments, use telephone directories since a telephone is often the first requirement for a new business and the last thing to be abandoned if they go bankrupt.

Where a good business register exists it is usually the first resource to which a statistician turns to construct a sample for a survey. Business surveys often ‘over sample’ (include more cases than they need) amongst the largest companies as they are so few in number, and amongst the smallest companies because they may have ceased trading. Oversampling large companies is unlikely to be a problem for craft statistics as it is unlikely that any very large businesses will be considered as craft operations. Oversampling small companies may be more relevant.

\textsuperscript{21} This point is taken up in a similar way by Viswanathan (2013; 10) in seeking to apply Indian national statistical classifications to craft.
While business registers may be more sensitive to identifying craft in larger companies it will overlook many small craft businesses which may obtain most of their income from non-craft or more mass produced activities. Many craft businesses will not be included at all as they operate in the informal sector. Some informal craft operations may still be included if they have a listed business phone number.

Membership lists of craft associations may be regarded as a particular form of business register. Many craft surveys begin by trying to establish the number of crafts producers in their target area by means of a trade association register. Several countries included in this report have based their estimate of the total number of craft producers on membership lists (Mali, Tunisia....). While national business registers suffer from the problem of turnover in small businesses, trade associations suffer from the quirks of membership. For example amateur artists may not choose, or may be ineligible, for trade association membership. Trade association membership based on a definition of the trade which is too narrow or too broad for some artists. Often artists/artisans just like to be independent. One way or another one may normally assume that a figure based on trade association membership is an underestimate of practitioners in any particular trade. Of course it is then possible sometimes to identify missing producers. In the 2010 Georgia craft survey the team felt confident that they had identified all the craftsmen in the country by talking to the municipal authorities. This approach is less likely to work in a large country or a large city.

Many crafts people are ‘hobbyists’. They may not be members of associations, and their ‘art’ productions may not be captured in sales records. It is certainly crucial that craft surveys do not only use professional registers of artists as they will exclude ‘amateurs’ who may be important producers in terms of the quality of their products and even the level of production. Moreover if the purpose of surveys is to develop support for the sector it is often those who have not developed their potential as professionals who are most in need of help.

The most common solution is to develop some form of hybrid database of professional association members supplemented by ad-hoc local information. This could be a good practical solution but risks creating a mixture of different sources which could skew the results (for example potters may be more professionally organised and thus more ‘visible’ in a particular locality than more ‘amateur’ painters who may be more common but less identifiable). Caution should then be exercised in assessing the representative nature of the results.

The Living Standards Measurement Study (LSMS) 22

The Living Standards Measurement Study (LSMS) is a survey methodology which is designed to give special attention to the nature of household income. The methodology is under the custodianship of the World Bank but is implemented in individual countries as part of a General Household Survey or as a

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22 The LSMS, including questionnaires, manuals, data, and research papers, can be found at [http://econ.worldbank.org/WEBSITE/EXTERNAL/EXTDEC/EXTERSEARCH/EXTLSMS/0,,menuPK:3359053~pagePK:64168427~piPK:64168435~theSitePK:3358997,00.html](http://econ.worldbank.org/WEBSITE/EXTERNAL/EXTDEC/EXTERSEARCH/EXTLSMS/0,,menuPK:3359053~pagePK:64168427~piPK:64168435~theSitePK:3358997,00.html). Only surveys undertaken since 2010 were sample for this paper.
stand alone survey. Its importance for craft is that the LSMS is often used to define the official level of poverty in a country, and that it asks a range of questions on ‘non-agricultural household income’. This in theory allows a direct calculation of the degree to which income from craft production lifts families out of poverty. Many countries have undertaken LSMS surveys since 1995 (several countries have carried out multiple LSMS). The use of a generally standard method makes these surveys broadly comparable. Moreover several surveys provide data, and manuals, online at the LSMS website, along with a range of research reports.

A few examples for recent surveys illustrate the potential. Questions in the 2011-2 survey of Ethiopia include

- How many hours in the last seven days did you run or help with any kind of non-agricultural or non-fishing business, big or small, for yourself or for the household? [same question Malawi 2010/1]
- How many of this [ITEM] does your household own? Who in the household owns the [ITEM]?
  Items included weaving equipment and sewing machines
- Over the past 12 months has anyone in this household.[also Malawi 2010/1]
  o Owned a non-agricultural business or provided a non-agricultural service from home or a household-owned shop as a...carpenter, tailor...etc.?
  o Processed and sold any agricultural by-products...
  o Owned a trading business on a street or in a market?
  o Offered any service or sold anything on a street or in a market, including ....traditional medicine, mats, cane furniture, weave baskets...?
- Revenue from sales of assets..... income from household non-agricultural asset sales

Example of questions from other recent LSMS include

- At any time over the last 12 months were you employed as an unpaid apprentice for anyone who is not a member of your household? [Malawi 2010/1, Tanzania 2010/1]
- [For household businesses] During the last month of operation which household members worked for this [ENTERPRISE] [Malawi 2010/1]
- In the last 7 days how much time in hours did [NAME] spend making handicrafts for household use? (this includes making furniture, clothing, clay pots, baskets, mats and other similar activities) [Uganda 2011/2]

These questions are sufficient to show that with a certain degree of interpretation LSMS studies can be used to study craft activity. LSMS surveys also included substantial detailed questions on; health, nutrition, well-being, finance (sources of credit), and education. It is thus possible to extract data to suggest whether craftspeople have a certain level of education or incomes, or whether they are in better or poorer health than their communities. A profile of craftspeople based on age, sex, housing status can also be established.

The LSMS is structured around different questionnaire ‘modules’ such as education, health, and
household income. A standard module for craft should be introduced for countries who want to assess the sector’s contribution to poverty alleviation. It would be very easy to standardise some of the existing questions set out above and include a limited number of key questions derived from craft surveys and national statistics. The World Bank should be approached regarding this development.
3. EMPLOYMENT, TRADE AND EXPORT DATA FROM SELECT COUNTRIES

This section summarises the data which is immediately available on countries from both NSOs and surveys. Every country in the world has data, but only some countries make this available. Often this is because relevant authorities do not understand what craft is.

Data are not presented for OECD countries. Firstly this section is specifically targeted and the less developed regions of the world. Secondly data from OECD countries are readily available and more complete. Thirdly, given the objectives of this paper, it would be more appropriate to consider statistics for the demand rather than the supply of craft (we study US demand for crafts below).

The data presented should not be considered a direct measure of craft activity, so much as a broad-based estimate derived from publicly available sources. Better more precise, more reliable figures can be obtained from National Statistics Offices by using the more detailed (4 digit) codes already discussed.

i) Asia

(1) Bhutan

Bhutan is a small country but places strong emphasis on its culture. The Zorig Chusum or thirteen traditional arts and skills are a key part of skills training. A baseline survey of cultural industries in Bhutan was published in 2009 (Askerud 2010) and a survey of hand loom production was published in 2013 (Askerud and Lo 2013). Bhutan also puts great emphasis on well-being and has been the global pioneer in the development of measures for happiness. Data published by the National Statistics Office contains elements of craft data but further consolidation and co-ordination of the data is needed. Despite its small size Bhutan is a leading country in the world for the preservation of traditional skills, sustainable development and their measurement.

(2) China

The massive size of the craft sector in China and its enormous diversity make it very difficult to summarise. Several local craft surveys, at least three with a common methodology, have been conducted. It is very important that China find a way to establish comparability between craft surveys and build them into a national framework. Data from the National Bureau of Statistics could help here but are under-used. Whereas national statistics are based on top-down national surveys, local craft studies are very much driven by local administrative bodies.

(3) India

There have been many attempts to build a national craft statistics programme. These have generally been thwarted by India’s multi-dimensional and huge craft sector. Co-ordination of different

administrative levels from federal and state, to Panchayat and block, is difficult. Another complicating factor is the extent to which craftsmen in India are itinerant, and that certain crafts come from the scheduled tribes who lie somewhat outside state administrations.

The national textile survey of 2008 provides an excellent classification for occupations in a traditional textile market. In many crafts the sheer size of the industry in India allows enumeration of much more detailed occupations than in any other country. It includes for example the following detailed codes (Table 2). The exceptional size of craft production in India and China means that they can differentiate very specific occupational groups and still expect to collect data on statistically significant numbers of workers.

Table 2 Occupational codes from the Indian national textile survey 2008

<table>
<thead>
<tr>
<th>Code</th>
<th>Occupation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0503</td>
<td>Baler</td>
<td>Arranges the required number of bundles in the press and presses them into bales. Stitches up hessian all round and hoops the bales. Weighs and marks serial numbers, etc. Cleans and oils the machine.</td>
</tr>
<tr>
<td>0504</td>
<td>Bobbin Carrier</td>
<td>Removes filled bobbins or sliver in trays or bobbins from spinning department and takes them to the winding or reeling department. Cleans empty bobbins, covering boxes or bobbin carrying carts.</td>
</tr>
<tr>
<td>0507</td>
<td>Can Tenter/ Card Tenter</td>
<td>Tends carding machine which cleans and transforms lap of cotton into sliver (rope like untwisted strand). Delivers cans full of sliver to drawing department and brings empties from there. Locates operational defects in machine and sets them right. Removes waste and cleans the machine.</td>
</tr>
<tr>
<td>0508</td>
<td>Creeler/ Creel Boy</td>
<td>Arranges cones or spools on creels for warping. Brings filled spools or cones from winding machine. Replaces exhausted cones with full ones and join ends. Cleans creel and warping machine.</td>
</tr>
<tr>
<td>0509</td>
<td>Comber Tenter</td>
<td>Tends comber machines which removes short fibers and laps in cotton lap and transforms into sliver. Delivers sliver cans to drawing and bring empties from there. Collect noels and cleans the machine.</td>
</tr>
</tbody>
</table>

The 2013 report of the Madras School of Economics (Visnawathan 2013) is also ground-breaking in clearly establishing the relationship of Indian craft textile production to national statistics.

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(4) Indonesia; trade data, survey data

Indonesia is a large country extremely rich in cultural diversity. From a statistical point of view its strongest point is its export statistics which are published on the web monthly in tremendous detail (up to nine digits in the Harmonised System). This allows a very strong picture of craft trade with a product classification that is as close as one could possibly get to craft classifications.

A local craft survey has also taken place recently in the Jogjakarta area and analysis is expected soon.

(5) Singapore

Singapore has published a regular data series classed as ‘Fine Art, Crafts, and Collectibles’ based on national industrial codes for ‘Wholesale of antiques and works of art, Wholesale of handicrafts and gifts, Retail sale of antiques and works of art, Retail sale of handicrafts, collectibles and gifts’ as well as Photography (National Arts Council 2013; 52). Singapore has great interest in establishing itself as a regional capital for arts and creativity, but some of its statistics do not seem to follow international standards.

(6) Thailand; extensive NSO and trade data

UNESCO work with the Thai NSO through the current author under the overall banner of the UN partnership programme has produced a detailed overview of the availability of statistics in cultural and creative industries. This includes

- Detailed coded data from the quarterly Labour Force Survey
- Data from the 100% Business Census 2012
- Administrative data from the national OTOPs craft project
- Surveys of the Informal Economy

These sources provide a rich variety of data on the craft sector, and it is hoped that the continuation of the project will provide more co-ordination of these various datasets.

(7) Vietnam

An UNCTAD study of the mid 2000s suggested that there were 1,350,000 crafts producers in Vietnam, 510,122 men and 838,227 women. They included 265,000 textile workers and 575,000 workers in rattan and ‘rushes’. An unofficial national estimate of craft in Vietnam gives 7,754 companies or 1.4% of all registered businesses. Vietnam has recently undertaken a craft survey but is yet to publish the results.

(8) Malaysia, Philippines

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While some survey work has taken place in these countries it is not publicly available. Broad estimates have been made by deducting form occupation group 7 the figures for some non-craft occupations (above all construction). The results give proportion of the workforce involved in craft which are similar to more ‘observed’ estimates for Thailand and Singapore.

ii) Latin America

While there are no countries in Latin America for which it seems possible to provide a detailed estimate of craft activity, there are nine countries which publish employment for occupational group 7. These nine countries also publish a table which looks at occupation by sector. This enables one to deduct from the group 7 total of Craft employees sectors which are not involve in artisanal production. These include construction workers, service sectors, transport, and utilities.

If occupation group 7 could be made available in these countries down to the three or four digits a much more precise figure could be produced. Since a breakdown of group 7 by industrial sector has been published, this suggests that a breakdown of occupation to 3 or 4 digits (e.g. code 7312 instead of just 7) would not affect the reliability of the statistics or threaten privacy.

Colombia (the NSO DANE) and the regional Conveno Andres Bello have long worked on the production of cultural satellite accounts. While these show enormous promise they need to address several major technical issues such as how to price ‘non-market’ goods. Work on national accounts should not however prevent NSOs publishing existing data as outlined in this report.

iii) Arab States

(1) Jordan

Jordan is the only Middle Eastern country for which it is possible to estimate the level of craft activity from publicly available data. The US Aid study of craft in Aqaba (Akhal, Shabaneth and Tyroler 2008) summarises the overall situation in the country well though strangely neglects NSO data. It highlights the importance of tourism in the Jordanian economy but notes that there are no central facilities for craft promotion. At the same time tourism has driven the development of a craft sector, whose products (textiles, baskets, jewellery, wood, ‘sand bottles’, food, and soaps) the US Aid study discusses. Estimates from the national statistics office indicate that the craft industry is of a similar size to those in other countries where data is available. Informally this author is also aware of a number of local studies. Coordination and consolidation of the sector and the statistics could yield quick information to inform strong policy formation.

(2) Morocco

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29 ‘non-market’ goods are cultural objects which have never been sold in the open market and therefore have no explicit price/value, for example art exchanged between major galleries for exhibitions or as donations.
Some data was found for Morocco but not enough to be able to estimate detailed employment for craft. A study\(^\text{30}\) provides an estimate of employment in businesses with a ‘strong cultural content’ which is 3.25% of total employment, and similar to the level of employment derived from the craft association register for Tunisia.

(3) Algeria

Bellache (2010) quotes the Ministry for SME Development to produce a figure for Algeria based on people employed as ‘traditional artisans.’ At 0.17 of total employment this is likely to be an underestimate, in line with others derived from existing contracts.

(4) Tunisia

The number of people registered with the Office National d’Ârt, was 137,135 in 2012 which forms about 3.5% of total employment.\(^\text{31}\) This is similar to the figure for Morocco suggesting that this percentage might be tentatively accepted as an initial estimate for North African countries.

iv) Sub-Saharan Africa

(1) South Africa

An estimate can be produced for South Africa thanks to a craft study of Western Cape Province (Kaiser Associates undated). Like the UK Heritage Craft study (TBR et al. 2012) its estimate is built from a commercial business register. Such registers often contain much commercial data which allow the consultancy to know precisely what business companies in the register are engaged in. The problem with such registers is that they may have less information about smaller businesses, especially self-employed crafts people or those who are only involved in craft as a second business. Thus the study estimates that craft employment in South Africa is around 34,000 people, while suggesting that an estimate by another agency of 1 million is too large. Because of the limitations discussed the truth is likely to be between the two.

(2) Mali

Mali has a very rich cultural heritage. A study in 2001 (Federation National e des Artisans du Mali (2001) produced an estimate of craft producers based on registration with the Federation National des Artisans. The figure represents less than 1% of the workforce. It is likely to be an underestimate.

(3) Guinea

Guinea has an old 1990s estimate posted on a website www.artisans-guinee.org. The figure represents some 15% of the workforce and is likely to be inflated.

\(^{30}\) Diagnostique de l’économie du patrimoine culturel au Maroc’ (2010), prepared with the UN MDG/Spanish funds for culture REF CL/RA/MA/2010/P/I/H/4

b) Towards regional estimates; the Maghreb and Asia

It is too early and the data too imprecise to produce regional estimates but some observations may be made. For the Maghreb countries we noted a constant 4% of the workforce engaged in craft. In Asia where we have the most frequent observed data the percentage of the workforce varies from 1.3% to 6%. Some of this variation may be statistical errors in our broad-based estimates, but some is probably real suggesting that craft work has different significance in different countries. For Latin America our simplistic method of excluding ‘non-craft’ sectors from major occupation group 7 yields very different results for different countries making it difficult to evaluate.

c) Summary; what the statistics tell us

At this point we can summarise the strengths and weaknesses of the different kinds of data based on the published availability for different countries.

National Statistics; we have emphasised that some kinds of statistics are available for all countries. Thus we have begun the database with occupation code 7xxx Craft and related trades. It has been indicated that subcategories up to four digits are generally available, such as 7313 – jewellery makers and 7312 – musical instrument makers, but not published. These data are collected through Labour Force or Population surveys which are amongst the most common reliable national statistics. They are collected every year and often every three months! In the case of Thailand this has allowed the author to compile a relatively accurate estimate of craft workers and compare it with employment in other areas of the Thai economy.

National Statistics are regularly collected by the state and feed directly into policy making. They also allow contextualisation within the economy as a whole. This can also be seen from the export statistics which are available in a good amount of detail from the UN (comtrade.un.org). Comparability of national statistics extends to international comparison allowing one to see how far for example China dominates the global trade in textiles.

When discussing Latin America we noted that many countries published tables of major occupation by industrial sector. This enabled some non-craft jobs to be eliminated from our target occupation group 7-Craft and related trades. The fact that subcategories of group 7 were published suggests that data would be reliable if published by subclasses of 7 such as 731x or 7312

Craft surveys; are extremely important for the detailed picture they present of the craft master’s production process, household and workshop organisation. They can capture significant issues such as the difficulties of taking craft to market, or obtaining finance for business expansion. The country for which we have the clearest picture based on craft surveys is Bhutan, thanks to studies in 2005 and 2010. For example while the 2005 survey identified about 6,000 professional textile workers the 2010 survey found that over ten times that number of women were engaged in some form of textile production. Many of these women sold some of their production but it was only the main job or occupation for 6,000 people. The 2010 survey thus allows one a glimpse of the difference between amateurs or part
time workers and professionals.\textsuperscript{32}

The difference between the number of textile workers between the 2005 and the 2010 studies opens up one of the difficulties in surveys. Although we can be sure that both numbers reflect craftspeople the use of different definitions between the two surveys makes comparison uncertain. Later surveys always ‘improve’ on the methods of earlier work but such improvements reduce comparability and prevent trends from being established. We don’t just want to know how many textile workers in 2005 and 2010 we want to know whether the number has gone up or down, and when the two figures are calculated on different bases we cannot tell.

For trends we need the regular annual collections of national statistics which use international standard classifications and methods that are stable over time. Bringing the two kinds of statistics together requires two particular actions

1. Standardisation of craft surveys so that they will be more comparable between each other and with national statistics
2. Publication of national statistics in more detail

Action 1 requires agreement between different survey organisations on best practice as well as commissioning agencies insisting on the use of this practice. Action 2 requires agencies to push national statistics offices to release the data that they hold in more detail.

The significance of Action 1 has already been demonstrated in Figure 2, showing the highest level of qualification of artisans as identified in different countries and in national statistics. For example if we carried out a straight comparison of the Bhutan weavers survey with the UK craft survey we might assume that the Bhutanese craftspeople were of very low status as being uneducated whereas the UK craftspeople were all highly educated. However we need to take each survey within its national context (i.e. compared to national statistics). In the case of the UK artisans are less educated than the national population with a higher proportion with low or no qualification and a noticeably smaller proportion without higher education. In the case of Bhutan artisans are less likely to have no education than the population as a whole, but there are some 20% with ‘unknown’ in other words unrecognized or unofficial qualifications.

4. ISSUES
The previous sections have examined the different forms of statistical information available for craft across the world. No one source of data provides all the answers. Craft surveys provide detailed information, both quantitative and qualitative, on the lives of craftsmen/ artisans, but they need to be interpreted in the context of national statistics in order to assess whether they the surveys are representative and in order to examine ‘macro’ issues such as the contribution of craft to local, national and international economies.

The point has been repeatedly made but should be re- emphasised that all national statistics offices (NSO) do have data on craft production. However data are not published as NSOs are worried that detailed breakdowns are unreliable and risk breaking privacy concerns. It has been argued above that this is not the case, and that in publishing a breakdown of occupation by industrial sector NSOs are already publishing a similar level of detail.

This section now reconsiders some of the major issues identified in the statistics and how action could be taken to improve the quality of both survey and NSO data. Two major topics are considered. Firstly how by firming up definitions we could ensure that we were ‘talking about the same thing’. Secondly we discuss the broader benefits of comparability – saving considerable amounts of funding by reducing development costs for surveys, and increasing the accuracy of national statistics by using the greater detail available from surveys.

1. Definitions

Definitions and classifications lie at the heart of systematic data and analysis. The point is easily made. Something can only be counted once. Some years ago in considering a classification at committee the question arose as to whether libraries were to be classified under ‘Museums and galleries’ or ‘Books and press’. If we put libraries under ‘Books’ then we seem to be missing the broader role of libraries for lending music, and for hosting lectures and exhibits. If we put libraries under ‘Museums’ we are disassociating them from their main business of books. If we have some libraries in one category and some in the other then we risk never presenting a ‘true’ figure for the number of libraries, and some libraries might end up being counted twice. So after much deliberation they were placed under ‘Books’.

Craft like any other activity is extremely difficult to classify, but some choices must be made, or we will end up as we have seen mixing artisans and construction workers, or jewellers and gold refiners. It is not possible to arrive at a perfect solution, but clarifying some elements of craft activity will make the classification and the measurement easier.

Handmade v machine made – clarifying the production process

The definition of ‘craft’, ‘artisan’ or ‘folk’ production is a major problem in itself, as everyone concerned with the business knows. It is generally accepted that ‘craft’, in principle is not machine-made. BUT few people would say that using a handloom or a manual/foot powered potters’ wheel was using a ‘machine’. What happens if you then replace the ‘hand’ with a small motor? Where do you draw the
line? I asked an African basket manufacturer who employed one thousand people how could she prove she was still making craft? She said because one person produced one basket and signed her product: good answer!

It is unrealistic to expect all parties to agree on what has been produced by hand or by an ‘artist/artisan’ and what has not, but the closer this can be defined the easier it will be to ensure comparability. There is also a good case to be made for ‘transparency’. Every survey (and national statistics) should publish the definitions they are using so that users know what decisions have been taken on this issue.

**Artisans; defining occupation**

The term ‘occupation’ has emerged as key concept in this paper. Statisticians (lead by those at the International Labour Organisation) define an occupation as a set of tasks that are normally carried out together as part of a ‘job’. For example someone on the front line at a bank receives customers’ payments or disburses cash, whereas a financial manager is more like to discuss investments and mortgages. Occupation is a classification that suits craft because a craft person, artisan, artist is above all someone who makes something physical with their hands.

Both surveys and national statistics concentrate on ‘main’ occupation, as in the job that you spend most time on, or which is your ‘main source’ of income. Here we are already on difficult ground. Many rural artisans ‘main occupation’ is agriculture, but surveys suggest that some artisans spend more time (at some times of the year) in craft. Equally an urban artist may spend 2-3 days a week earning the money to support the craft activity on which they spend most time. This leads to several issues. Who is the ‘professional’ craftsperson? Most artists are ‘portfolio’ workers, being paid only when they sell something, being commissioned sometimes and working out of their own resources at other times, even during the same 24 hours.

For national statistics the key recommendation is that Labour Force Surveys should record not just the ‘main’ occupation (as determined by hours or income), but a second occupation. Just asking about one more occupation would identify a large number of craftspeople and artists in both urban and rural locations.

Surveys find it easier to talk around this issue during an interview. They should record more detailed information. Most surveys ask about the number of hours worked per week, taking into account seasonality, (e.g. at harvest time, or in the winter). They should, especially in urban settings, record more detail on the nature of contracts. Some important variations are:-

- Full time permanent
- Part time permanent
  - Fixed hours per week/month
  - Variable hours
- Temporary contract
  - Full time (e.g. exclusive) for xx months
Different forms of contract may be more or less relevant in different countries and circumstances (urban/rural). However it is certain that in the future these distinctions will be more and more important, especially if national policy, trade associations and other aim to put craft workers on a more stable working basis. Standardisation of occupational classification is also a good platform for establishing certain craft pursuits as ‘professions’ with quality standards which can help raise prices and expand markets.

**Defining craft**

The majority of countries included in this analysis would define the core of ‘craft’ as being handmade goods produced with ‘traditional’ materials, and which generally though not always followed elements of ‘traditional’ design. This accords well with the basic international definition of craft through statistical coding presented in the 2009 UNESCO Framework for Cultural Statistics, Domain C - Visual Arts and Crafts. However some national definitions of crafts include some other categories which are worth discussing at this point.

*Food. Several countries (Peru, Thailand) include food as a craft product. One Peru report features ‘artisanal fishing’. In Thailand food items represent over one quarter of One Tambon One Product craft items. It is undeniable that one of the major ‘exports’ of Thailand and China is food in the form of restaurants throughout the world. Similarly Japanese ‘sushi’ can be said to have a high ‘cultural content’ in which not just the food itself but the way of eating is associated with Japan.*

The UNESCO Framework emphasises how cultural statistics must be adaptable to national considerations. If we are measuring economics then we can pull all countries together to a common metric, but in culture what we measure is directly a reflection of national identity. To exclude food from a definition of ‘craft’ would be to disregard a major part of Asian and Latin American identities.

Defining which food preparing businesses and employees to include is another matter. Is any restaurant in Thailand a ‘Thai restaurant’ or only those that serve Thai food? If a major US multinational has a large office in Thailand with a staff canteen do we include its catering staff as people preparing Thai food? A moment’s thought indicates that there are a host of issues.

*Construction. A number of countries include traditional wood and stone carving or other forms of decorative architectural tradition as craft. Bhutan in particular has formalised these as part of the Zhorig Chusum traditional skills set. It is likely that these can be accommodated in the standard definition of craft as counting their practitioners amongst the coding associated with carving or moulding the appropriate material in more freestyle ways – i.e. sculpture. Indeed it seems likely that many artisans practice both carving of architectural finials and freestanding sculpture in the round.*

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Simon Ellis
**Intangible practices.** In many countries craft or traditional objects are closely associated with what UNESCO would term intangible practice; music, dance and ritual. Again some care is justified in treating this subject. Just as western fashion models would be considered part of the ‘fashion industry’ along with those who designed and made the clothing, it would seem equally reasonable to count traditional dancers who wore traditional craft textiles as part of a ‘craft textile industry’. On the other hand for most purposes ‘craft’ may be considered as based around the production process, while traditional dance is more concerned with dissemination and marketing of the textiles produced by someone else.

It is common in traditional societies for musicians to make their own instruments. In this case the maker (ISCO 7312) may also be the performing musician (ISCO 2652). In a survey we would be asking such a person what was their *main* occupation; manufacture or performance?

These two examples of textiles and music illustrate that ‘craft’ should capture the manufacturing process rather than the dissemination process. It is peoples’ ‘closeness’ to this manufacture or creation of the product which should determine whether they are seen as ‘craft’ workers or not.

**Conclusions**

In summary definitions and classifications are extremely important in craft for both surveys and national statistics. The more common standards are adopted for both the more the two data sets will complement each other.

National statistics, particularly Labour Force Survey, but including all household (e.g. Census) as opposed to workplace (Business) statistics should ask about a second occupation

Some key points that all dedicated craft surveys should document include

- What level of machine-assisted production is included in the survey? Hand-powered?
- Are ‘occasional’ producers included, or only full time producers? If occasional how often (once a quarter, once a year, or less?)? Do producers get interviewed only if they are paid for their work (perhaps they distribute their work for food or in other exchange systems)?
- Is there a limit on inclusion in the survey based on scale/size of company? E.g. number of employees, or turnover. Some surveys only seem to cover self-employed or single person production

I would repeat here the proposal here is not that surveys exclude anyone they think relevant, but rather that they explicitly state who has been included and who has not.

**2. Benchmarking**

By benchmarking I understand bringing dedicated surveys and national statistics together to

- Assess the accuracy and completeness of the data
This section will suggest ways in which different surveys can be brought together, and in which surveys can be brought together with national statistics.

**Comparability**

Making different sources comparable allows them to be effectively integrated into a single dataset. This is advantageous for several reasons.

Firstly it allows the relative accuracy of both datasets to be established. This is not about identifying different data as ‘good’ or ‘bad’. Almost every data source will have some understanding to add, especially in an area such as craft where information is so scarce. It is more about establishing the limits of interpretation. Every dataset has its limitations. For craft surveys we have talked about survey size and representativeness of the overall population of craft producers. For national statistics we have mentioned NSO worries about publishing small numbers which may be statistically unreliable or breach privacy constraints. Every survey or statistical dataset should be published with a note on its quality to help users know what it should be used for and what it should not be used for.

Secondly making data sets comparable extends analysis by allowing you to move from one set of data which may not be so reliable on a particular question to another one which is. It has been suggested for example that using common definitions will help place the work of artisans in a craft survey within the context of the economy as a whole in the region or the country, or indeed internationally. Similarly a ‘gross’ figure on number of ‘jewellers’ from a National Labour Force Survey can be enlarged upon through a dedicated craft survey as long as the craft survey starts with the same occupational definition as the Labour Force Survey (i.e. ISC 7313). To take another example interviews of anyone who might be classed as jeweller by the Labour Force Survey can ask whether they are amateur or professional, and whether they ‘mass produce’ or makes unique items by hand. Counts from these might then be grossed up to the Labour Force Survey to estimate the number of amateurs in the country as a whole (i.e. use ratio professional; amateur in the survey and apply to the national Labour Force data). This can fuel discussions about how many amateurs have the potential to become professional, or the benefits of training in jewellery manufacture or business skills. Similarly the proportion of jewellers who make unique handmade items from the survey can be applied to the national figure on the number of professional jewellers.

**Trends**

One of the most important benefits of using the standard definitions or other forms of increased comparability (for example making sure that a dedicated craft surveys interviews all those crafts professionals who took part in the national Labour Force Survey, in other words using the same sample) is the ability to establish trends. Sometimes when repeating a dedicated survey five years later it is worth reusing the original definition of a ‘crafts person’ or ‘artisan’ even if the official trade association...
definition has changed. If the new definition is used then the two surveys will not be comparable and it will be difficult to tell even whether the number of artisans has risen or fallen.\textsuperscript{34}

Statistical trends are a vital policy tool. Is the number of artisans falling in a recession? Are they suffering more than other professions because they produce high-end quality goods? If macro-economic data suggest increased demand for craft products (as indeed I have suggested) are artisans responding by increasing production or are more artisans entering the profession? These are all vital questions which can affect government support for the sector from business start-up grants to marketing support. They can only be measured/monitored if there is regular data at a maximum of five years apart. When it is recalled that the Labour Force Survey provides data every three months in most countries it can easily be seen how important it is to benchmark against this major data set. Even with regular craft surveys every five years (something no country in the world has ever achieved) using the same definitions as the Labour Force Survey would allow estimation of many statistics (e.g. number of professionals, production levels, apprentices and employee numbers, types of contract...) for every quarter between the five year surveys! Such ‘early warning’ systems are vital for pushing public agencies into action at national and local level.

\textit{Cost savings}

Benchmarking against national statistics allows provides the designers and financiers of craft surveys with many efficiencies and cost savings.

- Using standard definitions, such as the occupational classification ISCO, makes for ‘tighter’ terminology, avoiding uncertainty in interpretation and many hours of discussion at Steering Committee
- Using standard questions, such as asking the same ‘main occupation’ question used in the national labour force survey, means using well tried and tested questions that are less open to misinterpretation, where all terms like ‘occupation’ are precisely defined. This leads to less discussion in Committee less development time for questionnaires, less piloting of the questionnaire, more effective interviews (terms easily explained to respondents), and easier interpretation of results
- Development of a ‘standard’ questionnaire makes it easier to repeat the whole survey. If a quick efficient survey method is developed it may well for example be taken up by other local administrations increasing comparability, allowing more strategic analysis, and reducing costs to funders by not ‘re-inventing the wheel’.

3. \textit{Consultation}

This report has argued very strongly for more standardisation of craft statistics. However this should not, and indeed cannot, be achieved by ‘top down’ recommendations. All craft data is only useful if it helps craft producers and their representatives. It is easy to produce some ‘theoretical’ best form of

\textsuperscript{34} The only craft survey in this study which was repeated using the same design was that of Cap Breton in 2004 and 2012.
craft survey, but to function countries around the world must use it, and artisans must be willing to respond to it. The purpose of this project is not to produce the ‘ideal’ craft statistics. The purpose of the project is to help the craft sector by having more statistics available, and used.

Achieving this end requires ‘ownership’ by the sector. Craft Associations around the world must be able to see that the definition of a jewellery maker in Africa, Asia, Arab countries, Latin America, the Pacific, the Caribbean, and in the ‘developed’ regions of North America and Europe is relevant to them, and yet also framed in a way that allows them to see where African jewellery productions fits into the global picture.

This is where occupation code 7313 – jewellery making is so powerful. It is the result of endless meeting and discussions in national statistics offices, in regional meetings, and at major international meetings in New York and Geneva. While not proposing such a heavy formalistic approach this section proposes how craft people, their trade associations, and other relevant parties can have a say in determining a new statistical standard for craft, to make sure it is useful for them.

Several examples cited in this paper also emphasise the need for local consultation to understand the interpretation and use of the statistics. We have seen how local information on the textiles of El Salvador helps understand the nature of its production. The data on imports of jewellery into the US led to discussion about the limits of trade data and mass production. We have seen how two contemporary national studies of craft in the UK, both undertaken by respected agencies, produced the opposite division of craftspeople by sex. It is therefore essential that local experts and agencies have the chance to comment on the data that is produced.

Standardisation also works in this direction. The more key definitions are ‘tightened’ and agreed the more everyone – statisticians, crafts people, national agencies – will have confidence that we are talking about the same thing, that data are comparable, and that the limits to using the data are known.
5. THE WAY FORWARD

This section considers how the results and implementation of this report might be carried forward. It starts by presenting a draft set of seventeen indicators derived from surveys and national statistics. They provide a core dataset for the sector. It then considers how such proposed indicators could be tried and tested at national level. The potential use of statistics to assess demand for craft is then considered with regard to the USA. Finally concrete recommendations are made for; introducing craft into the current round of trade negotiations, in international statistical standards, and in the further work of the Alliance for Artisan Enterprise.

A Set of indicators used to monitor craft around the world on an annual basis (e.g. Labour Force Survey, Business Census) identifying needs and opportunities for artisans

There are some principles to be observed in setting a set of standard statistical indicators. They need to be chosen to maximise comparability. They should be relatively few in number so as to minimise the burden on agencies who wish or are obliged to collect/prepare them. They should be independent from each other, as indicators which measure the same thing are redundant.

Statistical indicators are almost always a combination of two different items or datasets, most often as a rate or proportion i.e. the number of craft workers as a percentage of the labour force. ‘Raw data’ are not ‘indicators’ as data only acquire meaning through this relationship with the general population or another broader dataset. This is another reason why craft surveys and national statistics need to be put together.

If other data on craft are not mentioned in the short list of broad-based indicators it is not to say that they are useless. The indicators are exactly what they imply – they indicate – and other relevant data help in the interpretation. For example if we say that craftsmen make up a certain percentage of the work force then we immediately want to know in which fields they work, whether they are full time or part time…

Having these principles in mind a list of 17 proposed indicators is given below. They should be considered by experts and in various national craft associations, ministries and other agencies for relevance and ease of collection/estimation.

Table 3. Proposed Standard Indicators on Craft

<table>
<thead>
<tr>
<th>ref</th>
<th>indicator</th>
<th>source</th>
<th>frequency</th>
<th>notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>craft employment as a % of total employed</td>
<td>Labour Force Survey/Population Survey</td>
<td>quarterly or annually</td>
<td>easiest indicator to extract from national statistics. Use International Classification of Occupations (ISCO) to four digits</td>
</tr>
<tr>
<td>ref</td>
<td>indicator</td>
<td>source</td>
<td>frequency</td>
<td>notes</td>
</tr>
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<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
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<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>2</td>
<td>value added of craft sector as a % of GDP</td>
<td>business survey &amp; other</td>
<td>annual, 3 or 5 years</td>
<td>important indicator but can only be assessed indirectly by combining business survey with other information</td>
</tr>
<tr>
<td>3</td>
<td>ratio between professionals and amateurs</td>
<td>Labour Force Survey/Population Survey</td>
<td>quarterly or annually</td>
<td>combine with survey data. Important indicator of 'potential'</td>
</tr>
<tr>
<td>4</td>
<td>&quot;demographics&quot; of craft; age, sex, ethnicity, ‘amateurs and professionals’</td>
<td>Census of Population</td>
<td>1 every 10 years</td>
<td>Census has most comprehensive data. Can combine with LFS or survey data</td>
</tr>
<tr>
<td>5</td>
<td>production level; no of products in 1 year</td>
<td>Craft Survey</td>
<td>occasional</td>
<td>depends on nature of product</td>
</tr>
<tr>
<td>6</td>
<td>level of education of craft workers compared to national workforce</td>
<td>Craft Survey and Labour Force Survey</td>
<td>occasional/annual</td>
<td>should use International Standard Classification of Education (ISCED)</td>
</tr>
<tr>
<td>7</td>
<td>% of craftspeople with apprentice, or students</td>
<td>Craft Survey</td>
<td>occasional</td>
<td>to indicate transmission of skills</td>
</tr>
<tr>
<td>8</td>
<td>numbers of 'helpers' per craftsman</td>
<td>business and craft surveys</td>
<td>3 or 5 years</td>
<td>business survey may not identify apprentices and especially unpaid support</td>
</tr>
<tr>
<td>9</td>
<td>age of business; years</td>
<td>business and craft surveys</td>
<td>3 or 5 years</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>average profit of craft businesses</td>
<td>Craft Survey</td>
<td>occasional</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>average income of craft businesses</td>
<td>Craft Survey</td>
<td>occasional</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>average hours worked per week</td>
<td>Craft Survey</td>
<td>occasional</td>
<td>allow for seasonal working</td>
</tr>
<tr>
<td>13</td>
<td>average no of community/trade group membership of craft workers</td>
<td>Craft Survey</td>
<td>occasional</td>
<td>measure of social capital</td>
</tr>
<tr>
<td>14</td>
<td>craft exports ($) as % of all exports</td>
<td>national or UN trade data</td>
<td>monthly</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>craft imports ($) as % of all imports</td>
<td>national or UN trade data</td>
<td>monthly</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>balance of craft trade exports:imports</td>
<td>national or UN trade data</td>
<td>monthly</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>craft exports per worker</td>
<td>national or UN trade data</td>
<td>annual</td>
<td>an indicator of export productivity. Links the two major internationally available data sets of labour and trade.</td>
</tr>
</tbody>
</table>
NOTES;
1) each indicator would require more precise definition in order to turn them into actual data
2) The starting point for definitions of craft should be the international statistical classifications (above all ISCO and HS) and approaches to their refinement (for example cross tabulation by size of business & use of local intelligence) as set out above in section 3 and in the UNESCO Framework for Cultural Statistics 2009

Opportunities for further development

1) Piloting

The project has been able to demonstrate a range of data and indicators which can be produced in the majority of countries, large and small, advanced and least developed. It has proposed a limited set of key indicators which can be derived from such sources.

For many countries, as presented here, these statistics are already available and for some already published. For many countries these statistics could already be published if National Statistics Offices were minded to do so. Craft associations and government agencies around the world should push National Statistics Offices to release this data using the international codes discussed extensively here and already agreed by countries under the UNESCO Framework for Cultural Statistics (2009).

The UNESCO Framework and the formation of the standard set out in this paper form the basis for funding proposals for consistent, high quality, craft surveys. Surveys based on this model should attract development funding because they will meet international standards, and they will provide good data for policy formation in the vital craft sector.

The members of the Alliance for Artisan Enterprise and the various agencies which have been involved in support of this initiative for craft statistics would welcome proposals for such surveys and would consider how to obtain technical support and funding for implementation.

At the national level it will be necessary to engage representatives of at least three different constituencies 1) craft associations or craft producers’ groups, 2) national statistics offices, 3) an appropriate government agency, ministry or other agency responsible for craft policy. The support of an academic body, university or research institute is also helpful to input local knowledge on survey response rates and cultural attitudes.

A key step in this process is the wide circulation of this paper and discussion if its proposals at regional meetings. Adaptation and further development of the detailed proposals is vital to ensure that any survey addresses the particular local circumstances of craft producers. Donors, international bodies, and bilateral aid agencies should build these indicators into their craft/artisan assistance programmes for monitoring and evaluation.

2) Demand assessment

The major part of this paper has been concerned with statistics on craft production. This reflects the major interests of all parties to support and encourage the craft sector. There is also a need to assess the demand for craft, both in the major centres where it is produced and especially in the more
advanced economies of North America and Europe.

Demand for craft in the USA. The main statistics on demand which have been discussed in this paper have been figures for imports. These (Figure xx) have suggested that in the case of precious metal jewellery alone annual imports to the US exceed $5,000 million. NEA surveys in 2002 and 2008 found a consistent 20% of Americans owned an original art work. In 2008 13% of Americans said that they carried out ‘weaving, crocheting, quilting, needlepoint, and sewing’, 9% were involved in ‘painting, drawing, sculpture, and printmaking’, and 6% made ‘pottery, ceramics, jewelry, leatherwork, and metalwork’. These arts creators tended to be over 35 years old, white, and earn over $50,000 a year.\(^{35}\)

Of prime concern is to engage with the ‘Cultural Satellite Accounts’ being produced by the National Endowment for the Arts and the Dept. of Commerce (NEA 2013).\(^{36}\) These have the potential to produce consistent figures on both production and consumption of craft products within the US, the proportion of GDP/GVA attributed to craft, numbers of people employed in craft production and many other important statistics. Furthermore these statistics will embed craft in the US National Accounts, the core set of economic data used for all economic assessments in all government departments, and the data will be released at the state level allowing analysis of the pattern of craft production/consumption across the country.

The cultural satellite accounts explicitly identify the following products for inclusion in the data

‘Musical instruments; china and glass; custom architectural woodwork; lead pencils and art goods; basketwork and wickerwork; custom non-upholstered wood furniture; Christmas tree ornaments’ (NEA 2013; 17)

‘Jewellers and precious stone and metal workers, a specialized type of craft artist, numbered 22,060 in 2012—their average annual earnings were $35,350. Most jewellers and precious stone/metal workers are employed by jewelry, luggage, and leather goods stores (10,700) or by manufacturers of jewelry and silverware (6,930).’ (NEA 2013; 27)

Overall the 2012 accounts\(^{37}\) suggests that in 2011 that domestic manufacturing of cultural products was worth $31,000 million, while imports were worth $18,000 million, exports reached almost $10,000 million, personal consumption of manufactured cultural goods was $17,500 million with total consumption just short of $99,000 million.

The cultural satellite accounts also place great emphasis on designers including of jewellery and fashion. The close relationship with the statistics discussed in this paper will immediately be apparent as US NIACE codes are mapped to those in the international system.\(^{38}\) Thus it will also be possible to compare the national account figures with the data produced under this report for countries around the world.

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\(^{35}\) NEA 2008 Survey of Public Participation in the Arts (2009), pp. 48-53. A further survey was conducted in 2012 but not data on these particular issues has yet been published.

\(^{36}\) Accessed 20 Aug 2014 at http://www.bea.gov/industry/#satellite

\(^{38}\) The accounts avowedly follow the UNESCO Framework for Cultural Statistics 2009
The agencies (NEA, Dept. of Commerce) producing these accounts could present more precise figures on craft if they were made aware of the key codes and definitions used in this report. For example the Santa Fe International Folk Art Market 2013 report spending of $2.7 million. This figure for one festival, on one weekend, could be set against the comparable satellite account figures for New Mexico State, or for craft spending as a whole across the US.

3) Trade agreements and discussions

For the US government policy on craft has two broad thrusts. Firstly domestic policy for the support of US artists and creative as informed by the domestic market, and export potential. Secondly aid policy wherein as set out at the beginning of this report ‘aid’ or craft purchases from developing countries put money directly in the hands of some of the least developed communities. For many of these communities and artisans reaching the US consumer market is a major ambition.

Two specific initiatives in 2015 illustrate the importance of US policy in this regard, and for which statistical evidence has a supporting role.

- **Africa - AGOA.** The advantages of craft as a trade policy are most visible for Africa, which has such a wide range of hand-made products produced by some of the least developed communities in the world. It can be argued that trade in craft aligns well with US policy to aid to supporting local commerce, and moreover tends to support the poorer enterprises often organised as community businesses in rural areas.

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Unfortunately while all African statistical offices could produce regular data on craft production, none do so. This report does on the other hand indicate clearly what data are needed to evaluate craft in African countries as well as how and where that data can be obtained. As a result the best recommendation one could make for AGOA would be that it incorporates a ‘mapping’ and evaluation of small businesses in target countries based on national statistics and direct survey with a view to establishing reliable evidence on which sectors including craft would benefit most from US support.

It might be advantageous to apply the statistical approach to a small group of countries. For example South Africa and Mozambique have already engaged with UNESCO on cultural statistics, while the East African countries (Kenya, Tanzania, and Uganda) have good statistical offices. This proposal is in line with those put forward by the Center for Global Development which suggests that AGOA should support African regional initiatives with harmonised policies. This call seems to have been taken up by the White House at the Summit

‘President Obama has issued a Presidential Memorandum tasking agencies to recommend strategies to coordinate their trade and investment capacity building activities both across the U.S. Government and with a range of partners: African governments, the private sector, regional economic communities, and international partners such as the African Development Bank. The Steering Group will explore options such as supporting African efforts to develop country- and region-specific AGOA export strategies, developing compacts identifying complementary strategies and investments to be made by the AGOA countries, and partnering with companies and trade associations to develop private sector sourcing initiatives.'

It is to be hoped that craft will feature in the strategies emerging from this work, in which case statistics extracted from National Statistics Offices in the region would demonstrate the significance of the sector.

After the African Leaders Summit in August 2014, the White House suggested amongst other policies that

‘To advance these goals, the United States announced commitments to further support women’s participation in peacebuilding activities, increase efforts to help women entrepreneurs launch and expand their businesses, and support parliamentary efforts to promote women’s rights’

In particular President Obama in his Memorandum of 4 August 2014 signalled that with regard to US African initiatives ’it is important to align agencies' efforts and resources through a coordinated approach that is data-driven, goal-oriented, and strategic’ [author’s emphasis]. This paper has

40 http://www.cgdev.org/blog/boosting-us-africa-trade-aint-just-about-access-its-about-competitiveness
identified a set of available statistics to evaluate a crafts policy, which would directly address poverty and empower women entrepreneurs.

- **Asia-Pacific -APEC.** The situation in the Asia-Pacific region is very different from that of Africa. Several countries in the region have advanced economies - Australia, Canada, Chile, China, US, Japan, Korea, and Mexico – just to name those with a direct Pacific coastline. At the same time there are still countries, mostly in SE Asia and the Pacific, which require development assistance.

From the point of view of statistics every national statistics office in the region, with the possible exception of some Pacific islands, produces high quality statistics. For both Asia and Latin America the figures included in this paper approach a complete picture. The figures presented here are however still broad-based estimates which can be much refined (as indeed the author has done in Thailand).

It is particularly significant that next year’s APEC meeting will be in the Philippines. The Philippines is the Asian country which is in many ways closest in culture to the US, an open society with a large English speaking population. Economically the Philippines major concern has been that its growth is lagging other SE Asian countries. Philippines is culturally diverse with a well-developed craft sector (e.g. Kultura [http://kulturafilipino.com](http://kulturafilipino.com)). It also has excellent statistics driven by the National Statistics Office and the National Statistical Co-ordination Council. The APEC meeting in Manila would be an excellent opportunity to present a statistical summary of craft in the Philippines based on the principles of this paper.

There are also several strong regional organisations involved in the APEC group which should be approached with regard to the economic and cultural importance of craft

**Asia**

- Asian Development Bank; concerned with craft as an important element of competitiveness
- ASEAN; moving towards and economic union in 2016, cultural exchange is likely to play an important role. There are several geographic disputes concerning the origin of cultural products such as batik, shadow puppets, ceramics etc. Responsibility for culture in ASEAN rests with the Education section, suggesting as in the case of NSOs, a lack of appreciation of its economic impact and vital role in competitiveness

**Latin America**

- Organisation of American States; OAS has had a strong interest in cultural policy and statistics and are likely to be open to renewed arguments about craft as an important element of competitiveness
- Inter American Development Bank; has partnered with OAS on cultural products. Craft statistics would be an important index of competitiveness and an essential part of evaluating assistance programmes
- Conveno Andres Bello; Hispanic regional agency based in Bogota. Is a strong advocate of
cultural statistics and has pioneered work in cultural satellite accounts

The common approach to all these organisations is to stress that craft is an important element of competitiveness, and that this can already be demonstrated using official statistics, if states are willing to adopt the approach outlined in this paper. The regional development banks in particular have a strong incentive to use statistics for priority setting and evaluation of assistance.

4) Further statistical development

The most vital requirement here is to publicise this report to make crafts people, national agencies, and aid bodies aware that craft statistics already exist in every country in the world. Agencies should demand of NSOs that the data set out in this report be made public, since this data was collected for this purpose by the state statistical agency using public money.

The publication of statistical data on craft would lead, as in any other domain of measurement, to further questions about definitions and methodologies e.g. “Just how good is this data?” Raising public discussion leads to improvement in the data and allocation of greater resources to NSOs.

Key to progress on this report as custodians of the international statistical standards are

- The UN Statistical Commission
- UNESCO
- The International Labour Organisation (ILO)
- UNCTAD

It is hoped that the provisions of this report will inform international meetings on statistical standards and form the basis for adopting a new formal statistical standard for craft.

5) Recommendations to the Alliance for Artisan Enterprise

This paper has demonstrated that statistics on craft do exist, but they need to be obtained through approaches to National Statistics Offices, with the support of national agencies and associations of craft producers. It has also suggested that such statistics can be used to prove that craft

- is a vital element of competitiveness that should be supported and the economic impact can be measured
- can contribute to poverty alleviation, and that the extent of this can be measured
- surveys should be benchmarked against national statistics to place community studies in a national perspective, so that the social and economic significance of these communities can be assessed, allowing prioritisation of assistance
- surveys are vital in prioritising assistance to crafts people in terms of training and finance, giving them a voice to express their needs
- national statistics and surveys from their different perspective provide essential tools for evaluating assistance projects
It is therefore suggested that all assistance programmes conducted by the Alliance should contain an element of statistical validation allowing the recognition of the role of craft in every country. The list of key indicators presented above in Table 3 provide the basic framework for a request form the NSO. This can be undertaken with next to no additional resources since in every country in the world the data already exist inside National Statistics Offices. Such assessments may then be used where appropriate as the basis for a dedicated craft survey to provide direct information of the needs of craft producers, which can clearly be set within the national strategy.

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Peru – survey of craft in Huancayo province

http://sisbib.unmsm.edu.pe/bibvirtualdata/tesis/Empre/ricaldi_hr/Anex.PDF

Bogota, Colombia – Encuesta Aryesanos de Bogota 2011

6. APPENDIX: DATA TABLES

1. Craft Surveys
2. Employment
3. Exports
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**Notes:**
- Relevant Networks: Networks that are relevant to the project/initiative.
- Relevant Capabilities: Capabilities needed for the project/initiative.
- Relevant Access: Access to resources or markets for the project/initiative.
- Relevant Brochures: Brochures related to the project/initiative.
- Relevant Reputation: Reputation associated with the project/initiative.
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This refers to the way in which the Code 7 or Total employment figure has been ‘modified’ to produce an estimate for craft employment. It consists of either a reference to a study which produced the estimate, or if a number it represents ‘non-craft’ employment (e.g. construction) deducted from the code 7 total to give the estimate.

Simon Ellis
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<th>Unemployed</th>
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SOURCE: national labour force surveys, or specific studies as detailed in Section 3

7. **Craft and related trades workers**

‘Craft and related trades workers apply specific knowledge and skills in the fields to construct and maintain buildings, form metal, erect metal structures, set machine tools, or make, fit, maintain and repair machinery, equipment or tools, carry out printing work produce or process foodstuffs, textiles, or wooden, metal and other articles, including handicraft goods.’

71 - construction. Traditional construction seen as ‘craft' in Bhutan and elsewhere??

72 - metal, machinery and related trades. Some metal workers could be craft workers, e.g. traditional blacksmiths

73 - handicraft and printing. **Main code for craft not often published.**

74 - electrical and electronics trades NOT craft

75 - food processing, wood working, garment and other craft and related trades
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SOURCE: comtrade.un.org