

# Crafting Culture

*Final report*

Arjo Klamer  
Priyateja Kotipalli  
Lili Jiang  
Thora Fjeldsted  
Kazuko Goto  
Anna Mignosa

Rotterdam, 23 April 2013

## **Crafting culture (de cultuur van de ambachtseconomie)**

How well are the crafts doing in the Netherlands in a comparison with other countries? Is it possible to learn from other countries?

This is the question that the Hoofdbedrijfschap Ambachten posed to us. And so we set to work to chart practices, policies, institutions and economies concerning the utilitarian crafts in China, India, Germany and Italy. Our objective was to draw lessons for the Dutch. Can the Dutch benefit from practices in these countries? Are there best practices that the Dutch can emulate.

We, the researchers, are a team of cultural economists at the Erasmus university. The team consists of Priyatej Kotipalli (from India), Lili Jiang (from China), Dr. Anna Mignosa (from Italy) Prof. Dr. Kazuko Goto (from Japan) and Thora Fjeldsted (from Iceland) and is headed by Arjo Klamer, professor of cultural economics. We were fortunate to have such an international group of researchers, most of whom are from the countries that are included in our research.

Around the same time that het Hoofdbedrijfsschap Ambachten posed the question to us, we got an assignment from the “SGVB” to investigate the creative crafts in various countries. We were anticipating that the research into the utilitarian crafts would benefit from this research and vice versa. It did.

The research has been an illuminating exercise. The territory is relatively unexplored and in our search for information and relevant literature we hit upon interesting research topics (such as definitional issues, the importance of a craft culture for the creative economy, the ways in which such a culture comes about—can it be managed, or not?). The more we delved into the topic, the more convinced we got about the relevance.

We presented our findings at the international conference of cultural economics in Kyoto in June 2012.

This report focuses on the utilitarian crafts, yet will include some of our findings concerning the creative crafts.

## Overall vision

We are writing this report with a particular vision on the future in mind. This vision is percolating in a great variety of writings in the popular media as well as in academia. The vision is contested, we should add.

We foresee an economy that will increasingly revolve around on quality, rather than quantity. People will expect more and more of the quality of products, of living conditions, of work and of organizations.

Nowadays, the emphasis is still on quantities, on income earned, profit generated, economic growth, number of jobs. The tendency is to value activities mainly for their contribution to financial income and economic growth. That is why policy makers are interested in the economic impact of a sector like the crafts. The criterion is then how much the sector contributes to overall economic performance.

When the quality of products and of work begins to count, other measurements are called for. As quality most likely cannot be measured by way of monetization somehow, we are in need of quality indicators. A rough approximation is the charting of best practices.

We expect an increasingly important role for the crafts. The crafts, after all, stand for the skillful making of things. And they stand for quality of work.

*Case: Interesting in this respect is the project of philosopher Henk Oosterling in Rotterdam-Zuid. The project is called Rotterdam Vakmanstad/Skillcity. It involves a program for kids in a difficult neighbourhood who are taught judo, cooking, philosophizing and a craft. The main objective is to teach these kids to be self/conscious, awareness of their environment and to give them an identity: when they learned roofworking they can call themselves a roofworker, when they learned plumbing, they can call themselves a plumber, and so forth.*

*Signs: The ongoing reevaluation of utilitarian crafts is signaled by a great variety of signs. Important has been the publication of the book *The Craftsman* by the British sociologist Richard Sennett. This book called attention to the particular characteristics of the craft work and its importance for current society. Researchers began to recognize the limitations of a one-sided attention for information and knowledge—as if we are living a*

*knowledge economy. Governments and governmental organization such as UNESCO are developing interest in skilled work in general and the crafts in particular.*

*And while working on this research we noticed how more often people in all kinds of settings speak of craftsmanship or skilled work. In the Netherlands the secretary of education has introduced 'vakmanschap' (skilled work) as a new focal point of professional education.*

*And although we are working in commission for Hoofdbedrijfsschap Ambachten, we would be unfair if we did not mention the attention that the platform ambachtseconomie has been receiving in the Dutch media.*

Attention for the crafts brings about attention for skills. The last few decades cognitive skills got most appreciation. Kids learned that if they had the talent, they should pursue a professional (HBO) or scientific (WO) education. They learned that cognitive work was best remunerated of all kinds of work. Working with the hands was something for people who could not work well with their mind.

This one-sided emphasis on cognitive skills is about to change. The realization is setting in that skilled handwork is critical for the quality of everyday life. Skillful housepainters, plumbers, dental technicians, carpenters, furniture makers, shoemakers make essential contributions to the quality of life.

In this reevaluation awareness is growing how pervasive the role of skilled work with the hands is in every day life. After all, when we climb in the chair of the dentist or on the bed in the surgery room we surrender out fate to the hands of very skilled workers. Dentists and surgeons may have received an academic training but they are craftspeople just as plumbers and carpenters are in the sense that they do highly skilled handwork. Musicians are skilled hand workers as well.

It is time to reevaluate skills (vakmanschap) and in particular skilled handwork, that is, utilitarian craftsmanship. It is a matter not just of economic sense but also of the overall culture as it is about valuing quality.

The research:

After doing desk research, surveying the available literature, we investigated for each country in our sample the following:

- 1) the definition of utilitarian crafts and the data that are gathered based on that definition
- 2) the educational practices

- 3) the organization of the craftworld, with special attention for the institutions that support craftspeople.
- 4) The policies with respect to the utilitarian crafts
- 5) Characteristics of the overall craft culture in each country

We were not able to accomplish all our objectives. The statistics for utilitarian crafts proved to be inadequate for several countries and the definitions varied too much to make sensible comparisons feasible.

Another reservation is that practices in countries such as India and China are changing drastically because the industrialization and rapid economic development underway. It is hard to say how the utilitarian crafts will end up in this process. (We distinguish awareness on the part of Chinese authorities to recognize the importance of utilitarian crafts, however, and with that the determination to prevent the neglect of this sector in most western countries).

And when we realized we had to compare the craft cultures of our countries, we ran into the limitations of our research project. Although we were able to do research in each of the countries, by visiting them or by having members present in Japan and Italy, such a comparison requires a great deal more research than we were able to do.

For the sake of clarity and efficiency we first share our main findings and conclusions.

Then we develop ideal scenarios for different aspects of the utilitarian crafts to stimulate the thinking about best practices. We base these scenarios on what we have found in the Netherlands and the countries we investigated.

We then present the main findings for each of the countries in accordance with the above mentioned topics.

The separate country reports, a report of our research, relevant literature and our cv's are in the appendix.

## Summary of our findings:

Based on the individual reports on the various countries, our information on the situation of the utilitarian crafts in the Netherlands, and insights from cultural economics, we offer the following conclusions:

1. We expect the utilitarian crafts to play an increasingly important role in the economy of the future. They will do so because they meet the growing demand for quality, creativity and authenticity. They also provide the opportunity to talented people to develop and exercise a skill. Being good at something is a big motivator (see for example Daniel H. Pink, Drive, 2009)
2. The development of the utilitarian crafts in the Netherlands, however, is seriously inhibited by a lack of resources, neglect in the educational system, infrastructure, and most importantly an underdeveloped utilitarian craft culture.
3. Although the expectation was that we would be able to deliver numbers on the economic significance of the utilitarian craft sectors in various countries, we concluded that
  - a. definitions across countries vary too much to allow for meaningful comparisons
  - b. statistics in various countries are deficient
  - c. the absolute numbers are not very meaningful.
4. To do justice to practices concerning the utilitarian crafts it is important to look beyond the conditions of supply (the infrastructure, education and policies) and to look beyond the economics in a strict sense. We propose to consider the notion of **the craft culture** in general and the **utilitarian craft culture** in particular.
5. With the notion of the utilitarian craft culture we want to point at the values that express appreciation for utilitarian work, quality, craftsmanship and the like. A vital utilitarian crafts culture, as we encountered for example in Italy and especially Germany, includes interest by young people to aspire working in the utilitarian crafts, the status of utilitarian craftspeople, conversations about the work of utilitarian craftspeople

(expressed in publications, a community of critics and the like), the existence of a distinctive taste among consumers, and keen interest in the products of utilitarian crafts.

6. Even though the Netherlands has a significant number of utilitarian crafts people, they lack the prominence and status that they would have in a more vital and dynamic craft culture, as we perceive to exist in Germany and Italy.
7. The development of a utilitarian craft culture will not only provide more opportunities for talents but will add to the quality of life.
8. We think that the Netherlands would stand to benefit from a significant investment in its craft culture in general and its utilitarian craft culture in particular.
9. The Dutch can learn in particular from the utilitarian craft culture that we found in Germany. The utilitarian craftspeople in Germany operate in a supportive environment (as shows in the great appreciation of the skills needed to make things) and have a significant social status. The effectiveness of this model seems to be proved by the fact that it has been partially replicated in some Italian areas in order to boost and support utilitarian crafts whereas normally the focus of most policies is on artistic and traditional craft.
10. Italy provides interesting examples of how the associations and the institutions responsible for craft can play an important role in boosting the sector stimulating its development and evolution. It has to be noted that the best projects, in terms of effects, are those that involve both the public and the private sector.
11. Measures to bolster the utilitarian craft culture usually aim at the supply side, and in particular at the educational policies. Such a focus is understandable, but we think more effort is needed to strengthen the appreciation of the utilitarian arts, a public awareness of its qualities and of its price. The Netherlands is badly in need of a class of people with a distinctive taste. As good as the Dutch are in assessing the qualities of cars, wines, and vacations, as good they need to get in appreciating beautiful and well crafted things.

We have detected a strong and growing interest in different societies for craftsmanship. Let the rising tide raise all boats. Clearly defining the values of craftsmen/craftsmanship and creating a framework signified with a visual representation and used by qualified craftsmen would enable the population to participate in and hamper these values. Bridges between maker and user of this kind that might inspire are the Slow Movement, the Cradle-to-Cradle framework and the auteuristic (but important for film-making)

----Dogme95, manifesto

12. The definition of utilitarian craftspeople that we use here, implies a wider scope of professions to be counted. Dentists, surgeons and musicians are craftspeople just as carpenters and dental technicians are. New crafts come along with new techniques and new practices. Recognition of new crafts may contribute to the reputation of the crafts.
13. What would help is a more entrepreneurial attitude in the world of the utilitarian crafts. They need to be more attuned to what others are able to appreciate and to be able to educate the public about quality, design and creativity. Italy provides good examples in Trentino where the master title since 2003 can be given to utilitarian craftsmen.
14. The creative economy is an attention economy, implying that drawing attention to the values that one generates, is a major challenge. How will utilitarian crafts people attract attention to their work? How do they counter the taste formation that commercial enterprises stimulate and foster an appreciation for creative and authentic products? Craftspeople have to come with a better story about themselves and about their work.
15. The attribution of a quality indicator is a fundamental step for boosting the sector. Clearly defining the values of craftsmen/craftsmanship and creating a quality framework signified with a visual representation would enable the population to participate in and hamper these values. Internationally, the “Slow Movement” and “Cradle-to-Cradle Framework” can serve as examples.

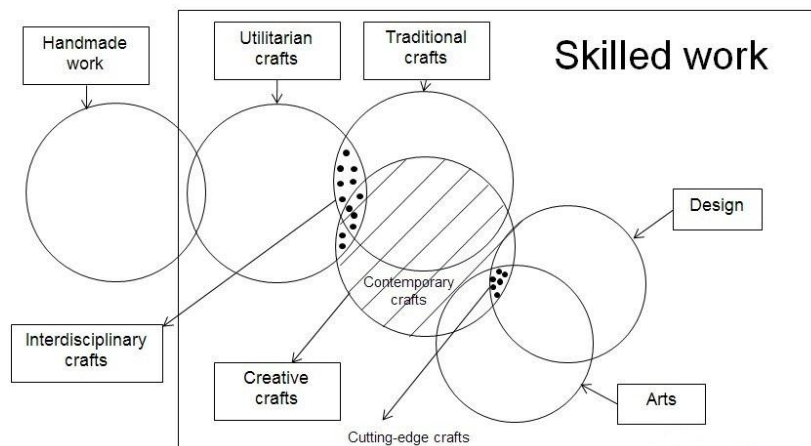
16. Utilitarian crafts people and their supporters stand to benefit when they are able to tell their story well (as some already clearly do), and are able to seduce others to share in their creative energies and appreciation of beautiful things.
17. Improvement in the organization of utilitarian craftspeople is necessary to a) organize attention for utilitarian crafts, b) develop internal control of quality, c) generate a system of support for utilitarian craftspeople, d) manage procedures for the awarding of master titles.
18. Extension of the master title to a wide variety of disciplines in the utilitarian crafts. The master title will help to a) promote a sense of quality, b) promote appreciation for the utilitarian crafts, c) generate attention, d) stimulates the sharing of skills and knowledge.
19. Candidates for the master title should have at least the following qualifications: a) highly skilled, b) utilitarian, c) entrepreneurial, d) good in presenting the work, e) ability to share the skills and the knowledge with apprentices.

### **The ideal situation**

When we compare practices in utilitarian craftsmanship across various countries, it is useful to do so with an ideal in mind. We present, therefore, first an ideal frame for the utilitarian crafts before showing how the practices of the different country compare. We then will point out best practices, as well as bad examples.

We developed the ideal frame in hindsight, that is, after we examined practices in the various countries. So there is some circularity in our method. Even so, our purpose is a practical one. With the ideal more or less clear, and with well stated best practices, it is easier to determine what policy to follow, what the goals are, and what to do. And we may elicit a discussion about the ideal, for that would be constructive as well.

## Definitions and statistics: the utilitarian crafts versus other crafts and skills



**Figure 1** the definition of utilitarian crafts versus other crafts and skills

Ideally, the definition of the craft and craftsmanship is clear and corresponds with the data gathering. Ideally, the following definitions apply **[Figure 1]**.

**Skilled work** is all the work that requires one or more skills the mastery of which requires training and practice.

*Clarification: Skilled work is the most comprising category (although in some countries its meaning is restricted to hand workers). It includes teachers, managers, carpenters, plumbers, dentists, civil servants, architects. Skilled workers include so-called professionals. The Dutch speak of "vakmanschap". The idea is that there are professions that require training before people can practice in them. You need to train, study, go to school before you can call yourself a teacher, or a manager, or civil servant. Each profession has special characteristics, and requires distinctive skills. Teacher need to be on top of the material they teach, and they need pedagogical skills. They need to know how to convey what they know, and preferably be inspiring and emphatic as well.*

**Craftsmanship** involves the skilled working with the hands to create something of use for a purpose where the skills require training and usually continuous practice.

*Clarification: the working with hands is critical. Carpenters, dentists, and quite a few artists qualify. Whether webdesigners qualify is up for discussion. Being skilled is*

*important as well. Not everyone working with the hands count as a craftsman. Someone painting a room in the house, could call himself a housepainter but a craftsman he is not as he lacks the training and the continuous practice. Teachers may be skilled in their work, and may continuously practice teaching, but they are no craftspeople either as the working with their hands is not critical for what they are good at. A musician should count as he or she works with hands or other parts of the body, are highly skilled, and practice continuously. They create music for others to 'enjoy'. Dentists and surgeons are, according to this definition, craftsmen as well: they are highly skilled and they need to practice continuously with their hands in order to maintain their skill*

**Handworkers:** includes all workers who work mainly with their hands.

*Clarification: these workers consist of skilled and unskilled workers. Picking grapes and harvesting mushrooms constitute unskilled work as such work does not require much training.*

**Utilitarian craftspeople:** these people do work that meet the definition of craftsmanship, with the qualification that their work serves a concrete use that has a purpose other than the use itself.

*Clarification: Critical is the addition: "serves a concrete use". This is clear for plumbers, roofworkers, and dental technicians. There will be plenty of contestable cases. A ceramic teapot can be put to use to serve tea; it can also be put on display for its design qualities. In the latter case the making of the teapot should be counted as creative craftsmanship.*

**Traditional craftspeople:** these people are craftspeople who are making things that in their context are considered traditional.

*Clarification: Craftsmanship usually evokes this group of people. In reality they constitute only a subset of the set of craftspeople. In the Netherlands these include people painting "Delft's blue", and classical musicians. They partly overlap with utilitarian craftspeople but are distinct for basing their work on traditional skills and practices.*

**Creative craftspeople:** these people are craftspeople who are making unique object, each with a distinctive quality and expressing the creativity of the maker.

*Clarification: the creativity is critical and distinguishes this group from the traditional and utilitarian craftspeople. Creative craftspeople work with their hand and are directly involved in the production of the products that they design. In that respect they are different from designers (who usually leave the execution to other craftspeople).*

*The work can be used (like hats, bags, cups and the like); often it serves as decoration, or is put on display.*

*The distinction with artists is not always clear. Some creative craftspeople have their work presented in arts galleries and art musea.*

*Likewise the distinction with cutting edge craftspeople is blurry.*

**Cutting edge crafts people** are crafts people who are exploring new territory, developing new practices, and shaping a new genre of craft products.<sup>1</sup>

*Clarification: we see need for this group because of developments in technology and the emergence of new markets. In particular digital technology creates new opportunities. In addition we perceive craftspeople doing things that would qualify them as artists or designers.*

**The world of design** includes graphic designers, architects and industrial designers.

*Clarification: designers are skilled people as they need training and continuous practice to be good at what they are doing. They usually design and leave the making of things to others. This world overlaps with creative crafts as creative craftspeople design as well. The difference is that creative crafts people generally are working with their hand to make the things that they design.*

**The world of the arts** includes all kinds of artists, such as visual artists, sculptors, writers, moviemakers, performance artists and digital artists.

*Clarification: The difficult question is what qualifies as art and who, therefore, qualifies as artist. Some creative craftspeople may want to be considered as artists, and so do some designers. Our solution is to consider anyone an artist who is considered as such in the conversations that are called arts. The key, therefore, is to be part of the artistic conversation. You are not when you claim to be so yourself, but when other artists, critics, curators of museums or collectors take you seriously as an artist.*

---

<sup>1</sup> Consuming Craft: The Contemporary Craft Market in a Changing Economy, Crafts Council and Morris Hargreaves McIntyre (2010)

Ideally, data gathering occurs in accordance with these definitions.

### **The ideal education**

Ideally, the education in utilitarian crafts involves excellent utilitarian crafts people sharing their knowledge and skills with apprentices. The mastering of certain skills requires years (see Sennett) and needs the supervision of a master.

Apprentices need to study usual subjects (such as material, techniques), but also need to learn about the social, cultural, and economic context of their future work. In addition they need to learn about running a small business, and about cultural entrepreneurship (how to deal with clients, how to make use of social media, how to tell your story, how to price the work and so on.)

The educational system ideally provides the institutions that awards titles, such as the master title, to promote and sustain quality

### **Master title**

Utilitarian crafts are about quality. In principle only those intimately involved in the process of crafting can judge quality. In the ideal world customers will trust the quality of craftsproducts when the quality is guaranteed.

One sign of quality is the awarding of the master title for the very best utilitarian craft people in every discipline.

A master title should be preserved to those utilitarian craftspeople who are

- a) highly skilled as judged by their peers
- b) innovative (proven ability to work on the cutting edge) as judged by their peers
- c) highly capable in promoting his or own work in particular and the utilitarian crafts in general
- d) competent in sharing his or her knowledge and skills with apprentices.

The master title is awarded for a limited number of years. A year before expiration the master has to demonstrate that he or she still meets the criteria.

The guild in a modern form is responsible for the awarding of master title.

## **Ideal organizations**

In order to guard quality, organize support groups, protect the interests nationally and internationally, to maintain international contacts, to organize fairs and the like, and to provide information and knowledge about utilitarian crafts, the world of the utilitarian crafts is organized in the form of modern guilds.

These guilds are ran by the craftspeople themselves, with the assistance of professionals in marketing, promotion, finance, international contacts, organization of fairs and other events.

To prevent a rigid insider's culture—the main objection against the old-fashioned guilds, the modern guilds have a board of trustees that includes prominent outsiders. This board has the explicit task to monitor the openness and innovativeness of the organization.

The ideal utilitarian crafts culture

A utilitarian crafts culture comprises all the shared values, experiences, stories, traditions, skills, knowledge, and institutions that are characteristic for the world of the utilitarian crafts.

A strong and vital utilitarian crafts culture has the following characteristics

On the supply side

- Young people view the utilitarian crafts as a career worth striving for
- Strong traditions of apprenticeship
- A strong sense of tradition,
- Recognition of the masters; fair and effective
- A strong sense of collegiality among utilitarian craftspeople
- A spirit of creativity and innovativeness
- A strong appreciation of entrepreneurship
- A clear sense of mission (promoting and sustaining quality, contributing to a joyful and inspiring life)
- Core values clearly expressed in daily practice of craftspeople (commitment to skill and quality, innovation, collegiality and so on)

On the demand side

- an active and interested community of stakeholders

- a well developed distinctive taste for and appreciation of utilitarian quality (usually implying the existence of an elite in the sense of people who are intimately acquainted with the world of utilitarian crafts)
- willingness to pay
- Significant local demand as well as international interest (where international buyers do not crowd out local buyers)

## **Ideal policies**

The most important contribution that governments can make is to stimulate a utilitarian craft culture. Local governments can show their pride with the presence of master craftspeople in town, by giving opportunities to show the work and by commissioning work for their own use. The national government can organize, and provide support for, the education of utilitarian crafts from early age on (including classes in elementary and higher education with the idea that students benefit from exploring their talents for working with their hands).

## **Best Practices**

In the countries we found the following best practices:

## **Definitions and data gathering**

In Germany, the data on utilitarian crafts, on all levels of organization – with the chambers, guilds and German Confederation of Skilled Crafts – are comprehensive and readily available. Research is regularly commissioned and carried out by various experts and at the Volkswirtschaftliches Institut for Mittelstand und Handwerk an der Universität Göttingen which focuses on issues related to crafts.

In Italy, it is not an easy task to assess the weight of this sector for the Italian and/or regional economy.<sup>2</sup> There are several interesting studies (The European House-Ambrosetti S.p.A., 2010; Centro Studi CNA, 2008; Istituto Tagliacarne, 2007) that face a main common difficulty: the

---

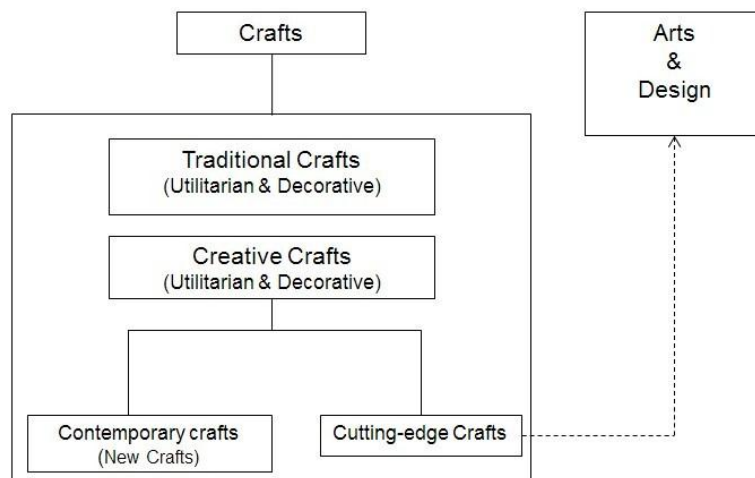
<sup>2</sup> According to a study of the Centro Studi of the *Confederazione Nazionale dell'Artigianato e della Piccola e Media Impresa* (CNA - National Confederation of the Craft Sector and Small and Medium Enterprises - 2008), in Italy in 2007 there were 1.3 million craft enterprises (28,5% of the total national number) with c.a. 3.3 millions of employees (18,8% of the national total). Most of these were micro enterprises: 96,2% had less than 10 employees. The differences between the data in this report and the data about 2010 reported at the beginning are quite astonishing. It looks as if between 2007 and 2010 the number of craft enterprises diminished by half. This drop might simply be due to the different counting system used. The difference between these reports, done by institutions with responsibilities for craft enterprises (see below), confirms the main difficulty for the sector, i.e. the lack of a clear definition and thus the difficulty in identifying the companies belonging to it.

identification of the craft sector. As a matter of fact, the law (no. 443 of 1985) providing the legal definition of craft refers to the companies' dimension. It does not mention the field of activity except for 'Artistic and traditional works and clothes', 'transportation' and 'construction': these sectors are explicitly indicated as specific rules apply as far as their dimension is concerned. As a result some confusion might rise as a wide array of activities is included within the craft domain: from artistic craft (pottery, glass, fashion, etc.) to food, health care, construction, transportation, etc.

In India, utilitarian crafts provides for the required skilled man power for India. The sector is fragmented this makes it hard to get the accurate economic contribution of the sector. The majority of the craftspeople are employed under the Micro, Small, and Medium enterprises. This sector provides for 40 % of total production, 95 % of industrial units and 34% of exports and produces about 6000 products in the manufacturing sector alone. It provides for the largest source of employment after agriculture in the country with a focus on indigenous knowledge, cultural wisdom, dexterous hands and entrepreneurial skills. The training of the crafts people within this sector occurs in the informal (unorganised) sector which amounts to about 93 % of the skilled workers in the sector. Attempts are being made to bring them under a formal and regulated qualification. By and large, skill formation takes place through informal channels like family occupations, and on- the- job training under master craftsmen, craftspeople with no linkages links to the formal education training and certification. Training needs in this sector are highly diverse and involve multiple skills multi skill-oriented. Many efforts for imparting to training through Swarnjayanti Gram Swarojgar Yojana (SGSY), PMRY, KVIC, Krishi Vigyan Kendra (KVK) and Jan Shiksha Sansthan (JSS) are in place but the outcome is not encouraging. The Craftsmen training scheme under the DGE&T, which runs under the umbrella of Ministry of labour, government of India. The DGE&T delivers the CTS program through Industrial Training Institutes.

In China: In Germany, Italy and India, plumber, digger and roof workers are craftsmen, and their works also are utilitarian crafts. In contrast, 'crafts' has the different interpretation in China: 'utilitarian' won't be singled out to special crafts in category list. In China, they prefer to consider 'crafts' should have two kinds of attributes: utilitarian and decorative. Crafts are necessities for human life, the applied function as important part in here. Craftsmen use their knowledge and ability to solve problems, and then create kinds of subjects which for satisfying physical and emotional requirements of consumers. Utilitarian attribute for consumers should play certain practical roles for the life of human, which attribute can build an intimate relationship between crafts and consumers. Decorative attribute also can satisfy spiritual needs

of consumer, people always use eyes and heart to feeling this decorative beauty of crafts. Crafts with utilitarian and decorative attributes have well documented and charted in China.



**Figure 2:** The diagram of Chinese crafts

## Education

In China, educational system is divided into two distinct educational systems (school-based vocational education; pre-employment training and on the job training education). It insists three principles (to training craftsmen through multi-channel and multi-level methods; to combining academic education and practical creation; to keeping ‘creativity’ as the core of the development of creative crafts). In the education of crafts with utilitarian and decorative attributes, it exist three social relationships (stranger-to-stranger in school; master-to-prentice in workshop; father-to-son in family).

In Germany, the strength of the vocational education system is a clear example of best practices in the crafts. The first part of the education, the apprenticeship, takes place as work at a crafts firm while the apprentices also attend theoretical classes for part of each week. This way the apprentices have a hands-on immersion in their craft from day one. After three to three and half years apprentices graduate as journeymen and many work as such for a number of years before entering the master-educational programs.

The availability of apprenticeships is maintained by an interdependent network engaged in a virtuous cycle – the apprentices gain their education and experience while the companies are enabled to transmit skills and knowledge and have access to labor at a somewhat cheaper cost than otherwise. The outcome is the successful maintenance of skill, in such proportions, in fact, that industry also has access to highly skilled labor.

During the master-education craftsmen are thoroughly schooled in all the practical aspects of running an enterprise. Management and accounting feature along with theoretical lessons. A key goal in the education is *Selbstverwaltung* – self-management or autonomy. This enables the craftsmen a firm grip on running enterprises after completion of master-studies.

Up-to-date information on educational issues is readily available at the website of the Federal Institute for Vocational Education and Training (BIBB) at <http://www.bibb.de/en/>.

In Italy, the job market is characterized by a twofold dynamic: on the one hand there is a high rate of unemployment (29% of youth between 15 and 24 years old was unemployed in 2010, ISTAT, 2011) and on the other hand enterprises cannot find specific professional figures who are totally missing. According to a research of CNA research office, most craft companies in Italy have difficulties in finding employees and feel there is a huge gap between their theoretical and practical skills. The “most wanted” professionals were woodworkers, painters, hairdressers and beauty consultants, car repairers, smiths, industrial machineries mechanics, carpenters, electricians (Unioncamere, 2011).

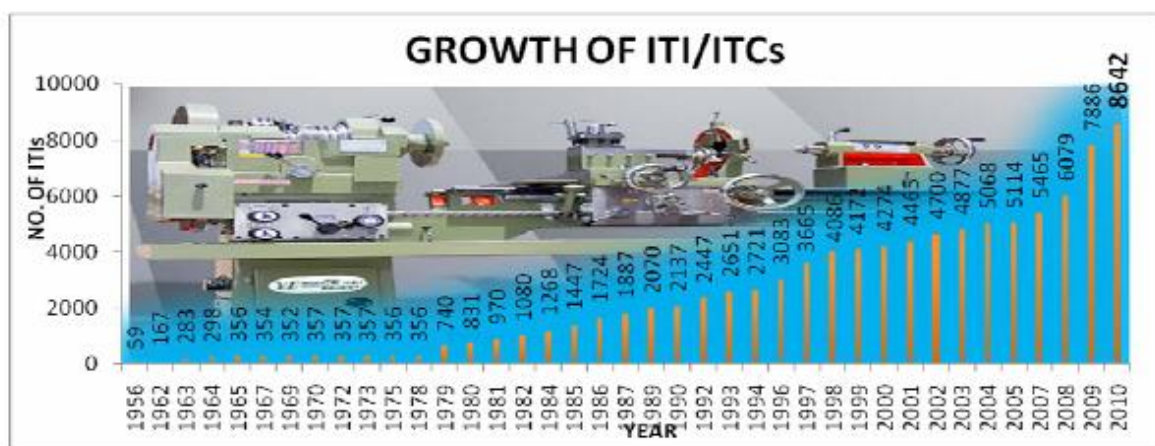
The analysis of these characteristics led to the reorganization of the Italian system of education at the high school level especially as for technical schools, i.e. the schools that prepare craftsmen for their future activity. The aim is that of providing a five years education that takes into account both theoretical and practical aspects and that should give easy access to the job market satisfying, actually, anticipating its needs. After these five years of course, students can decide whether to directly start to work or continue to study for two or three years in a Superior Technical Institute. Talking with people who are now in their third year of studies it seems that the new model does provide a more comprehensive education next to the possibility to start internships in order to improve the practical skills through practice. Schools interact with craft enterprises in order to find internship for students. Then, depending on the personal capacities of the students they can get a job within the enterprise where they did their internship. Because of the decentralization of authority on craft matters to the regions the actual implementation of this educational system varies a lot from one region to the other.

Next to formal education, the law regulates *apprenticeship contract*, a special type of contract including education next to the normal work relationship between the employer and the employees. The former must guarantee the upgrading of education of the apprentice so that the latter can increase his/her professional skills. The apprentice, in turn, must follow the courses organized within and outside the company. In fact, craft companies are in favor of apprenticeship contracts for they allow the combination of practice and education. In fact, in some cases, new staff enters through apprenticeship contracts (14% of the total), which are meant to further train the staff (Unioncamere, 2011). At present (February 2012), in the

attempt of the government to reorganize the work sector in Italy, the Minister of Work affirmed that apprenticeship contracts constitute a formidable challenge to be taken up. However, when talking to craftsmen, especially the owners of one-person companies, they point at the fact that this type of contract is often too expensive for them so that they cannot afford to get apprentices and their skills will die with them. Acknowledging this problem the Ministry of Employment introduced a specific program 'AMVA' (apprenticeship and jobs in the craft sector) that puts forward 120 million Euro to allow companies to hire at least 16.000 apprentices and to support young people who decide to start a craft company.

In general, however, a problem of the craft sector in Italy is that lifelong learning is not as developed as in other European countries. A report of CNA (2011) highlights the positive relationship existing between lifelong learning and employment as well as the scarce diffusion of lifelong learning in Italy where, on the contrary, all possible measures to stimulate employment would be necessary.

In India, it mainly has *Craftsmen Training Scheme* in educational part. The DGE&T initiated the Craftsmen Training Scheme (CTS) in 1950 by establishing about 50 Industrial Training Institutes (ITIs) for imparting skills in various vocational trades to meet the skilled manpower requirements for technological and industrial growth of the country. The second major phase of ITIs came with the oil-boom in West-Asia and export of skilled manpower to that region. Several new private ITIs were established in the 1980s in southern states, mostly Kerala, Karnataka and Andhra Pradesh, which placed trained craftspeople mainly in the Gulf countries. From 831 ITIs in 1980, there were 1,887 in 1987. During the 1990s, the growth of ITIs was steep and now there are over 8,687 (2189 governmental, 6498 private) with a capacity of 12.14 lakh. The graph below shows the distribution of ITIs and their growth over the last four decades.



Source Ministry of Labour and employment Annual Report 2010

The development of training schemes at the national level, evolution of policy, training standards and procedures, and conducting trade tests and certification are responsibilities of the central government, whereas the implementation of training schemes largely rests with the state. The central government is advised by the National Council of Vocational Training (NCVT), a tripartite body having representatives from employers, workers and government. Similar councils known as State Councils for Vocational Training (SCVT) are constituted for the same purpose by the respective state governments at state levels.

There have some Salient Features of the Scheme

- Training is given in 63 engineering and 53 non-engineering trades (Annex 1).
- The period of training for various trades varies from one to three years and the entry qualification varies from 8<sup>th</sup> to 12<sup>th</sup> class, depending on the requirements of the trades.
- About 70% of the training period is allotted to practical training and the rest to subjects relating to theory, workshop calculation and science, engineering drawing, social studies, environmental science, and family welfare.
- Training in government ITIs is generally free. There is a provision to grant stipends and workshop uniforms to all trainees. They are also provided with library, sports, and health facilities. Some state governments levy a nominal fee.
- Seats are reserved for candidates in proportion to the population in their respective states. Guidelines for reserving 3% of the seats for the disabled and 25% for women have been issued to State Governments and could be filled based on the general reservation policy of each state. Seats are also reserved for the wards of defense personnel.
- Broad-based modular training is offered in four Central Model Industrial Training Institutes (MITIs). This pattern of training has the advantage of re-orienting the training modules according to the changing skill requirements of labor and industry.

## **Master title**

In China, there has the extremely orderly and organizational 'Master title' selection system. They put forward the 'Master title' in different levels (national-level; provincial-level; municipal-level).

For national-level title, according to *Regulations on the Protection of Traditional Crafts and Arts*, craftsman should meet certain quality characteristics and also has engaged in crafts profession for a long time. 'Chinese Craftsman Master' national-level award already held five times (1979, 1988, 1993, 1997, and 2006). At the beginning of 2011, government started to hold the sixth time selection, but the result of 'Chinese Craftsman Master' hasn't been released yet.

In Germany, the master title is a central issue in the organization of crafts. It denotes participation in crafts through education and is considered an insurance of quality. It is awarded upon the successful completion of master-studies and creation of a master-piece. In 41 of the occupations defined as Handwerk it is a necessary pre-condition for establishing or heading an enterprise within the field. In 53 other occupations master-education is available but having the title is not obligatory for establishing or heading a firm in the field. The distinction, however, enables consumers to opt-in a crafts culture.

In Italy, also the recognition of the master title depends from the type of rules applied within each region. Hence, some regions have introduced the master title with specific laws and only for artistic and traditional craft sectors. Others have introduced this title for a wider range of craft sector. For instance, in Trentino the master title was introduced in 2003. Since then the title has been assigned to c.a. 100 craftsmen following completion of specific courses. The title was given to woodcarvers-furniture makers, hairdressers, esteticians and tailors, and since 2009 also to iron carpenters, thermo-plumbers and lattonieri. Apart from the province of Bozen where the German model of the craft master has been somehow replicated, as mentioned above, most Italian regions use the title with reference to artistic or traditional craft (e.g. food production in Piedmont, textile production in Lombardy).

In India, a scheme for holding an All India Skills Competition for Craftspeople at the national level was introduced in 1964 to foster healthy competition among ITI and ITC trainees. The competition is held every year in 10 trades: instrument mechanic, electronics mechanic, welder, fitter, turner, machinist, mechanic (MV), foundrymen, electrician, and cutting and tailoring. The best craftspeople at the All India level are awarded merit certificates and a cash prize of Rs.10,000. The best ITI in each trade is awarded a merit certificate. The 'Best State' – the one whose trainees secure the highest total marks among all trades – is awarded a merit certificate and a running shield.

## **Organization**

In China, the organization of crafts is in pyramidal structure and two apartments of *The State Council of China* (ministry of finance and ministry of culture), which are on top of this pyramid, are charge of all affairs and activities in the development of craft with utilitarian and decorative attributes. In the organization system, there are 23 craft associations (*China Crafts & Arts Association* is national non-profit organization, which established in Nov.1988 to support the effective protection of Chinese crafts and arts, to facilitate the thriving of the crafts industry in China), 11 crafts societies (*China Crafts & Arts Society* is a legal entity,

which has been ratified by science and technology of China association and registered in the ministry of civil affairs).

Handwerk in Germany is a highly organized sector characterized by active institutions, associations, chambers and guilds that operate on many levels, ranging from the borough to the federal. Membership in the guilds is obligatory for every firm operating in the crafts as defined by the crafts legislation, the *Handwerksordnung*. Power is first and last invested in the craftsmen and distributed from the bottom up. The highest entity and political organ is the *Zentralverband des Deutsches Handwerk (ZDH)*. There is a strong emphasis on a united front and conflicts of interest that might arise between different crafts are resolved within the ranks of craftsmen. On the governmental level crafts are fall under the Ministry of the Economy and Technology.

The organizations are interlinked and co-dependent in a way that makes ties close, information distribution effective and expertise well utilized. This is reflected in the education where the guilds (*Innungen*) analyse and dictate the requirements for the examination, while the chambers (*Kammer*) oversee and implement the educational process. An integrated system of consultants and coaches in different fields such as culture, accounting, and legal matters maintained by the institutions of Handwerk and available to craftsmen and crafts enterprises is a great example of a strong and effective support network.

In Italy, the organization of the craft system is quite articulated. The main competence stays under the Ministry of economic development. However, as mentioned above, competences have been devolved to the regions and each of them has chosen the type of institution responsible for craft matters. In general, regional boards (*assessorati*) are responsible for this sector. Normally, they do not deal only with craft but with a combination of subjects next to it (industry, commerce, tourism). In some regions, however, there is a specific office responsible for craft within these boards.

Next to these institutions, there are three associations representing the craft sector in Italy: 1. *Confartigianato*, 2. *Confederazione Nazionale dell'Artigianato e della Piccola e Media Impresa (CNA - National Confederation of the Craft Sector and Small and Medium Enterprises)*, and 3. *CASA*. They all operate at the national level and have regional and provincial offices. There is a fourth association *CLLAI (Confederazione delle Libere Associazioni Artigiane Italiane – Confederation of Free Italian Craft Association)*,<sup>3</sup> which is not homogeneously spread through the country. These associations represent more than one third of craftsmen. Next to representing the sector at the political level and with trade unions, these associations provide services to their member enterprises (financial and fiscal

---

<sup>3</sup> See: <http://www.claai.info>.

assistance, support to education and internationalization, and to retirement and labor matters, etc.).

These organizations smaller ‘sub-organizations’ active in a specific sector developed in order to stimulate specific productions. It is the case of the Fine Chocolate Organization that brings together craft chocolate makers with the aim of enhancing their production and stimulating the export of their products. The *Camera Italiana degli Acconciatori* is another ‘sub-organization aiming at stimulating the development of Italian hairdressers.

In India, the craft economy can be divided in to two major groups that together constitute the MSME (Micro, Small and Medium Enterprises) sector:

- Village and small industries
- Utilitarian crafts (vocational and technical labor)

The village and small industries sector comprises two broad sub-sectors: modern small industries and traditional industries. The first covers small scale industries (SSI), power looms, the latter khadi, village industries, handlooms, sericulture, handicrafts, and coir industry. Utilitarian crafts are mostly under the purview of the Ministry of Labor and Employment and help form capacities and skills needed for SSI and medium enterprises, which are mostly service-based

## **Policies**

In China, government try to pay more attention to the cultural values of development of crafts with utilitarian and decorative attributes, addresses to promote Chinese traditional craftsmanship, and impetus cultural creativity industry in modern society. They emphasize on the importance of ‘core technology’, which means not only to base on traditional culture but also to import advanced knowledge and modern equipment. Thus, in 1997, *Regulations for the protection of the traditional arts and handicrafts* was published, which define what traditional crafts culture is and formulate how to protect craftsmanship. Subsequently, Beijing (2002), Shanghai (2001), Jiangsu (1997), Guangdong (2004), Hebei (2005), Zhejiang (2000), Anhui (2011), Sichuan (2004), Chongqing (2005) also issued relevant management rules.

In Italy, the definition of the craft sector is rather loose in Italy, and refers to the dimension of the enterprise.

The decentralization of power to the regions led to a rather varied range of policies aiming at supporting and favoring the development of the craft sector. The way these policies are designed and implemented differs a lot among regions.

In Germany, the values of crafts are clearly defined and nurtured within the organizations of Handwerk, which allows them to be very forward-looking – by building on strong foundations it seems they manage to adapt quite effectively and successfully to societal and technological changes, without endangering the core of their work.

The Zentralverband, on behalf of the crafts, has considerable political clout and summarizes its policies so:

ZDH is committed to a social free market system and to an SME policy of competitive excellence that promotes independent small and medium-sized enterprises through suitable economic framework conditions and thus contributes to their ability to develop their potential as employers and providers of vocational education and further training. ZDH opposes excessive state control, a restriction on private property and the abuse of market power.

Policy-making on national and EU level is continuously monitored in order to assess possible implications for the crafts and they actively engage with policy-makers for lobbying.

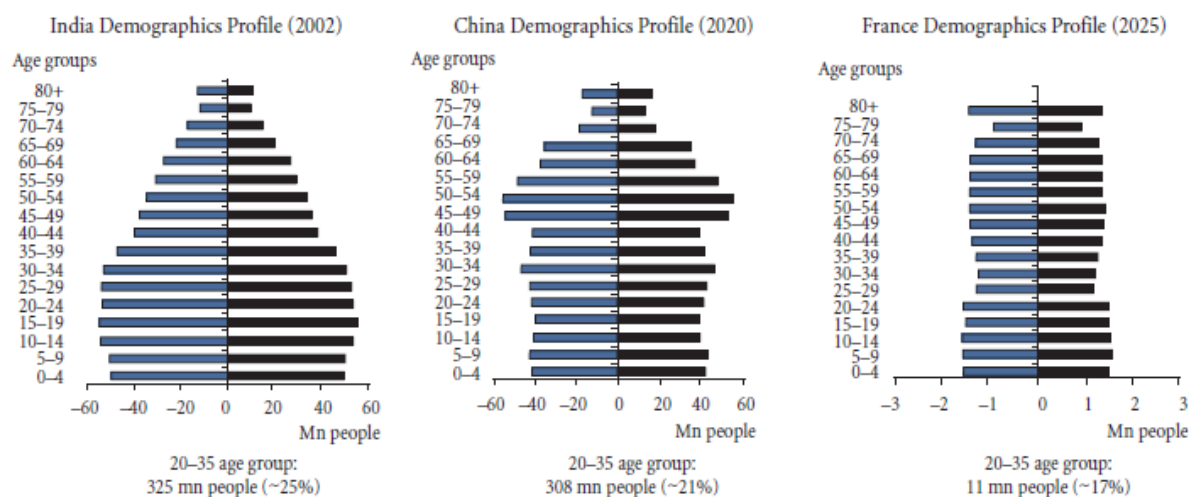
In India, a recent plan has outlined the issues on skill development under two categories: quantitative and qualitative. The plan reveals that attendance rates at educational institutions have dropped nearly half in the age group of 15-19 years to about 86 percent. At the same time the participation in the labor force has risen sharply after age 15, reaching close to 100 percent in 25-29 year-olds. The plan stated a 38% illiteracy rate of the labor force with 24.9% schooled to primary level and 36% educated to middle and higher levels. It was also found that 80% of the workforce has no identifiable marketable skills.

From the qualitative side the key issues identified have to do with the non-responsiveness of the current skill development system to the needs of the labor market, due to demand and supply mismatches in number, skill type, and quality. The reason cited for these deficiencies was a regional disparity in the number of institutions and seats, with the southern states having the greatest concentration. It is also observed that the quality of training in these institutions suffers from a lack of clear definition of deliverables and a lack of system for evaluating outcomes and issuing job placement. It was also felt that greater industry interaction was needed.

An aspiration expressed by the planning commission was to provide for a system of non-monetary incentives in terms of skill and entrepreneurial development and provide for forward and backward linkages for finance, marketing, and human resources management for those seeking post-employment training.

Despite the shortages described above there seems to be a great amount of optimism about the future as at this moment, India accounts for 28% of the graduate pool among the world's

28 lowest economies. It is projected that globally there will be a shortage of skilled labor by 2020. Based on the fact that India enjoys a favorable demographic condition owing to declining birth rate, a slow improvement in life expectancy of 63 to 64, and a coming demographic bulge of the age group of 15 to 20. It is projected that if the policies are right India can have a 47 million surplus in skilled labor.



Source: CII Conference 2002 CSFB Report: UN Population Division: BCG.

It was with this preamble that the national skill development mission was instituted with the following objectives.

- Assess skill deficits sector- and region-wise and meet the gaps by planned action in a certain time frame.
- Orchestrate public and private sector initiatives in a framework of a collaborative action.
- Realign and reposition existing public sector infrastructure ITIs, polytechnics and VET to get into public/private partnership mode and to smoothen transition into institutions managed and run by private enterprise or industry associations, giving them autonomy in function and governance.
- Establish a credible accreditation system and a guidance framework for all accrediting agencies set up by various ministries or industry associations, getting them to move away from regulation to performance measurement and ranking of institutions. Institutions should be rated on standardized outcomes, percentage of graduates placed, pre- and post- course wage differentials, dropout rates, and so on.
- Encourage and support industry associations and other specialized bodies and private enterprise to create sector skill development plans in 20 high-growth sectors.

- Establish a ‘National Skill Inventory’ and a national database for ‘Skill Deficiency Mapping’ on a national Web portal for exchange of information between employers and employees.
- Establish a ‘Trainee Placement and Tracking System’ for effective evaluation and future policy planning. Reposition ‘Employment Exchanges as Outreach points of the Mission’ for storing and providing information on employment and skill development. Enable employment exchanges to function as career counseling centers.
- Enlarge the 50,000 Skill Development Centers (SDCs) program into a Virtual Skill Development Resource Network for Web-based learning.

These objectives are to be realized through the reorganization and action plans for ITIs, which is to be implemented through the Ministry of Labor and Employment and an action plan for poly-techniques for vocational education. Plans for rural training and establishment of a virtual skills development resources network linking 5000 skill development centers involves coordination among hosts of ministries. There is also a great thrust toward public/private partnerships.

## **Crafts Culture**

In China, people always emphasis on ‘the quality of crafts’, which include tangible material and intangible culture. In whole production process, Chinese craftsmen have to abide by the rule of nature and follow the characteristics of material to create subject. They not merely pay enough attention to the ‘beauty of raw material’ to reshape tangible material, but also transmit symbolic messages or meanings to consumers. In the same time, ‘core technology’ and ‘culture-based creativity’ also play important roles in the development and innovation of crafts with utilitarian and decorative attributes.

In Germany, quality and skill are the notions at the heart of the crafts culture and the maintenance of both is a cardinal objective of the organizations of Handwerk. German products are known around the world as high-quality – it is a matter of interest to insure that so they remain – but craftsmanship is also highly valued within the country, in all the work of utilitarian craftsmen. Technical innovations are not only fostered, they can be assimilated more efficiently since the skills needed to implement are in place and information can be distributed easily within the tight-knit organizational network. This has concrete effects – for example through adoption of new technologies, skill and quality contributes to the efficient management of the German economy by minimizing energy use and waste, amongst other factors.

## **Critical Reflection**

In China: Firstly 'master title' can stimulate craftsman further develop their skills and knowledge, and help customers further to recognize the ability of craftsman and the quality of craftsmanship. But, there exist some negative phenomenon in this selection process of 'Master'. Because of craftworks can bring a considerable income for craftsman, who has 'master title'. Thus, many unknown craftsmen inevitably use 'Guanxi' power ('Guanxi' describes the basic dynamic in personalized networks of influence, which refers to the benefits gained from social connections and usually extends from family, friends, workmates and members of common clubs or organization. This is an intricate and obscure network in China) to get this kind of titles in the master selection process (We would like to call it 'corrupt') and also raises 'bureaucracy' in part.

Secondly, because of Top Incomes in crafts are considerable. More and more apprentices are too impatient for success. They enter the market too early, and much expanding desire for fame and wealth are control their hearts. They already can't quiet their minds to study craftsmanship and enrich knowledge. People are so eager to pursuit commercial benefit in crafts sphere, is that good thing or bad thing? How to solve it? That is big issue for the development of Chinese crafts. As for Dutch government, they also need to notice that.

Thirdly, because of most artists can gain more fame and wealth than craftsmen, the development of Chinese crafts educational system is suffering bottleneck. In a lot of Chinese people's minds, they think the social position of artists and designers (or cutting-edge craftsman) are higher than traditional craftsmen's. It is bound to set up a vicious circle, there will raise many serious problems, such as a shortage of teachers, hardware facilities, and financial capital.

In Germany, a possible limitation of the German Handwerk systems would be its organization by occupation and the considerable rigidity of the list of occupations considered as Handwerk. Deep historical roots could mean difficulty in changing the concept/scope of Handwerk were it to become desirable and so strength could also prove a weakness.



# Crafting Culture

*Germany*

Thora Fjeldsted

Rotterdam, 23 April 2013

“God made heaven and earth – we made everything in between”.

Otto Hesse, General Secretary of the Central Association of German Trade and Crafts (*Rede* 2011)

## **I. Introduction**

*Handwerk*, trade and skilled crafts in Germany, is such a varied sector that it is virtually impossible to refer to any particular item or style. While completely different in form, material, aesthetics, and purpose, the ceramics of Rheinland and wooden toys of Sachsen are both typical craft-products of their regions and of Germany itself. And within the range of crafts output are such broad areas as roads, plumbing, and hair-styles. Being a craftsman means doing one of the legally-defined jobs as outlined in the Trade and Crafts Code of 1953, being a part of an organized societal group, belonging to a community, having rights and duties, and carrying on a very old tradition. *Handwerk* is an ethos, not merely a sector.

The crafts sector includes 151 vocations, some of which are legally protected, and employs 4.8 million people (12% of the German labor force). Institutions are many, strong, and coherently organized. The centerpieces of the trade and crafts system are the master distinction, the master-apprentice education – a knowledge-transfer system with firm roots in medieval workshops – and the chambers and regional bodies loosely based on the guilds of the Middle Ages. The survival of the system and the protection it implies are unique in the western world. When speaking of “system” here, what is intended is formation through education, organization through associations, and rights and duties entailed in membership. Restrictions for entry are intended to ensure quality but can also be interpreted as protecting the members of a trade from competition. In any interpretation, free market principles do not universally apply to the sector. It is clearly an ideological entity as much as an institutional one.

### ***Historical Background***

As the industrial revolution made its mark in the European countries, a particular historical constellation contributed to the somewhat lesser speed and depth of changes in the German-speaking countries. Starting in the nineteenth century, however, the build-up of industrial capacity got seriously underway and inevitably the reigning order, in which artisans had held a central place, began to break up. As the secret knowledge that the guilds

had preserved and passed on was no longer fundamental to making things, they began to lose ground. Since then craftsmen and their organizations have faced serious challenges and threats of extinction but have fought to maintain a fixed place in the economy and society. Their efforts have been more or less successful. At the end of the nineteenth century even the core element of the system – the transfer of skills from master to apprentice – was seriously endangered (Doran 1984). The decisive blow came in 1869 when, upon the unification of Germany, the freedom to enter any kind of business was introduced into the law. A principle of free trade guided the political elite of the new country and in the subsequent years artisans and small enterprises seemed, indeed, to face extinction by industry. It was then that *Handwerk* began to reflect critically on its status and build the ethos and arguments to which it still holds true. At the same time the organizational framework began to form, slowly giving *Handwerk* its modern shape as an organized entity (Muthesius 1998). At this point the chambers (*Kammer*) and professional associations (*Innungen*) were established and tied together in a national network. The critical issue from a political perspective, however, became the drying up of skills. By 1890 Germany was short of skill (John 1987: 287-99), giving opportunity to the newly arranged organizations of craftsmen. In 1897, in the name of Kaiser Wilhelm II and the parliament (*Reichstag*), the organizations of *Handwerk* were acknowledged by the German state. Re-introduced, *Handwerk* existed uneasily in conjunction with industry; relations were at times fraught while striking a new balance. The pressure gave rise to a strong anti-modernist movement amongst craftsmen (Campell 1978). A partial result of these tensions was an eventual alignment with the national socialists following their ascendancy to power. After initial victories in gaining a stronger legal status for *Handwerk* in the 1930s, *Handwerk* organizations found themselves powerless and incorporated in the German state during WWII.

To this challenging historical baggage the crafts organizations responded by re-articulating objectives and methods at the end of the war. They found themselves in an intriguing position – whereas the means for industry production had been to a severe extent eliminated during the war, crafts production was still possible. The first post-war products were crafts (Kockel 2011). Out of this reality was born the tradition of *Handwerksgalerie*, exhibition spaces created to showcase new products by craftsmen. (They now offer exhibition opportunities in *Kunsthandwerk* (the applied arts)). As the organizations of skilled crafts continued their campaign for official status within Germany

the presence of the occupying forces somewhat influenced the arguments and legislation. Whereas the French and British were soon allowed to re-establish national bodies, in Germany's American-occupied zone authorities were reluctant to approve the protective system. This had considerable influence on subsequent developments. Laws reinstating the powers of *Handwerk* organizations openly collided with the free trade principles guiding the policies of the US and craft leaders had to be "especially careful to frame the argument and outlook in modern, anti-protectionist, anti-exclusionary terms" (McKittrick 1998: 472). Carried out in that spirit, the campaign culminated in *Handwerk's* acknowledgement in 1953 as a semi-public entity in Western Germany when the government passed the Craft and Trade's Code (*Handwerksordnung*), a law that still codifies the system of *Handwerk*. Despite tussles with different governments over various practical issues, relative peace reigned around it in the following half-century. Unification of the organizations of West and East were a milestone, and the *Handwerksordnung* was extended to the eastern part in 1990. A substantial change was realized, however, in 2004 when in opposition to the *Handwerk* organizations the federal government passed a change to the code that entailed a dramatic downsizing of the number of trades and skilled crafts to which entry restrictions applied. The effects of these changes are still unclear.

## II. Definitions

In light of the size and heterogeneity of the *Handwerk* sector, some qualifications must be made at the outset. First, a fundamental difference can be made between what would be referred to in English as *utilitarian* and *decorative* crafts. While *Handwerk* refers to all trades and skilled crafts, those known as *Kunsthandwerk* could be translated as applied arts or studio crafts (Muthesius 1998: 88), corresponding roughly to what is known as crafts in most western countries. Between the two groups that identify themselves as *Handwerker* and *Kunsthandwerker* substantial organizational and educational differences exist.

### ***Crafts are a matter of legal definition***

In the Trade and Crafts Code (*Handwerksordnung*), 94 vocations are defined as skilled trades and crafts and 57 as crafts-similar (*handwerksähnliche* – a concept we return to shortly). They are categorized in three different groups, listed in Annexes A, B1 and B2 of the Trade and Crafts Act (see Annex I). The differences between the groups lie in their

regulations. In annex A, 41 occupations are listed; entry is restricted to persons holding a Master-certificate. It is thus, by law, forbidden to establish an enterprise in any of these trades without the legally-sanctioned qualifications. Justification for the restrictions largely has to do with safety hazards implied in the work. For the 53 trades and crafts listed in Annex B1 it is possible but since 2004 optional to pass a master-exam, thereby acquiring the Master-certificate. Thus, anyone can establish an enterprise in these trades and crafts. The final 57 crafts occupations (Annex B2), more specifically referred to as crafts-similar (*handwerksähnliche*) vary in that vocational education is available but no Master-certificate exists. That they are referred to as crafts-similar serves to underline the historical centrality of the Master within the crafts. Ultimately, however, they belong to the same organizations and thus the same social system.

The heterogeneity within the group is remarkable – construction workers, saddle makers, milliners, stonemasons, gold- and silversmiths, butchers, ice-cream makers, wood-carvers, dental technicians, tailors, hairdressers and ceramists, amongst others – all have a place. The trades can be divided into the following seven fields ([www.zdh-statistik.de](http://www.zdh-statistik.de)) and measured in terms of total turnover in 2009:

|                                                                      |       |
|----------------------------------------------------------------------|-------|
| Building and interior finishes trades .....                          | 27.9% |
| Electrical and metalworking trades .....                             | 28.4% |
| Woodcrafts and plastic trades .....                                  | 10.6% |
| Clothing, textiles and leather crafts and trades .....               | 6.1%  |
| Food crafts and trades .....                                         | 4.1%  |
| Health and body care trades + the chemical and cleaning sector ..... | 19.6% |
| Glass, ceramics and other .....                                      | 3.3%  |

Furthermore, *Handwerk* can be divided into the three Annexes (2010):

| <b>Handwerk statistics 2009</b> | <b>Enterprises</b> |
|---------------------------------|--------------------|
| All                             | 987.818            |
| Annex A                         | 602.495            |
| Annex B1                        | 197.439            |
| Annex B2                        | 187.378            |

Source: ZDH At: <http://www.zdh-statistik.de/application/index.php?mID=3&cID=47>

The relative clarity provided by the legal definitions hides some grey zones. Since 2004 anyone has been allowed to work as a *Handwerker* in the occupations to which entry restriction do not apply. Anyone is also free to call themselves a *Kunsthandwerker*. Are all who work in the listed occupations not craftsmen? The organizations of trades and skilled crafts have from the outset answered this question negatively and in response have put the

master qualifications at the center of the ideological construct of *Handwerk*. What concretely unites nearly all the craftsmen today – since not everyone is required by law to complete the same education or exams to identify themselves and do business as craftsmen – is membership in the *Handwerkskammer* or chambers to which membership is compulsory. In light of this we will accept the legal definitions when speaking of utilitarian crafts in Germany and focus on the field from the perspective of the organized German *Handwerk* with small deviations.

### ***Definitions of output***

The pivotal word in all German-speaking countries for the craft products is *Handwerk*, the chief 20<sup>th</sup> century term for “anything that does not come under ‘*Industrieproduktion*’” (industrial production) (Muthesius 1998: 85). The juxtaposition of industry products and those of design is often as confused as it is confusing, a fact which nonetheless signals the particularity of *Handwerk* in the German context. From 1870 to the turn of the century, the advent of industry called for considerable redefinitions as machines made previously unthinkable production possible, several different concepts were interchangeably used to describe products of *Kunsthändler*. *Kunstgewerbe* (can mean equally industry, craft and business), *angewandte* (applied) *Künste*, *Volkskunst* and sometimes *Kunsthändler*. In the formation of the vocabulary used to distinguish crafts from industrial products are the roots of emphasis on quality. While in the early days of industrialization many experimented freely in conjunction with machine-production, from 1880 onwards an effort was undertaken to distinguish crafts by hand and machine. It came to be believed that machine-produced products had developed a tendency towards the cheap and bad. It is interesting to note that by the time that relatively clear distinctions had been made (some grey zones remain to this day), around 1920, *Handwerk* consolidated its image by catering to the higher and highest segments of the market. It gave itself an image of absolute quality.

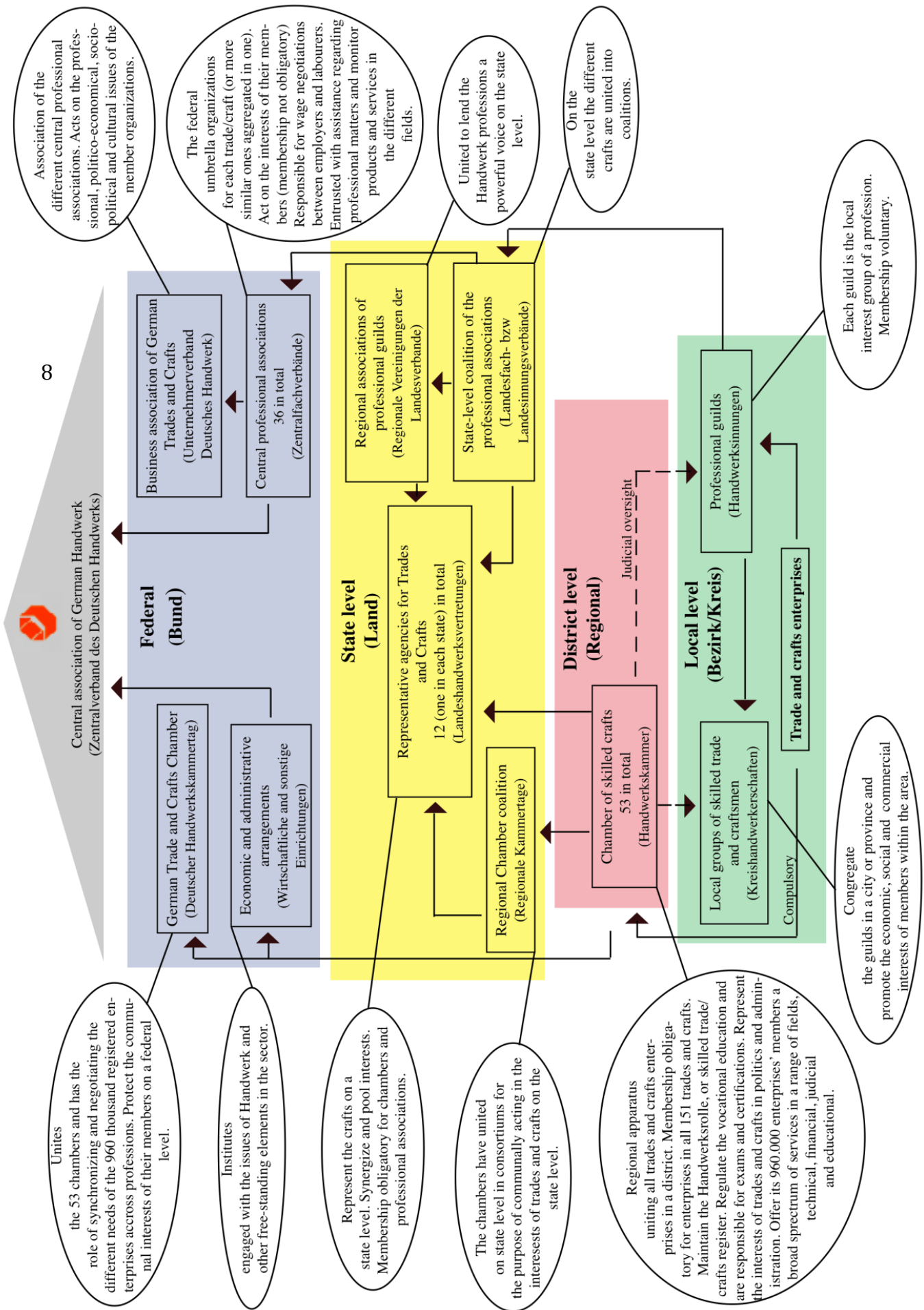
### **III. Institutional arrangements**

As we have seen, whether a person or an enterprise belongs to the crafts sector depends on which activities are legislated to belong to crafts and trade, which, in turn, is largely historically determined. The law that lays out the relevant conditions is the Crafts and Trade Code (*Handwerksordnung*) was passed in 1953 and amended in 2011. By virtue of the size of the sector, historical continuity, and clear legal status, *Handwerk* in Germany today is a

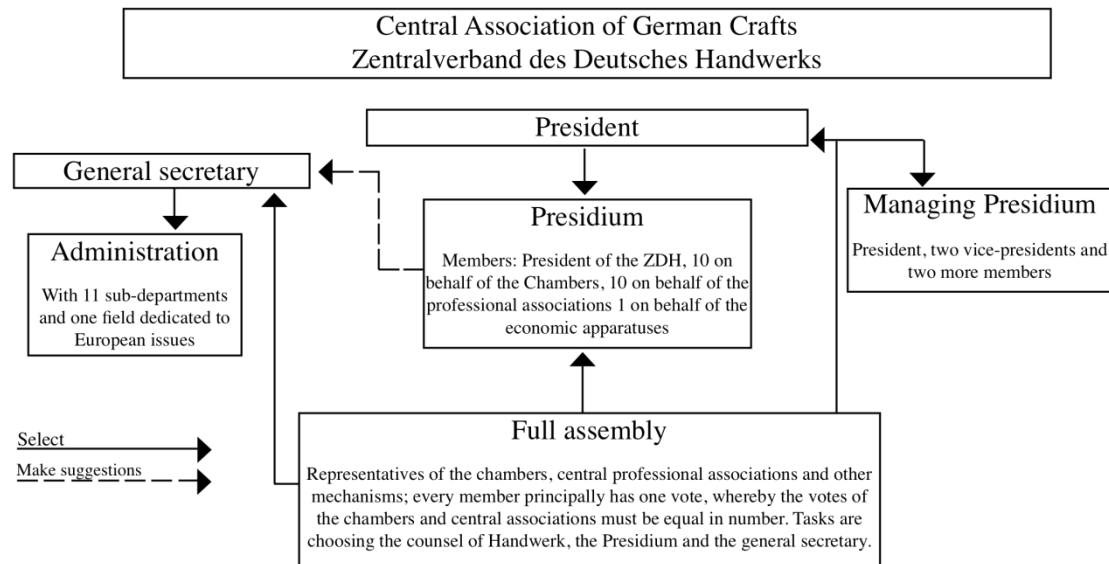
highly sophisticated semi-autonomous entity, responsible to the Ministry of Economy and Technology (*Bundesministerium für Wirtschaft und Technologie*). Its organizations function on many different societal levels. The chambers, with obligatory membership for enterprises in the field, are powerful regional bodies; on a national level, the craftsmen are united in the Central association of Crafts (*Zentralverbund des Deutschen Handwerks*), which is responsible for internal matters, education and labor relations, and has considerable political clout.

### ***Organization***

A most defining characteristic of German *Handwerk* is its intricate system of organizational entities on many different levels, outlined and explained in the diagram on page 7



The Central Association serves as an umbrella to the interests of all the trades and crafts. Its internal organization is outlined in the following diagram.



Source: ZDH

The *Handwerk* organizations are to a large extent self-financed through membership fees and special financial contributions charged by the respective organization-units for additional member services. A minimum membership fee to a chamber (obligatory and varies from one to the next) is €105 per year and other fees are dependent on total revenues of the firms. In certain cases, especially in the field of training and education, public construction, or business consulting, the different states (*Länder*) or federal government (*Bund*) contribute financially to operations. For an example of how the different bodies interact, a division of responsibilities within the educational system is illuminating. Whereas the professional associations dictate the necessary requirements in the education it is the chambers that oversee the actual execution of examination.

The ZDH is part of a “European Union” of small- and medium-sized enterprises with analogous associations in Belgium, The Netherlands, Luxemburg, France, Britain, Italy, and Denmark. Since 1990 the ZDH has had a satellite office in Brussels. It functions as an “early

alarm system” by monitoring political developments that can affect the interests of *Handwerk* in Germany (ZDH IV, Kockel 2011).

A defining feature seems to be high awareness and emphasis on foresight by the institutions of *Handwerk*, which attempt to systematically assert their place in the ever-shifting social and economic environment of the modern world. Positioning is a priority matter and to this effect different issues and causes have been addressed and furthered by the organizations of *Handwerk*. In order to raise awareness of the unique nature and ancient roots of the *Handwerk* system, the ZDH has been taking steps to have the government propose it to UNESCO as intangible heritage (Kockel 2008). Regional identity is another issue they have tackled. It is not seen in opposition to globalization, but as a cornerstone of society. Many enterprises in the sector have been run by the same family for generations and are firmly rooted in their locality. Strong regions are stabilizing entities in a complex world. For this reason the ZDH supports different projects aimed at highlighting their importance (ZDH I). A large research project of 2011 toward increasing the weight of the creative economy analyzed where *Handwerk* has developed or can develop within the creative economy along with the challenges and promises held by changes in the general economy (Müller and Markworth 2011).

Help to self-help is one of the mottos of the chambers and the ZDH, which employ several different of consultants and coaches who are at the disposal of crafts enterprises. Among the different kinds of expert advice offered are finance and accounting, exporting, quality management, and cultural issues. This system is highly noteworthy as it gives crafts enterprises of all kinds and sizes easy access to the latest research and information.

Finally, the organizations of crafts work to further the interests of the sector by maintaining a high standard and innovation in education. In response to the growing importance of design in trades and crafts, a strategy has been laid out with the Rosenberger Thesis (*Rosenberger Thesen* 2010) to integrate design into education for the next generation of craftspeople from early on in their vocational training (it has to some extent been done for the last 30 years) and they are currently encouraging more crafts enterprises to understand the growing market for design and how it can play into the crafts sector.

### ***Ideology***

Has the German national economy, in the last decades, benefitted from having a clearly outlined *Handwerk* with its own organizations and occupational profiles? Has the vocational education system, with its synergizing effects, decisively contributed to building human

capital within the German economy (Müller 2011: 138)? Answers given by people working under the banner of the multitude of organizations of German skilled crafts is likely to be a resounding yes, and on this platform are built the ideological principles of modern day *Handwerk*. The political aims of crafts are further articulated by the German Central Association of Crafts are stated on the website of the Central Association:

ZDH is committed to a social free market system and to an SME policy of competitive excellence that promotes independent small and medium-sized enterprises through suitable economic framework conditions and thus contributes to their ability to develop their potential as employers and providers of vocational education and further training. ZDH opposes excessive state control, a restriction on private property and the abuse of market power.

Functionality, the reigning ideology, takes on quite a particular guise. At the center of the construct *Handwerk* is the master – and its qualifications are for its organs *the* defining feature of a *Handwerker*. Although Germany must, as other members of the European Union, adhere to ISO standards, the guiding principle in discourses of quality on skilled crafts is that quality is insured with the process rather than the final product.

The right to restrictions is, however, not universally appreciated within Germany, even among those who practice skilled crafts. Thus, the Professional Association of Autonomous Craftspeople, which supports freedom of trade, lists on its website 33 theses against restrictions. They highlight many of the lingering criticisms surrounding the system. To name a few of their claims: it is the right of every person to use his or her own hands to earn an income; vocation-shifters and self-taught craftspeople enrich the market and deliver innovation; and the quality of crafts work should not be measured with a Master-certificate but by the execution of workmanship.

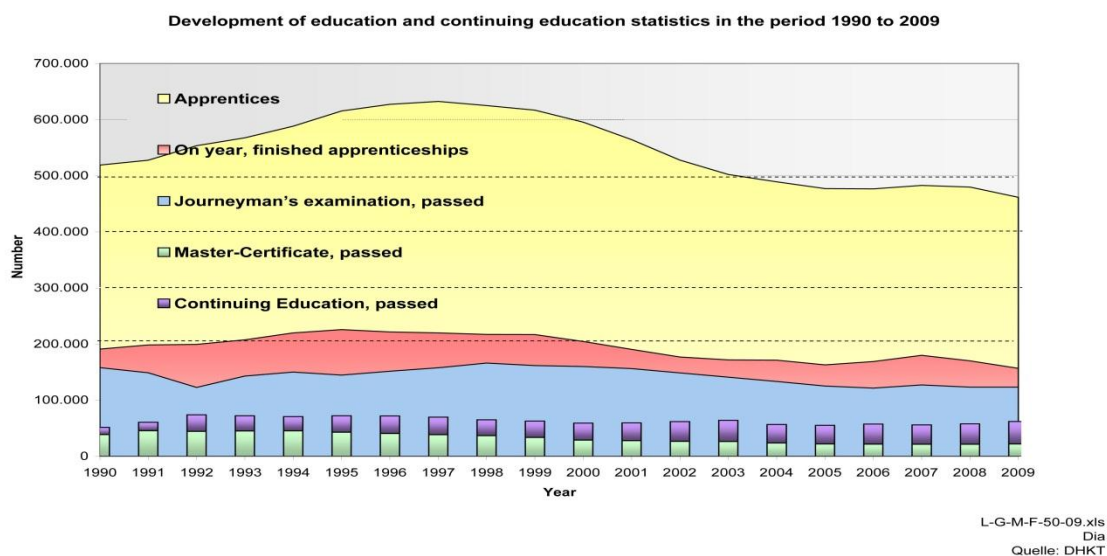
Tensions abound also within the political sphere, their full extent manifested in the changes to the *Handwerksordnung* in 2004 and the government's proposal to eliminate protection for more trades than the remaining 41. Tensions also present in the context of the European Union, where it is acknowledged that Germany does not fulfill all requirements of an open market system.

### ***Education***

Education is the bedrock of the *Handwerk* system. With the legal sanctioning and support of the German government the institutions of *Handwerk* are, indeed, responsible for

organizing and maintaining the educational system through which roughly one-third acquires education. Vocational training (at an enterprise overseen by a master) and theoretical education (at a vocational school, or *Berufsschule*) comprise a dual system, unique in content and approach. The system is dual in that the apprentice carries out practical training at a company of a master-craftsman while attending part-time classes that provide a theoretical foundation for the occupation. With this approach the apprentice starts learning the skill from the first day.

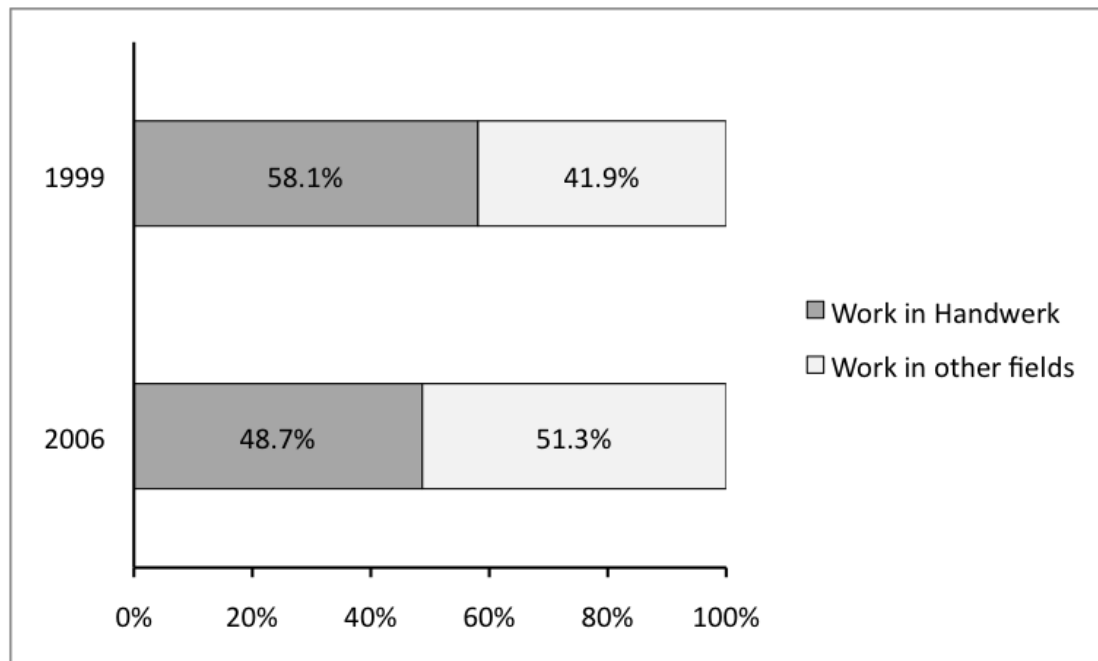
In 2009, 461,502 students were employed as apprentices and enrolled in the *Berufsschule*. Of them 123,361 graduated and 22,451 completed the master-studies. The table, however, reveals a flux in numbers of people seeking to enter crafts and trade since 1990 and a steady decline since the peak demand in 1997. That year a total of 1,134,327 students were enrolled in all the different programs (vocational, master, continuing studies); the number dropped to 696,252 by 2009, a 38.6% decrease.



Source: Business Association of German Trades and Crafts

A typical apprenticeship takes three to three and a half years of training and upon successful completion of the final examination (*Gesellenprüfung*), an apprentice graduates as a skilled craftsman. During their course of studies apprentices accept wages that are considerably lower than those of the skilled workers but rising during the apprenticeship. Fulfilling all requirements and passing the Master-exam grants the master craftsman rights to start a business in the relevant trade and take on apprentices for training. The precise

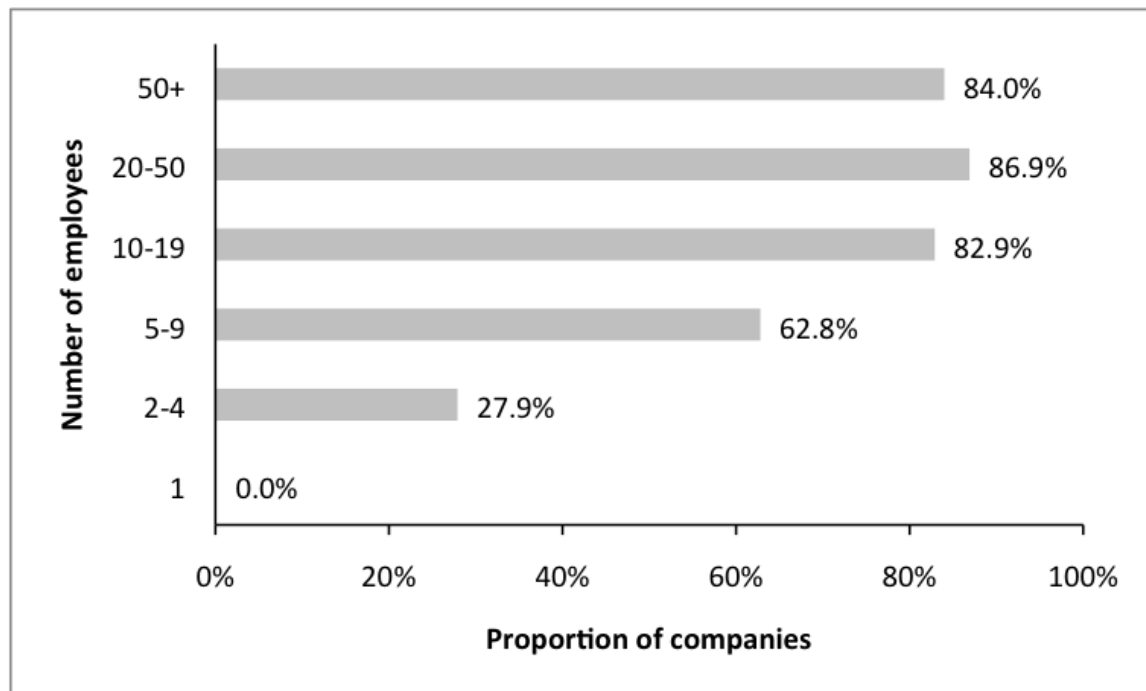
number of craftsmen who go on to establish a company or work within *Handwerk* is unknown but research by the *Institute für Mittelstand and Handwerk Göttingen* has indicated that less than 50% of master-exam graduates remain in the field. This number has shrunk in the recent past.



Source: Müller 2011 p. 135

Continuing education is offered in a wide variety of subjects and research suggests that 10% of *Handwerk* companies encourage their employees to partake in continuing educational courses. Furthermore, this number is sensitively higher among the top 10 companies in the field, or 16% (Würth 2011: 35).

The number of companies that offer internships has fallen in recent years and currently around 50% of *Handwerk* enterprises provide educational apprenticeships. Although limited, research in Rheinland-Pfalz and Saarland has suggested that a disproportionally high number of apprentices learn their trade in larger companies, indicating that smaller firms are less inclined to take on apprentices. This trend is particularly striking in the case of very small firms.



Source: IHF Göttingen (Müller 2011p. 131)

The drop in interest is commonly traced to four main factors: (i) demographic changes, (ii) craftspeople are not likely to enter the highest wage brackets in German society and thus other fields are likely to attract them, (iii) early choice (age 15 or 16) and rigidity of the education system has made it considerably difficult to change educational track and enter universities after completing vocational education (Kockel 2011), and (iv) *Handwerk* has suffered from a somewhat sullied image (Huber 2003). As the decline is a source of serious concern, two measures have been introduced to combat it. First, an image campaign was launched in 2009 (it is still actively maintained) presenting a modern picture of the field and aimed at projecting an appealing image to young Germans (ZDH II). Second, integration has been made a priority as hitherto a proportionally lower number of citizens of foreign origin or descent have entered *Handwerk*. An analysis of statistics and dynamics between the sector and citizens of immigrant origin and policy recommendations were published in 2009 in a report on integration in *Handwerk* commissioned by the Central Association (ZDH 2009). As a rule, language skills are fundamental criteria for entering the sector and applications for work placements and apprenticeships can only be made in German. This seems not to signify an exclusionist tendency. “The master of the future is a Turk” may be metaphorical but it reveals goals of inclusiveness and practicalism (the demographic changes are clear). German crafts can equally be created by those with different ancestries.

On the national level, changes to the school system in 2009 made the flow between different types of schools somewhat easier. At the current rate of decline the prognosis is for ca. 16,000 master craftsmen to graduate on a yearly basis until 2016, with the numbers mildly declining year by year (Müller 2011: 134). This number is considerably lower than the 22,169 master craftsmen that graduated in 2009.

### **Government**

*Handwerk* falls under the jurisdiction of the Ministry of Economy and Technology (*Bundesministerium für Wirtschaft und Technologie*) and as one of the important players in the economy craftsmen are represented in important negotiations on a federal level – a general fact to be noted is a strong tradition of consensus-building as an approach in German politics. As regards the relationship in general, the principle of subsidiary applies. An example is the recent process of combining several different crafts involving textiles. As the needs and actual occupations have changed over time the professional associations of different crafts within the textile trade reached a consensus for joining under the same craft. Proposals for these changes were then brought to the ministry through the ZDH, where an amendment to the Trade and Crafts Act was made. Changes should be made on as low a level as possible.

The government nonetheless holds the highest power in the matters of *Handwerk*. A clear example of this were the substantial changes made to the Trade and Crafts Code in 2004 when the number of trades and crafts requiring a Master-certificate were substantially cut to 41, taking away the protection of over 50 trades and crafts. The ideology that guided these changes was eliminating unfair advantages and claiming that freedom to enter trades would stimulate the opening of small businesses. By eliminating restrictions on who could establish an enterprise in the legislatively-protected crafts, service should increase and prices become more competitive. Some argue that instead, insurance of quality was endangered. Although consumers retain the reference point of master status, some have feared a general slump in standards. The changes were strongly opposed by the ZDH. Although they were able to negotiate protection for a number of trades from the original proposals, the government acted explicitly against their will and wishes.

#### IV. Realizing Values in an Economic Setting

The sector employs a total of 4.8 million people, or 12% of the German labor force and 962,000 enterprises, or 27% of all business. The numbers indicate the strong tendency for small enterprises, 5 employees on average. Additionally, 483,000 apprentices are employed in the sector. In 2009, a turnover of €491 billion (incl. VAT) was reported, 8% (of total gross value added) of the German economy. Several large companies work within the *Handwerk* field. The largest firm in 2011, Fielman AG (Optiker) reported a total revenue of €1.110 billion, while the second, A.T.U Auto-Teile-Unger Handels GmbH & Co. KG reported €992 million. In third and fourth places were subsidiaries of Daimler AG Mercedes-Benz Vertrieb Deutschland and BMW Group Niederlassungen with revenues of €419 and €399 million respectively. In all, the 1000 largest firms in the field (a full list can be retrieved at [www.handwerk-magazin.de](http://www.handwerk-magazin.de)) have revenues of €35.7 billion. It is now common for large enterprises to be organized as a business chain with a central headquarters while single-unit subsidiaries are registered in the *Handwerksrolle* of the corresponding chambers. In terms of total turnover of the 1000 largest firms in the field in different states of Germany, Nordrhein-Westphalen has the highest followed by Bayern, Baden-Württemberg, Niedersachsen and Hessen. Although German crafts and services are largely traded locally, an estimated 50,000 of the 960,000 enterprises are directly involved in export. Exports total 6.8% of the whole output of *Handwerk*. The most important sales markets are neighboring European countries, whose numbers have doubled in the last 15 years (ZDH III). The central association and chambers provide support in different aspects of the export process by providing expert coaching and counseling to enterprises when requested.

An important aspect of *Handwerk* in the economic setting is the high level of innovation that takes place within the sector. It has been estimated that *Handwerk* enterprises are responsible for up to 70% of innovation in German production (Kockel 2008). This characteristic is attributed to two main factors: (i) proximity to consumers gives craftsmen clear information and (ii) craftsmen are “of ” the material they work with; through education and work they develop expertise about the materials with which they work, even to the point of being able to explore new possibilities of working with their material and deep knowledge about potential outcomes and overcoming challenges in innovation (Kockel 2008). To mention a few, Adidas, Puma, Fischer-Dübel and Leica are all enterprises that have sprung from and developed out of innovation within *Handwerk* (Kentzler 2011), although none functions as a *Handwerk* enterprise today.

# Crafting Culture

*Vocational education in England*

Priyateja Kotipalli

Lili Jiang

Thora Fjeldsted

Rotterdam, 23 April 2013

## Vocational education in England

### Middle Ages to 1900s

Before the industrial revolution, most goods were made by hand and crafts techniques were handed down from generation to generation. Agriculture was the main occupation and craftspeople worked alone or in small communities. At the same time, the apprenticeship system played a key role in society. The system of apprenticeship began in the late Middle Ages and was often managed by the craft guilds or town government. A master craftsman was allowed to employ young people in order to provide them with formal training in a particular craft; the young people received a stipend while undergoing training and the amount increased as the program advanced over time. Most apprentices were male but some programs such as embroidery and silk weaving involved females. Apprentices ranged from 14 to 21 in age and upon successful completion of the apprenticeship became master craftspeople.

During the thirteenth and fourteenth centuries, the crafts guilds reached their peak of power and influence and were mainly responsible for the standards of craftsmanship skills and organization of labor. According to *The history of technical education*,<sup>1</sup> the guilds were organized into three hierarchical classes: (i) the liverymen, who were responsible for the organization and management of a particular guild, including setting prices and wages; (ii) the freemen, who were bound to a guild as journeymen craftsmen who had successfully completed an apprenticeship; (iii) the apprentices or trainees, who were bound or indentured to a master craftsman for seven years. The Crafts Guilds worked well for promoting the interests of several trades until the advent of steam power and factories, which required new methods of training as people migrated to the cities and away from rural communities. The transition led to the awareness of the application of scientific ideas to industry and to the guilds' developing vocational education, which continues today in the form of Cities and Guilds of London Institute (CGLI), which has diversified to support crafts and trades in a number of ways.

The mechanics institutes and the working men's colleges have also had an important role in apprenticeship system. The mechanics institute movement was the first attempt to create opportunities for workers who had a desire to learn scientific and technical principles. The mission of working men's colleges was very different; it focused on adult education and attempted to

---

<sup>1</sup> Dr. Dick Evans (no date), *The history of technical education: A short introduction*, 2<sup>nd</sup> ed., Cambridge: T magazine Ltd.

address deficiencies in education for working adults and provided a more general education to cope with social and economic issues. Ruskin College was built with a mission to educate working men to occupy leading positions in industry and commerce. At this time, however, England did not have a national primary education system; that came at the end of the eighteenth century.

The Great Exhibition in 1851 added impetus to establishing a national and effective system for technical education. Traditional universities began to open a broader and more enlightened curriculum and many higher education institutions started to introduce technology and science into their programs. The London Institute was founded in 1879 by the city and guilds of London and 16 livery companies to contribute to the development of technical education. It remains a leading vocational education organization. And science and art departments created by the government had a significant contribution to the development of the education system. Its formation highlighted the importance of science, design, and art in manufacturing, and the need to improve competitiveness with other European countries and America.

During this time, the livery companies and the CGLI continued to provide grants to existing technical institutions in London and a number of provincial towns. Many writers have estimated the total amount granted by the livery companies and CGLI was in the order of £2 million over a period of forty years. It ultimately proved impossible to sustain this level of financial support and it was becoming clear that State funding was essential to create a more secure and long-term basis for the consolidation and expansion of technical education and its constituent institutions.

The Technical Instruction Act was published in 1889, which fully recognized the need for a national framework for technical education in an attempt to halt industrial and manufacturing decline. It gave power to the County Councils and the Urban Sanitary Authorities to levy a penny tax to support technical and manual instructions. Afterward, the Local Taxation Act introduced the 'whiskey tax', which made extra money available for technical instruction. According related data, between 1892-93 and 1901-02 the amount raised via the whiskey tax rose from £472,500 to £859,011, 83% of the total public expenditure on technical education.

A separate code for Evening Continuation Schools introduced into law in 1898 eased age restrictions and broadened the range of subjects in technical education. Dramatic changes occurred with increased demand for studying in these schools. Funding transitioned to The Arts and Science Department and the Board of Education.

The various reforms that had been applied in educational sector in the last years of the nineteenth century were united in the Education Act of 1902, which formally created Local Education Authorities (LEAs), which replaced school boards and gave them wide-ranging powers to

administrate all higher education at a somewhat discretionary level. This led to variability in technical education across areas as some LEAs strongly supported technical education while others were less enthusiastic. Leaving technical education at that discretionary level and funding shortages have acted greatly to its detriment. In 1904 a set of regulations was introduced to deal with the issues of technical educational institutions, which set the path for giving a more coherent structure to this educational sector. In 1908 the number of full-time students in provincial universities and technical schools was less than 3000.

A fundamental issue was that technical training was scarce outside the educational system. It was, in fact, mostly available in the military since most industries relied on unskilled labor and the gradual flow of people from apprenticeship programs. Very few graduates were employed in industry in the later 1800s, largely because most firms were family owned, creating individualist capitalism – that, cutthroat competition, and a culture of independence did not contribute to creating cross-sector identities in industry. The lack of national structures to oversee industries and state funding for technical education also hampered its advancement.

As with other legislation, the 1902 Act (and the 1904 additional regulations and codes) failed to situate technical education within the national framework for education and give it value vis-à-vis academic education. Directed by a *laissez-faire* philosophy, the government gave authority to local levels; with additional discretionary powers this resulted in the absence of a national system for technical education and can be seen as having impeded the creation of a national structure. The ‘whiskey tax’ was furthermore largely used to support teaching of pure science rather than technical subjects, a fact that strongly hints at the country putting a higher value on a theory than application.

### **An issue of image and multiple systems**

The Education Act of 1944, also referred to as the Butler Education Act of 1944, had a vision of setting up a tripartite system that bifurcated the students at the eleven-plus examination to go to one of three Grammar schools that were more academic and prepared the students for a more formal university education. The technical schools were slated to provide for scientists and engineers while the secondary modern schools would train students in more practical skills. The system did not intend to set up a hierarchy but, given the fact that the Grammar schools resembled a more elite education that was once reserved for the privileged sections of the society meant that there was an unintended consequence of creating a new class of academically gifted versus those

with practical skills. The eleven-plus examination that decided the path tested the ability of the students on the basis of mathematics, written English, and reasoning. There were no pass or fail criteria but given the fact that the ambition of majority of the students was to get into the Grammar schools, which received the majority of public funds and were better staffed, entry became a matter of social prestige and a measure of intellectual capability. This, coupled with the fact government did not pay due attention to developing the other two systems, meant the system was in effect one of Grammar schools versus secondary modern schools. The biggest failure of the Butler Act, however, was its inability to provide sufficient funds to develop technical schools, which skewed the system toward failure. By the 1960s there were winds of change with a pattern of day release programs and a system of apprenticeships encouraged by the Industrial Training Board set up under Industrial Training Act of 1964. These were usually offered in conjunction with CGLI and were very occupation-specific. With the merger of the Councils of Business and Technical Education to form BTEC in 1983 came the possibility of offering a wider range of subjects. They tended to contain elements of general education designed to provide a progression from secondary to the sub-degree level and resulted in higher national certificates (HNC), which had become very established for technical level education. BTEC also developed fulltime programs for the HNC, which was equivalent to level 2 in the qualification frameworks. Another body offering vocational education was the Royal Society of Arts Examination Board (RSA) which offered office-related courses.

Through the year a range of bodies developed to provide vocational education, each having their own prestige and validity through their networks in the market. It was a largely held but mistaken view that students would undertake studies in the area of their work. With the phasing out of many industrial training boards in the 1980's what these qualifications had to do with employment became rather obscure. By 1980 vocational education in England included:

- Vocational bodies (CGLI, BTEC, RSA, LCCI, Open College, et al.)
- Six regional examining bodies (REBs)
- Approximately 250 professional bodies including:
  - 76 with royal charters and other non-chartered bodies which together represented such disciplines such as chemistry, engineering, construction and management.
  - A number of standard-setting bodies such as the joint industry councils and non-statutory industry training organizations; e.g. Chemical Industries' Association.

- 120 industry training organizations of which 8 were Industry Training Boards with statutory responsibilities. Many had mechanisms to train and assess and some had developed joint certification in such areas as engineering and agriculture.

Despite this bewildering array of organizations fundamental weaknesses existed, namely:

- Lack of a clear and comprehensible framework for vocational and technical qualifications;
- Considerable overlaps and duplication of qualifications across the awarding bodies;
- Major gaps in providing for progression, transition, and transfer for students and subjects;
- Continued inflexible arrangements in colleges and examination boards, creating barriers for entry and attendance;
- Little understanding of how to transition to the work place;
- Attainments skewed towards testing rather than skills and competence in work environments;
- Lack of systems to assess prior learning and experience especially in the work place.

### **The NCVQ and national vocational qualification**

In 1986 an attempt was made to reform the vocational qualifications with the establishment of the National Council for Vocational Qualifications (NVCQ) and the development of the National Vocational Qualification, a system operating on the basis of competencies defined by industry- and employer-led bodies. The NVQs were setup on the basis of occupational standards:

**Level 1:** Competence in a range of varied work activities, most of which were routine and predictable.

**Level 2:** Competence in a significant range of varied work activities in a variety of contexts; collaboration with others, perhaps through membership of a work group or team, was often a requirement.

**Level 3:** Competence a broad range of varied work activities performed in a wide variety of contexts, most of which were complex and non-routine; considerable responsibility, autonomy, and guidance of others was often required.

**Level 4:** Competence a broad range of complex, technical or professional work activities performed in a variety of contexts with a substantial degree of personal responsibility and autonomy; responsibility for the work of others and the allocation of resources often required.

**Level 5:** Competence in the application of a range of fundamental principles across a wide and often unpredictable variety of contexts; substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources featured

strongly, as did personal accountabilities for analysis, diagnosis, design, planning, execution and evaluation.

Because of criticisms of the misinformed academic and the cost involved in the delivery of the program, however, the program fell into controversy and traditional qualification of the A-levels took more favor with parents, teachers, and students. By the end of 2002 nearly 3.75 million certificates had been awarded and a number of key groups had fully exploited the benefits of the system. Colleges also found it a challenge to provide for the real working environment (RWE) which was a prerequisite for the NVQ. CGLI and BTEC and other examination bodies moved on to more competence-based programs. The other reason for this academic drift was based on the fact that from the 1970s-90s there was a general decline in manufacturing and a move towards a knowledge-based service economy, with politicians questioning the need for expansion in the training of the skilled craftsmen.

### **Modern apprenticeship system**

In the UK, a form of training based on a combination of work-based and theoretical learning and funded to various degrees is called 'apprenticeship'. Its 12 sectors include construction, hairdressing, business administration, customer care, hospitality, childcare and early years, engineering, vehicle maintenance, retail, health and social care, electro-technical, and plumbing.

Careers education and guidance (CEG), which has two partnership models, includes careers education and careers guidance to young people. The first is to help young people develop the knowledge and skills for employment. The second is to help young people when to make decisions relating to learning and careers.

The government raised the compulsory learning age to 17 and 18 years old, and 14- to 19-year olds are offered four principal routes: (i) GCSE/A-Levels, (ii) Diplomas, (iii) Apprenticeships, and (iv) Foundation Learning Tier. The Skills Commission, however, awards diplomas at an early stage, which are different from apprenticeships in having, for instance, broader qualifications. They provide a balanced mix of practical/applied and academic content; in contrast, apprenticeships focus on specific skills and knowledge.

Yet, in the UK, most teachers prefer to encourage young people to continue along a traditional academic route (e.g., diplomas). They think apprenticeship is not best career choice, that its skills and knowledge are not recognized and are misunderstood by the public.

In light of the potential problem of diplomas and apprenticeships competing for talent, the Association of Learning Providers (ALP) and the Greater Manchester Chamber of Commerce both advised building the technical certificate in the apprenticeship curriculum to avoid any unnecessary repetition between diplomas and apprenticeship, and raise the position of apprenticeships in the educational system. At the same time, program-led apprenticeships (PLAs) played an extremely important role in education. PLAs have three modes: (i) students undertake a planned period of initial learning; (ii) students receive the same learning experience as in an employer-led apprenticeship; (iii) students are enrolled on full-time vocational programs. The Select Commission advises that PLAs be housed outside apprenticeship and called 'pre-apprenticeship training'.

Advanced apprenticeships require the apprentice to be employed in a supervisory role, giving Minimum Levels of Performance (MLP) an important function. In certain cases, educators failing the requirements of MLP would no longer be granted government funding. Yet, the Select Commission thought the MLP system had indirect and unintended negative consequences on the numbers, progress, and quality of advanced apprenticeships.

Finally, advanced and higher education, even though data indicates overall numbers are very low, is very important for expanding apprenticeships and raises quality. The Skill Commission advised the Higher Education Funding Council to provide more part-time courses and the government to formulate incentives policies for guiding higher education.

## **The Wolf report**

The importance of the utilitarian and the need for craftsmen within the economy of Britain was well put in the forward of the Wolf Report by the Minister of State for Further Education, Skills and Lifelong-learning, John Hayes. He put the foundations of the economy in the skilled hands of craftsmen and women of Britain.

The focus of the report, written under the stewardship of Prof. Allison Wolf, called for embracing and extending vocational learning, giving special attention to apprenticeships.

It was felt that conventional academic study encompassed only part of what the labor market valued and demanded; in contrast, vocational education taught valuable skills with high standards achieved through relevant content and hands-on training via the apprenticeship system.

The report, however, claimed that vocational students were not following courses of this type of training. An acknowledgement was that the environment within which young people seek and

train for employment had changed. The discourse for training craftsmen of the future began with an outline of labor market characteristics:

- 1) Youth in England aspire for higher education and stay in fulltime education training till age 18.
- 2) The knock on effect of the labor market needs to be taken into account in vocational education.
- 3) Employers value and reward employment experience and not just formal credentials. Good apprenticeships are valuable for general and specific skills; any employment has value for people's careers and chances. Even though formal credentials are seen as important, they are not all-determining. Work experience offers an alternative progression route, while many qualifications are not worth having at all.
- 4) Good command of English and mathematics are the most useful and valuable vocational skills.
- 5) Young people change jobs frequently within a labor market that is in a constant state of flux. Developing generic skills is important and the educational system needs to reflect such realities.

### **Knowledge between Stakeholders**

The You Gov/Edge Survey<sup>2</sup> of 250,000 adults and young people in the UK (2008) revealed a considerable perception gap among the four key stakeholders – teachers, employers, students, and parents – about the options with regard to apprenticeships versus A-levels. Teachers' (n=1,199) knowledge about apprenticeships was limited. Their net knowledge score across a range of qualifications was calculated by subtracting the percentage of those with good knowledge from the percentage of those with poor knowledge. While the teachers had good knowledge of undergraduate and post-graduate degrees with a score of 67, the scores for GCSEs/Standers in Scotland and A-levels or higher in Scotland were 41 and 30 respectively. Teachers' scores on apprenticeships, young apprenticeships, and advanced apprenticeships were -39, -42, and -55 respectively. It was pointed out that this was a reason for concern and it need to be remedied.

About one-quarter (24%) agreed that apprenticeship was a good alternative to A-levels or equivalent; 46 percent disagreed. However, 47% believed that apprenticeships are suitable for individuals of all abilities; 10% did not know. The vast majority (~85%) felt that there was a clear progression route for academic qualifications but about 35% felt the same was true for vocational

---

<sup>2</sup> The Skills Commissions 2008, Progression through apprenticeships, London.

qualifications. A perception gap existed between teachers and parents on whether apprenticeship is a good alternative.

Children and young people were more positive, with 52% of students (376 respondents) seeing apprenticeship as a good alternative to A-levels or equivalent, but there was a gap between the perceptions of the C2DE and ABC1 social groups.<sup>3</sup> Parents also seemed to favor a mix of academic and practical learning (n=1,030), with 48% seeing apprenticeship as a means to provide a balance between extremes. As with students, however, there seemed to be a divide between C2DE and ABC1, with the working classes being more favorable to apprenticeship. Employers' evaluation of the readiness of the labor force entering the market without the apprentice system was low.

## **Conclusion**

Britain sees a mix of approaches towards technical education, having its roots in all the three modes of organization, that is, the free market, corporatist, and interventionist models, leading to a range of qualifications and means of achieving them with some if not great consensus on creating parity between them. A recurring theme through the ages, however, has been the fact that apprenticeships provide a good method for training the next generation of craftsmen in Britain, with many policies directed toward achieving high quality vocational education for British youth.

---

<sup>3</sup> The classifications are based on the occupation of the head of the household and break down into A, B, C1, C2, D and E. A equates to upper middle class while E represents the "underclass". Today, grades are often grouped into ABC1 and C2DE, which equate to middle class and working class respectively.

# Crafting Culture

*Italy*

Anna Mignosa

Rotterdam, 23 April 2013

## Introduction

The craft sector in Italy plays an important role in the economy, comprising 461,000 enterprises or 30% of Italy's total. Most are micro-enterprises, with a maximum of nine employees; 33,000, however, have between 10 and 49 employees. The craft sector employs some 1.5 million people, or 13% of the Italian work force (Unioncamere, 2011).

The sector is primarily industrial: 'production craft' employs 42% of the craft sector, followed by construction (31%), and services (27%). From 2007 to 2010 the number of craft enterprises fell by 1.6% whereas non-craft enterprises increased by 3.5%. A possible explanation is the weakness of craft enterprises (in securing loans, for instance). Another problem relates to the difficulty of finding employees with adequate levels of education and skill. (We return to this later.)

In the traditional division of Italy's macro-areas (Northwest, Northeast, Center, South, Islands), 31% of the sector is in the Northwest. Among them, 40% are active in the construction sector and 25% in industry. This distribution is similar in the Northeast and Center; in the South and Islands commerce is more important. The first three areas are host to about three-quarters of the sector.

A researcher of the research center of CNA has estimated the percentages of workers employed in craft versus non-craft enterprises in the manufacturing sector (table 1).

*Table 1: Employment % in craft and non-craft enterprises - manufacturing (2007)*

| <b>Sub-sector</b>                  | <b>Craft</b> | <b>Non-craft</b> |
|------------------------------------|--------------|------------------|
| Metal products (machinery          | 20,8         | 12,7             |
| Food                               | 14,2         | 7,3              |
| Clothing                           | 8,9          | 5                |
| Wood products and woodwork         |              | 2,2              |
| Machine and apparel repair and     | 6,3          | 3,2              |
| Furniture                          | 6            | 3,7              |
| Other manufacture production       | 5,2          | 2,3              |
| Other production from nonmetallic  | 5            | 5,7              |
| Leather products                   | 4,8          | 3,1              |
| Machinery and apparel              | 4,7          | 12,6             |
| Textiles                           | 3,9          | 4,3              |
| Print and reproduction of recorded | 3,7          | 2,2              |
| Rubber and plastic materials       | 2,4          | 5,3              |
| Electric devices and home non-     | 2,1          | 4,9              |
| Computer, electronics, optics and  | 1,1          | 3,7              |

|                                    |              |              |
|------------------------------------|--------------|--------------|
| Paper and paper products           | 0,8          | 2,1          |
| Steel industry                     | 0,7          | 4,0          |
| Other means of transport           | 0,6          | 2,8          |
| Chemical products                  | 0,5          | 3,6          |
| Vehicles, truck trailers           | 0,3          | 5,4          |
| Drinks                             | 0,2          | 1,1          |
| Coke and products derived from oil | 0,0          | 0,5          |
| Pharmaceutical                     | 0.0          | 2,1          |
| <b>Total Manufacturing sector</b>  | <b>100,0</b> | <b>100,0</b> |

Source: Translated from CNA elaboration of ISTAT data.

### Definition of the sector

Assessing the importance of this sector for the Italian and regional economies is not easy.<sup>1</sup> Several interesting studies (The European House-Ambrosetti S.p.A., 2010; Centro Studi CNA, 2008; Istituto Tagliacarne, 2007) have faced the common difficulty of *identifying* the craft sector. Indeed, the law (no. 443 of 1985) providing the legal definition of craft refers to companies' dimensions. It does not mention the field of activity except for 'Artistic and traditional works and clothes', 'transportation' and 'construction', sectors that are explicitly indicated as subject to specific rules as far as their dimension is concerned. As a result some confusion might arise as the craft domain spans a wide array of activities: artistic crafts (pottery, glass, fashion, etc.), food, health care, construction, transportation, and so on. The same law established a register of craft companies active in each province.<sup>2</sup> A company can be considered a craft company only following inscription into the register.

Three associations represent the craft sector at the national level and have regional and provincial offices: (i) *Confartigianato*,<sup>3</sup> (ii) *Confederazione Nazionale dell'Artigianato e*

<sup>1</sup> According to a study of the Centro Studi of the *Confederazione Nazionale dell'Artigianato e della Piccola e Media Impresa* (CNA - National Confederation of the Craft Sector and Small and Medium Enterprises, 2008), in 2007 Italy had 1.3 million craft enterprises (28.5% of the total national number) with c.a. 3.3 million employees (18.8% of the national total). Most were micro enterprises: 96.2% had fewer than 10 employees. The differences between the data in this report and that in the 2010 report seem quite astonishing. It looks as if between 2007 and 2010 the number of craft enterprises diminished by half. This drop, however, might simply be due to the different counting system used. The difference between these reports, done by institutions with responsibilities for craft enterprises (see below), confirms the main difficulty in the sector, i.e., the lack of a clear definition and thus the difficulty in identifying the companies belonging to it.

<sup>2</sup> Italy is divided in regions, provinces, and municipalities.

<sup>3</sup> See: <http://www.confartigianato.it>.

della *Piccola e Media Impresa* (CNA - National Confederation of the Craft Sector and Small and Medium Enterprises) which has the mission “to enhance crafts ... acting as their partner for development and promoting economic and social development”,<sup>4</sup> and (iii) CASA.<sup>5</sup> A fourth association, CLAAI (*Confederazione delle Libere Associazioni Artigiane Italiane* - Confederation of the Free Italian Craft Association),<sup>6</sup> irregularly appears in various regions. In total the associations represent more than one-third of active craftsmen. Next to representing craft enterprises at the political level and with trade unions, the associations provide services (financial, educational, support to internationalization and to pension and labor matters) to their associated enterprises. Services include administration (accounting, fiscal, legal and financial assistance); welfare services and sponsorship; quality and design; computerization and communication; education and human resources; and maintenance and logistics.

We should note that the above organizations also represent small and medium enterprises in general,<sup>7</sup> compounding the difficulty of getting a clear picture of the craft sector. Because they refer to various types of enterprises, some are undoubtedly not directly related to the craft sector.

When focusing on utilitarian craft more confusion might arise. As mentioned above, the types of activities included within craft are not explicitly stated except for ‘artistic and traditional works and clothes’, ‘transportation’ and ‘construction’, which are mentioned in the law of craft and fashion included in a Decree of the President of the Republic of 2001. To identify craft activities it is useful to consider the categories to which Confartigianato, CNA and C.A.S.A. refer. As is evident from table 2, the divisions are somewhat arbitrary. Confartigianato indicates seven areas of activity divided by category and activity type; CNA only refers to categories and activity type; C.A.S.A. simply mentions categories.<sup>8</sup>

---

<sup>4</sup> See: [www.cna.it](http://www.cna.it).

<sup>5</sup> See: <http://www.casartigiani.org>.

<sup>6</sup> See: <http://www.claai.info>.

<sup>7</sup> Actually this happens also at the EU level where UEAPME, the European Association of Craft, Small and Medium-sized Enterprises, represents the interests of crafts but also of SME, at the EU level.

<sup>8</sup> Another option to identify craft companies would be to go through the registers of the 110 Italian provinces.

Table 2a: Confartigianato, CNA and C.A.S.A. classification of the activities included in the

| CONFARTIGIANATO |                                                                                    |                                                                                                                                                                                                                                    | CNA                    |                                                                                                                                                                                                                                                                                      | C.A.S.A                                                                                                                 |
|-----------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
|                 | CATEGORIES                                                                         | TYPE OF ACTIVITIES                                                                                                                                                                                                                 | CATEGORIES             | TYPE OF ACTIVITIES                                                                                                                                                                                                                                                                   | CATEGORIES                                                                                                              |
| Are a no. 1     | <ul style="list-style-type: none"> <li>• Car repair,</li> </ul>                    | <ul style="list-style-type: none"> <li>- Car builders,</li> <li>- Car electricians,</li> <li>- Tire repairers</li> </ul>                                                                                                           | Community services     | <ul style="list-style-type: none"> <li>- Car repair</li> <li>- Car builders,</li> <li>- Car electricians,</li> <li>- Tire repairers</li> <li>- Automotive service</li> <li>- Road service</li> <li>- Car demolition</li> <li>- Cleaning companies</li> <li>- Dry cleaners</li> </ul> | <ul style="list-style-type: none"> <li>- Dry cleaners</li> </ul>                                                        |
|                 | <ul style="list-style-type: none"> <li>• Engineering /mechanics</li> </ul>         | <ul style="list-style-type: none"> <li>- Chemistry, rubber, plastic</li> <li>- Mechanics</li> </ul>                                                                                                                                |                        |                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>- Chemistry</li> <li>- Plastic</li> </ul>                                        |
|                 | <ul style="list-style-type: none"> <li>• Equipment installation</li> </ul>         | <ul style="list-style-type: none"> <li>- Aerial installers</li> <li>- Elevator installers</li> <li>- Heating systems installers</li> <li>- Electricians</li> <li>- Refrigeration systems installers</li> <li>- Plumbers</li> </ul> | Equipment installation | <ul style="list-style-type: none"> <li>- Aerial installers</li> <li>- Elevator installers</li> <li>- Heating systems installers</li> <li>- Electricians</li> <li>- Refrigeration systems installers</li> <li>- Plumbers</li> <li>- Household appliances repairers</li> </ul>         | <ul style="list-style-type: none"> <li>- Equipment installation</li> <li>- Metal mechanics</li> </ul>                   |
|                 | <ul style="list-style-type: none"> <li>• Services and tertiary services</li> </ul> | <ul style="list-style-type: none"> <li>- Household electrical appliances repairers</li> </ul>                                                                                                                                      |                        |                                                                                                                                                                                                                                                                                      |                                                                                                                         |
| Are a no. 2     | Food                                                                               | <ul style="list-style-type: none"> <li>- Food</li> <li>- Cheese</li> <li>- Ice cream</li> <li>- Meat producers</li> <li>- Bakers</li> <li>- Pasta makers</li> <li>- Confectionery</li> </ul>                                       | Food                   | <ul style="list-style-type: none"> <li>- Meat</li> <li>- Chocolate producers</li> <li>- Herbalist</li> </ul>                                                                                                                                                                         | <ul style="list-style-type: none"> <li>- Food specialists</li> <li>- Bakers</li> <li>- Confectionery</li> </ul>         |
| Are a no. 3     | <ul style="list-style-type: none"> <li>• Health</li> </ul>                         | <ul style="list-style-type: none"> <li>- Hair stylists</li> <li>- Beauty consultants (including: tattoos makers, manicure)</li> <li>- Dental technicians</li> <li>- Opticians and other health</li> </ul>                          | Wellness and Health    | <ul style="list-style-type: none"> <li>- Dental technicians</li> <li>- Podiatrist</li> <li>- Opticians</li> <li>- Orthopedist</li> <li>- Hair stylists</li> <li>- Beauty consultants</li> <li>- Fitness</li> <li>- Related</li> </ul>                                                | <ul style="list-style-type: none"> <li>- Hair stylists</li> <li>- Hairdressers</li> <li>- Beauty consultants</li> </ul> |

|             |                                                                    | specialists                                                                                                                                                                                                                     |                                                                                           | activities                                                                                                                                                                                                                                     |                                                                                                                   |
|-------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|             |                                                                    | <ul style="list-style-type: none"> <li>• Communication</li> </ul>                                                                                                                                                               | <ul style="list-style-type: none"> <li>- Photographers</li> <li>- Graphic arts</li> </ul> | Communication and services <ul style="list-style-type: none"> <li>- Graphics and publishing</li> <li>- Photo and video</li> <li>- Informatics</li> <li>- Interpreters</li> <li>- Exhibition and fair organizers</li> </ul>                     | <ul style="list-style-type: none"> <li>- Photographers</li> <li>- Paper makers</li> <li>- Print makers</li> </ul> |
| Are a no. 4 | <ul style="list-style-type: none"> <li>• Fashion</li> </ul>        | <ul style="list-style-type: none"> <li>- Clothing industry</li> <li>- Shoe production</li> <li>- Glasses (eye-sun) production</li> <li>- Dry cleaners</li> <li>- Tailors and designers</li> <li>- Textile production</li> </ul> | Fashion                                                                                   | <ul style="list-style-type: none"> <li>- Clothing industry</li> <li>- Shoe production</li> <li>- Fur makers</li> <li>- Tailors and designers</li> <li>- Textile production</li> </ul>                                                          | <ul style="list-style-type: none"> <li>- Clothing</li> </ul>                                                      |
|             | <ul style="list-style-type: none"> <li>• Artistic craft</li> </ul> | <ul style="list-style-type: none"> <li>- Potters</li> <li>- Goldsmiths</li> <li>- Restorers</li> <li>- Glassmakers</li> </ul>                                                                                                   | Artistic and traditional                                                                  | <ul style="list-style-type: none"> <li>- Artistic/traditional</li> <li>- Potters</li> <li>- Goldsmiths</li> <li>- Restorers</li> </ul>                                                                                                         | <ul style="list-style-type: none"> <li>- Artistic craft</li> </ul>                                                |
| Are a no. 5 | Construction                                                       | <ul style="list-style-type: none"> <li>- Builders</li> <li>- Interior decorators</li> <li>- Painters</li> <li>- Producers of marble machines</li> </ul>                                                                         | Construction                                                                              | <ul style="list-style-type: none"> <li>- Builders</li> <li>- Producers of building materials</li> <li>- Restorers</li> <li>- Production/use of concrete products</li> <li>- Painters</li> <li>- Excavation/transformation of marble</li> </ul> | <ul style="list-style-type: none"> <li>- Construction</li> </ul>                                                  |
| Are a no. 6 | Transportation                                                     | <ul style="list-style-type: none"> <li>- Bus operators</li> <li>- Taxi drivers</li> <li>- Goods transportation</li> </ul>                                                                                                       | Transportation                                                                            | <ul style="list-style-type: none"> <li>• Transportation</li> </ul>                                                                                                                                                                             | <ul style="list-style-type: none"> <li>- Taxi drivers</li> <li>- Goods transportation</li> </ul>                  |
| Are a no. 7 | Wood and furniture                                                 | <ul style="list-style-type: none"> <li>- Furniture</li> <li>- Wood works (doors, windows, floors, building materials)</li> <li>- Upholstery</li> </ul>                                                                          | Production                                                                                | <ul style="list-style-type: none"> <li>- Engineering production</li> <li>- Wood and furniture</li> <li>- Nautical</li> <li>- Chemistry, rubber, plastic</li> </ul>                                                                             | <ul style="list-style-type: none"> <li>- Wood and furniture</li> </ul>                                            |

Source: Our elaboration of data from Confartigianato, CNA and C.A.S.A.

The table shows the similarities and differences among the classifications, giving evidence to the lack of clarity in the method used to distinguish the craft sector, i.e., the dimension. The listing is not identical, which can lead to some confusion. The sectors of activity included in the tables include some areas that might be difficult to acknowledge as being part of the craft sector in general and the utilitarian craft in particular. Especially areas like transportation and engineering do not seem to fit the idea of craft, but then again, just what *is* craft after all? Probably the easiest way to identify utilitarian craft is by separating it from what Confartigianato includes in Area no. 4, 'Fashion' and 'Artistic craft'; these are also present in the classifications of CAN and C.A.S.A. Such a division means that all other areas would be utilitarian craft. This distinction would somehow correspond to that between *Kunsth Handwerk* and *Handwerk* which, in Germany, seems to distinguish traditional/artistic craft from utilitarian craft.

### Education in the craft sector

The ambiguity characterizing the definition can especially be found in the area of education, which in the craft sector is considered in the Constitution. In general, it is possible to get a professional diploma in the craft sector after four years in a regional center of professional education or in a national professional institute. Just how this works, however, varies by region (table 3).

| Table 3: REGIONAL ORGANISATIONS RESPONSIBLE FOR CRAFTS AND MEASURES FOR EDUCATION |                                                                                                                                     |                        |             |                      |                   |                                  |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------|----------------------|-------------------|----------------------------------|
| REGION                                                                            | REGIONAL<br>STRUCTURE OF<br>MANAGEMENT AND<br>CONTROL                                                                               | MONITORING<br>CENTER   | WEB<br>SITE | EMPLOYEE<br>TRAINING | COURSE<br>FUNDING | SUPPORT<br>AND<br>STRUCTURE<br>S |
| <b>Abruzzo</b>                                                                    | Office for crafts development within the Direction of production activities (i.e. Regional <i>Assessorato</i> for industry commerce | No                     | Yes         |                      |                   |                                  |
| <b>Basilicata</b>                                                                 | Department for crafts development and entrepreneurial policies No Regional                                                          | Yes<br>• Annual report | No          |                      | Grants            | School workshops                 |

|                              |                                                                                                                                            |                                                      |     |                                                                              |                                               |                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----|------------------------------------------------------------------------------|-----------------------------------------------|------------------|
| <b>Calabria</b>              | Department for industry, commerce and crafts (within the Regional Assessorato for tourism, industry, quarries and peat                     | No                                                   | No  | No                                                                           |                                               |                  |
| <b>Campania</b>              | Regional Assessorato for production activities, industry, crafts, cooperation and commerce                                                 | No                                                   | No  | No (Under Regional Assessorato for professional training)                    | No                                            | School workshops |
| <b>Emilia Romagna</b>        | No                                                                                                                                         | Yes<br>• Economic Survey                             | No  | No                                                                           | Yes                                           | No               |
| <b>Friuli Venezia Giulia</b> | Dept. for work and welfare, cooperation and crafts (within the Regional Assessorato for professional training, work, welfare, cooperation, | No                                                   | No  | No                                                                           | Professional courses for Master craftsman     | School workshops |
| <b>Lazio</b>                 | No                                                                                                                                         | Yes<br>• Economic Survey<br>• Research               | No  | No (jurisdiction of Regional Assessorato for professional training)          |                                               | No               |
| <b>Liguria</b>               | Office for craft development (NO Regional Assessorato).                                                                                    | Yes<br>• Database<br>• Economic Survey<br>• Research | No  | Yes                                                                          | Yes                                           | School workshops |
| <b>Lombardia</b>             | Dept. for industry and crafts (within the Regional Assessorato for crafts, new economy, research and technological                         | Yes<br>• Annual report                               | Yes | No                                                                           | Yes (Regional fund for professional training) | School workshops |
| <b>Marche</b>                | Dept. for industry and crafts (within the Regional Assessorato for industry and crafts)                                                    | Yes<br>• Annual report<br>• Economic Survey          | Yes | No (jurisdiction of Regional Assessorato for work and professional training) |                                               |                  |
| <b>Molise</b>                | Department for industry and crafts (within the Regional Assessorato for industry, commerce,                                                | No                                                   | No  | No (jurisdiction of Regional Assessorato for work and professional training) |                                               |                  |
| <b>Piemonte</b>              | Dept. for commerce and crafts (within the Regional Assessorato for crafts, cooperation, mining, local                                      | Yes<br>• Annual report<br>• Economic Survey          | Yes | Yes                                                                          | Yes                                           | School workshops |

|                            |                                                                                                                                                                           |                                                                        |     |                                                                                                                                                       |                                                                 |                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------|
| <b>Puglia</b>              | Craft office (within the Regional Assessorato for promotion, industrial activities, crafts, fairs and commerce)                                                           | No                                                                     | No  | No (jurisdiction of Regional Assessorato for work and professional training)                                                                          |                                                                 |                                                   |
| <b>Sardegna</b>            | Dept. for cooperation, commerce and crafts (within the Regional Assessorato for cooperation, commerce and crafts)                                                         | No                                                                     | No  | No (jurisdiction of Regional Assessorato for work and professional training)<br>Regional institute for the organization of craftsmanship (I.S.O.L.A.) |                                                                 |                                                   |
| <b>Sicilia</b>             | Office for crafts and industry (within the Regional Assessorato for crafts, SME, production and work cooperatives, promotion and internationalization, production system) | Yes<br>(managed by Confartigianato)<br>• Economic Survey<br>• Research | Yes | Yes<br>(TRIO projects: on-line courses on professional training)                                                                                      | Yes                                                             | School workshops                                  |
| <b>Umbria</b>              | Regional Assessorato for crafts, housing construction, research                                                                                                           | Yes<br>• Economic Survey<br>• Research                                 | No  | Yes                                                                                                                                                   | Yes                                                             | School workshops                                  |
| <b>Toscana</b>             | Regional Assessorato for tourism, crafts and commerce                                                                                                                     | (In progress)                                                          | Yes | Yes                                                                                                                                                   | Yes<br>(training center within the Regional Assessorato for...) | Center for artistic traditional crafts of Tuscany |
| <b>Trentino Alto Adige</b> | No                                                                                                                                                                        | In progress                                                            | No  | No (jurisdiction of Regional Assessorato for professional training policies and...)                                                                   |                                                                 |                                                   |
| <b>Valle d'Aosta</b>       | Department for industry and crafts (within the Regional Assessorato for industry, crafts and energy)                                                                      | No                                                                     | No  | Yes                                                                                                                                                   | Yes                                                             | School workshop                                   |
| <b>Veneto</b>              | Dept. for crafts (within the Regional Assessorato for agriculture, commerce and crafts)                                                                                   | No                                                                     | No  | No (jurisdiction of Regional Assessorato for employment and professional training)                                                                    |                                                                 |                                                   |

The law regulates the *apprenticeship contract*, a special type of contract between employer and employee whereby the employer guarantees to advance the apprentice's particular craft education and the apprentice follows the courses organized within and outside the company. The level of education and the types of professional skills acquired (professional degree, craft master contract, research or higher education apprenticeship) determine the nature of the apprenticeship contract. Delegation of authority on craft matters to the regions includes craft education. Regions are responsible for the promotion and coordination of the activities necessary for the education of craftspeople and for lifelong learning in the craft sector. The result is a multiplicity of regional models. Regions can involve craft enterprises in the organization of courses and can, for instance, can acknowledge craft masters. They can also assign craft companies active in the artistic and traditional sector the role of offering 'workshops in which to realize internship' and can give grants to support education in the craft sector.

According to research within the CNA research office, most craft companies in Italy have problems finding employees and find a large gap between their theoretical and practical skills. In 2009, craft companies suggested that more than 60% of their employees would need further education (CAN, 2010). One year later, the situation had not changed: according to research (Unioncamere, 2011), 61% of the new staff hired in craft enterprises needed further training. The 'most wanted' professionals were woodworkers, painters, hairdressers and beauty consultants, auto mechanics, smiths, industrial machinery mechanics, carpenters, and electricians (Unioncamere, 2011). Perhaps because of this, 31% of all craft companies organized lifelong learning activities for their employees in 2010 and 10% hosted personnel for internship or apprenticeship. Interestingly, 9% of trainees were hired at the end of that period. This indicates two main issues: on one hand training is a form of test before hiring; on the other, the difficulty of getting well-trained personnel makes enterprises hire interns that prove to be skilled. New staff training can be realized through courses outside the craft enterprise or in-house by trained staff. Craft companies are in favor of apprenticeship contracts because they allow practice and education in concert. In some cases, new staff enter through apprenticeship contracts (14% of the total), which are meant to further train the staff (Unioncamere, 2011). At this date (February 2012), in the government's attempt to reorganize the Italian work sector, the Minister of Work affirmed that apprenticeship contracts constitute a formidable challenge.

In general, however, a problem of the craft sector in Italy is that lifelong learning is not as developed as in other European countries. A report of CAN (2011) highlights the positive relationship existing between lifelong learning and employment as well as the scarce diffusion of lifelong learning in Italy where, on the contrary, all possible measures to stimulate employment would be necessary.

### **Concluding remarks**

In conclusion, utilitarian craft has a fundamental role in the Italian economy but is a rather ambiguous sector to capture, making it difficult to state its actual dimension. The lack of clarity in the definition given by the law makes identifying the sector and its activities a difficult task. To make things more complicated, the craft educational system, although introduced in the Constitution, is not a unique one. In principle, it is possible to receive professional diploma in craft after four years in a regional center of professional education or in a national professional institute; however, as table 3 suggests, education varies from region to region and does not seem to correspond to a unique model headed by one authority. In fact, while in some regions craft education is the responsibility of the regional institutions (*assessorati*) responsible for craft, in others it falls under the authority of the regional office responsible for education. We would assume that the types of priorities and policies between these two models vary. Reaching a more homogeneous national arrangement to strengthen and clarify the craft sector is advised. Especially with education and lifelong learning, the Italian craft sector could acquire a stronger position and play a fundamental role in boosting the national economy.

## References

CNA (2008), *L'artigianato in cifre*, Annual report.

CNA (2010), *Le professioni legate all'artigianato e le difficoltà di reperimento da parte delle imprese*, Report.

CNA (2010), *La life long learning uno strumento a sostegno dell'occupazione e della produttività un confronto europeo*, Report.

Michelsons, A. (ed.), (2003), *L'artigianato in Europa e in Italia*, Osservatorio dell'Artigianato Regione Piemonte.

UNIONCAMERE (2011), *Sistema informativo Excelsior - I fabbisogni professionali e formativi delle imprese artigiane per il 2011*.

# Crafting Culture

*China*

Lili Jiang

Rotterdam, 23 April 2013

## Contents

|                                                                      |    |
|----------------------------------------------------------------------|----|
| 1. Introduction .....                                                | 3  |
| 2. Definitions and Positions.....                                    | 4  |
| 2.1. Crafts .....                                                    | 4  |
| 2.1.1. The type of ‘arts and crafts’ .....                           | 4  |
| 2.1.2. The proportion of crafts.....                                 | 7  |
| 2.1.3. The quality of crafts .....                                   | 8  |
| 2.2. Craftsman .....                                                 | 10 |
| 2.2.1. General information .....                                     | 10 |
| 2.2.2. ‘Chinese craftsman master’ title .....                        | 12 |
| 3. Institution Arrangement.....                                      | 13 |
| 3.1. Organizations.....                                              | 13 |
| 3.1.1. General information .....                                     | 13 |
| 3.1.2. Related official data .....                                   | 16 |
| 3.1.3. Advantage and disadvantage .....                              | 17 |
| 3.2. Education.....                                                  | 18 |
| 3.2.1. General situation.....                                        | 18 |
| 3.2.2. Focus on ‘crafts and arts’ in colleges and universities ..... | 19 |
| 3.3. Government.....                                                 | 22 |
| 3.3.1. Background .....                                              | 22 |
| 3.3.2. Policy and measurement .....                                  | 23 |
| 3.3.3. General Census Report.....                                    | 23 |
| 3.4. Mode Production .....                                           | 24 |
| 4. Realizing Values in Economic Setting.....                         | 24 |
| 4.1. Analysis of the Market.....                                     | 24 |
| 4.2. Contributions of Economic Aspect.....                           | 25 |
| 4.3. Export Situation .....                                          | 26 |
| 5. Realizing Values in Social Setting.....                           | 27 |
| 6. Analyzing behavior of Consumer on Crafts.....                     | 28 |
| 7. Summary and Conclusion .....                                      | 31 |
| References: .....                                                    | 32 |

## 1. Introduction

Chinese crafts are famous worldwide, reflecting China's long history, magnificent culture, esthetic and values. Unlike ancient Egypt, which focused on the intangible dimension of spiritual religion with, for example pyramids, the sphinx and mummy, Chinese culture strongly emphasizes the tangible of dimension of material life, such as silk for clothing, ceramic for drinking, and jade for decorating. Most Chinese crafts are bound up with daily life and are for people's livelihood. As one Chinese ancient proverb goes, "time should be appropriate; place should be right; material should be harmony; and skill should be ingenious"<sup>1</sup>, therefore, as the indispensable ingredient of Chinese national culture, Chinese crafts carry traditional virtue, emotional expression, excellent skill, aesthetic values, and national character.

From the anthropological and sociological perspectives, Chinese crafts are closely connected with nature and humans. Due to China's unique geographical location and a long history as an agricultural civilization, its crafts mirror typical Chinese emotion and experiences that are practical, simple, warm, and natural. China is a country with strong local flavors, with the majority of its people living in rural areas, and as such, they were likely to pay attention to handicrafts. For thousands of years, this kind of autarkic rural life stimulated the formation and development of the Chinese traditional crafts culture. That is, the Chinese crafts culture is the essence of Chinese traditional culture, the accumulation of the Chinese work experience, and the crystallization of the Chinese life wisdom.

In the initial historical period of the People's Republic of China (1949-1957), the Chinese government put forward the slogan, "use crafts in exchange for industrial machines" and, with its export advantage, "Chinese Crafts" became a driving force in developing the national economy. In the 1970s and 1980s after the Cultural Revolution,<sup>2</sup> the Chinese government paid strong attention to the revival of Chinese crafts. Due to the policies of *Reformation and Opening* (1979), the sector was confronted with new opportunities of development as well as new challenges from modern society. The government thus published *Regulations on the Protection of Traditional Crafts and Arts* in 1997 for crafts to develop with steady steps. In sum, Chinese crafts carry the crucial responsibilities of preserving cultural heritage and ensuring economic development, and make great contributions to economic, cultural and social spheres.

Yet, what are Chinese crafts? Are they different from the other countries'? Do they have special characteristics? How are they organized and developed in China? And have they contributed to our lives? We explore these issues in the following discussions.

---

<sup>1</sup> *Kaogong-Ji* has one Chinese ancient proverb, '天有时，地有气，材有美，工有巧。合此四者，然后可以为良'

<sup>2</sup> The Cultural Revolution was a socio-political movement in China from 1966 to 1976.

## 2. Definitions and Positions

Before the People's Republic of China, crafts in China was not a formal research subject in scientific domain, despite the many books and articles on them.<sup>3</sup> Since 1949, the government has paid increasing attention to theoretical research and artistic creation of crafts, raising the stature of craftspeople to a certain degree. In other words, for the past thousand years, craftsmen belonged to the lowest social level in China, like slaves. The Chinese crafts culture in modern society has changed that.

### 2.1. Crafts

#### 2.1.1. The type of 'arts and crafts'

In ancient times, 'crafts' was a term was used to describe all handmade works in China. There were no significant differences between 'crafts' and 'arts', moreover, 'crafts' was not an opposite term for 'arts', but included all the skills and forms of the 'arts'. In other words, 'arts' is a foreign word introduced in China (Qingcheng Huang 1893). After the Sino-Japanese War, 'arts' became a familiar term among Chinese scholars.

In 1920, 'arts and crafts' first appeared in China (Yuanpei Cai 1920), translated from the *Arts and Crafts Movement*. Cai claimed that crafts should be a combination of the function of crafts and the beauty of art. Chinese scholars subsequently wanted to emphasize crafts' utilitarian attributes and skilled technology, so they changed the term from 'arts and crafts' to 'crafts and arts', and finally 'crafts' was gradually replaced with 'crafts and arts'. For a definition, 'crafts and arts' as a compound noun is 'handicrafts' mainly based on the Chinese traditional culture. In Eastern Han Dynasty (25-200), it was mentioned that every craftsman use a certain degree of culture and skilled technology to handle different materials and languages, and create handicrafts with both tangible and intangible values (Shen Xu 100).

'Crafts and arts' has pragmatic and aesthetic attributes in its traditional meaning; that is, crafts must have function that satisfies some daily need of the consumer *and* express different emotional values according to different conditions and environments. Therefore, 'crafts and arts' is not one personal subject; it inevitably impacts the development of cultural and economic spheres in China and records the whole of Chinese history from material to spiritual dimensions. In contrast, 'fine arts' is a vehicle for the transmission of personal experience and the aesthetic tendency of its creators.

---

<sup>3</sup> For example, *Kaogong Ji* (*The Records of Examination of Craftsman*) is a classic work on science and technology in Ancient China, compiled toward the end of the Spring and Autumn Period. *Xinshi Lu* (1567-1572), by Cheng Huang, is an earliest extant monograph on lacquer in Chinese history. "Xue Huan Xiupu", by Shou Shen (1874-1921), is the first theoretical monograph on embroidery in Chinese history. "Chang Wu Zhi" (1621), by Wen Zheng Heng, is closely related with Chinese traditional crafts culture. "The evolution and development of Chinese arts and crafts" (1917), by Yanzhou Xu, is earliest and most detailed book about Chinese crafts history.

From a taxonomical perspective based on chronology, I prefer to classify 'crafts and arts' into three types: traditional; new, and cutting-edge. First, 'traditional crafts and arts' obviously has an epochal character. Compared with other kinds of crafts, hands must play important role in the manufacturing process, not machines. According to *Regulations on the Protection of Traditional Crafts and Arts*,

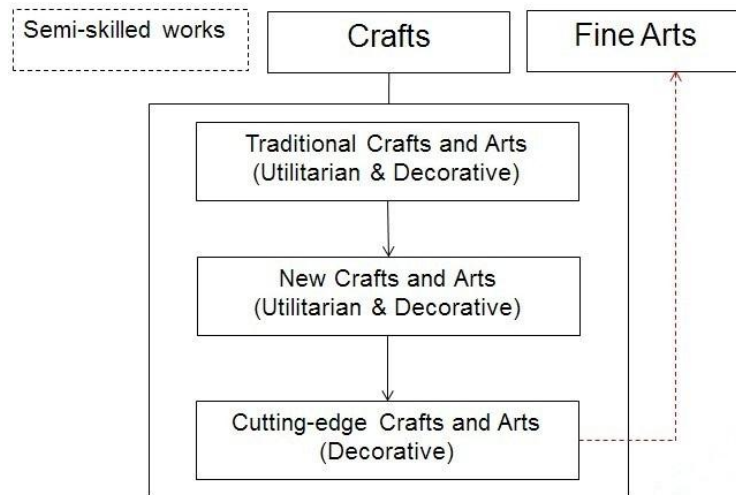
...'traditional crafts and arts' should have a long history of more than one hundred years from skill and form, and this superb craftsmanship should hand down from generations; this type of crafts should has complete technical processes, be made with natural raw materials, reflect national styles and local characteristics, and also has high prestige in domestic and foreign...

Hence, 'traditional crafts and arts' should have characteristics that are (i) traditional, (ii) artistic, (iii) national, (iv) natural, and (v) procedural.

Second, 'new crafts and arts' has no official definition in China. But after inspection and investigation in the Chinese crafts sphere, we could characterize it as having (i) new materials, (ii) new technologies, and (iii) new meanings. Even though 'new crafts and arts' must still be built on Chinese traditional culture, it also needs to satisfy new lifestyles and consumer tastes. Moreover, the characteristics of 'new crafts and arts' are driven entirely by market sales. For example, most traditional crafts workshops have already transformed into modern craft industries by the tide of China's market economy. They keep the crucial values of traditional crafts and arts, but import advanced equipment, new management modes, and fresh creation ideas. That is, 'new crafts and arts' are a perfect union between traditional and modern, local and international, and conservative and creative.

Third, 'cutting-edge crafts and arts' are closely connected with 'fine arts' due to their similar features. In this sphere, even though its creators have good knowledge on materials and sophisticated skills, and are well balanced among head, heart, and hands, they are different from other craftsmen in that they want to express personal experiences and feelings through their own work, and transform their role from craftspeople to artists. They struggle and have conflict with rules in the boundary between crafts and fine arts. Yet, if we carefully observe the market, we would find that works of cutting-edge creators still are subject to the tendency of consumers, even if the creators are reluctant to admit it. Unfortunately, we do not have corresponding official policies to interpret the group, and its creators are somewhere between crafts and fine arts.

The following figure illustrates the relationship among these crafts (Figure 1):



**Figure 1.** The mode of crafts

Because crafts are necessities of human life, their function is important. In ‘traditional’ and ‘contemporary’ crafts and arts, utility and decoration are primary attributes. Craftsmen use their knowledge and ability to solve problems, and then create items that satisfy consumers’ physical and emotional requirements. Utilitarian attributes for consumers should play certain practical roles, which can create an intimate relationship between crafts and consumers. A cup is created for drinking, whose function keeps people as close as possible to it, touch it, and handle it in the palm. Compare this with the kind of crafts that have a decorative attribute are placed in the corner of a room. In the total consumption process, consumers would like use the eyes and heart to feel its beauty, instead of the hands to practice its utility. The decorative attribute could generate a sense of distance for consumers, who admire and respect its values, but are not close with it.

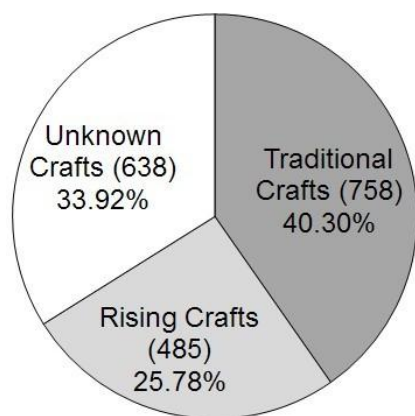
It is worth mentioning that utilitarian and decorative attributes can transform through space and time. Take, for example, a bowl created in the Ming dynasty. At that time, the bowl was merely for containing things. This changed in modern society: people might not use it as a necessity in daily life. Due to some special value increase, consumers prefer to put it in collection cabinet and enjoy it from a distance, giving it the principal attribute of decoration. In other words, values can change the function of crafts.

In considering the cutting-edge crafts and arts sphere, we suggest using the attribute of fine art. Cutting-edge craftsmen have a strong the concept of individualism and personal creativity. In most cases, their works cannot be duplicated and have a high price. Therefore, many consumers use subjective judgment to decide that cutting-edge crafts and arts are for decorating, and gradually ignore utility function in consumption process, even though one might exist.

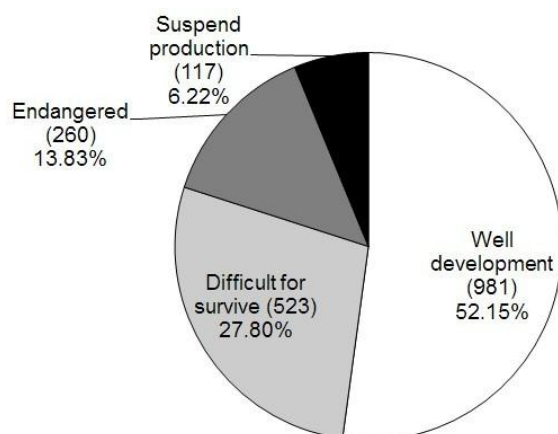
What about plumbers, diggers, and roof workers? Are they craftsmen? Are their works crafts? Actually, most of them are just semi-skilled people, not craftsmen. In most Chinese minds, craftsmen should very clearly know what they are doing in procedure. But plumbers, diggers, and roof workers have less self-motive and autonomy, and have the ability to handle emergencies. They need a commander to conduct them step by step, even though their works have obvious utilitarian or decorative attributes. Greatly skilled plumbers, diggers, and roof workers, however, might need to wear the craftsman's shoes.

### 2.1.2. The proportion of crafts

In the latest census<sup>4</sup> (China Crafts & Arts Association 2008), the State Council, according to *Regulations on the Protection of Traditional Crafts and Arts*, divided Chinese crafts into three parts from a chronological perspective: (i) traditional crafts (made before 1911), (ii) rising crafts (made after 1911), and (iii) unknown crafts (the time of creation is uncertain). (See **Error! Reference source not found..**)



**Figure 2.** The proportion of crafts about chronology, reproduced from (China Crafts and Arts Association 2008)



**Figure 3.** The development situation of crafts and arts in 2006, reproduced from (China Crafts and Arts Association 2008)

<sup>4</sup> From 2006 to 2008, the China Crafts & Arts Association surveyed the Chinese crafts industry.

Moreover, according to the development situation of crafts, they created four divisions: (i) well developed, (ii) survival difficulty, (iii) endangered, and (iv) suspended production (**Error! Reference source not found.**).

### **2.1.3. The quality of crafts**

#### **2.1.3.1. Tangible material and useful values**

Raw materials play an important role in the life of crafts. In the production process, Chinese craftsmen have to abide by the rule of nature and follow the characteristics of the material to create their subjects. They should pay enough attention to the 'beauty of raw material', which includes form, color, pattern, and texture. For example, jade craftsmen need first to consider rigidity and color of their raw material; furniture craftsmen need first to take into account the texture and structure; sculpturers should first pay attention to the material's strength and plasticity. In other words, in Chinese aesthetic perspective, the 'beauty of raw material' as natural beauty is a primary property, and the 'beauty of crafts' is a subordinate property. Raw material embodies the variety of beauty beyond any artificial thing and thus an excellent craftsman respects and explores the potential beauty of the material.

At the same time, craftsmen should not aimlessly use their skills to reshape tangible materials; they need to have a point for the subject, referring to utilitarian and decorative. For the beauty of crafts, this would be reflected in the consumption process. 'Useful values' are linked with the physical and emotional feelings of consumers. For instance, the development of Zisha technology and the formation of the tea culture are promoted together. The Zisha pot is used for more than drinking tea; it adds a pleasant spirit to life, which is an important part of Chinese tea culture. If a subject deviates from these kinds of values, its quality would be changed.

#### **2.1.3.2. Intangible cultural and aesthetic connotation**

Chinese crafts are more than the living heritage of Chinese culture; they are also the token of Chinese national spirit. For the development and revival of Chinese crafts, they require certain quality, which preserves national heritage, promotes national cultures, and develops national values. However, faced with the high-speed development of global economy, machines are gradually crowding into our lives, and we cannot deny the wonderful improvement in our standard of living as a result. In earlier times, we needed at least a month to craft one embroidered cloth, but now, we can produce it by machine in an hour. That is to save time and manpower, correct? But wait, pay attention: have we already lost some intangible value in this conversation? Are they cultural values or aesthetic values?

For example, differently patterned Chinese crafts have an intangible cultural and aesthetic connotation. 'Butterfly' means happiness for love and marriage; 'bat' means luck and blessings;

'deer' means thriving and prosperity...yet, these patterns can be produced by machines. If the pattern of Chinese crafts has these simple meanings, crafts would be replaced by industrial products in our life. Since the meanings of crafts are totally different from industrial products, how do we recognize their qualities? This is big issue for our project. Here, I focus on four points:

- a. *Humanity*. In China, 'humanity' is a priority for everything besides Chinese crafts. One old Chinese saying is 'human is the most valuable of things in heaven, human has the best spirit of things on earth'. As for crafts, they should be made by humans, and used for humans. But lifestyles have greatly changed since the Industrial Revolution, and innovation and technology has also changed the traditional structure of production. In industrial products, humans become part of the machine, and gradually crafts lose personal features of human nature. Chinese crafts, however, insist on the principle of humanity. As craftsmen, hands, head, and heart have to manage the whole production process, and consumers can sense the closeness to natural material and human emotion through human senses in the consumption process. Even though advanced production lines and modern machines came to the 'new crafts and arts' sphere, craftsman still play a leading role in the whole procedure. They should strive for active positions in controlling machines, not be an accessory for machines.
- b. *Harmony*. 'Chinese crafts' focus on relationships, which are between heart and hands, external material and internal spirit, tangible image and intangible implication... in a word, harmony is a quality of Chinese crafts reflecting balance, orderly, stability, and peace. Chinese often emphasize that harmony is the most precious thing in life, that it is crucial to the rational construction for everything in universe. Three aspects represent the significance of harmony: nature and human; material and technology; practical and aesthetic.
- c. *Uniqueness*. As an ancient civilization, China has almost 10,000 years of history. 'Chinese crafts' can satisfy physical and emotional needs of consumers, and reflect the experience and wisdom of Chinese people. As a witness, the development, innovation and renovation of 'Chinese crafts' can reveal the shape of culture, economics, and society in every stage of China's development.
- d. *Diversity*. Different crafts can display different cultural traits and social customs. Their diversity is closely linked with different times, social classes, regions, and so on.

#### **2.1.3.3. Skilled craftsmanship and core technology**

In the history of Chinese crafts, craftsmanship plays an important role for the life of crafts, which combines humans and nature, material and spirit, utility and decoration into its craft's subject. Chunlin Qiu (2011) suggests dividing craftsmanship into two sorts:

- a. *General Craftsmanship*. This is the collective wisdom and experience of generations. For a long time, selection, addition, reduction and replacement continually improved and perfected craftsmanship from generation to generation. Craftsmanship in general is open to the public; anybody can know it, learn it, and control it.
- b. *Special Craftsmanship*. This is the secret and personal wisdom and experiences of groups. It means knowledge and skills of craftsman like 'special secret'. Outsiders can never master the secret skill or have the secret knowledge.

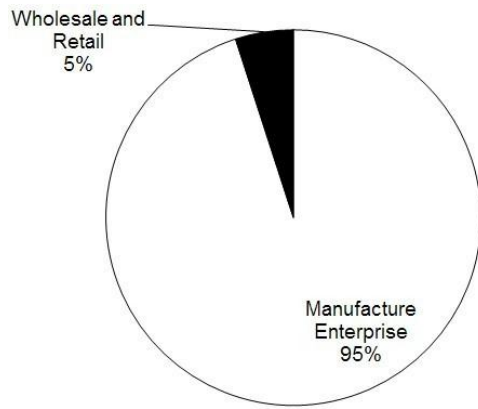
Craftsmanship increasingly and fortunately started to open to the public in modern Chinese society, providing an essential condition for the development and revival of Chinese crafts. Because craftsmen were looked down upon in the old society, they had no subsistence allowances; they had to keep their 'secret skill' for survival. Now that the position of craftsman has been raised, they need not worry that having knowledge and experience open to others will destroy their livelihoods. But we cannot deny that, because awareness of copyright is weak in China's markets, some craftsmanship still wears the mysterious veil.

For the development and inheritance of craftsmanship in modern society, many machines have replaced hands. When we face the impact of modernization, how do we recognize the 'craftsmanship' of Chinese crafts? Do we keep it or change it? Qiu puts forward the importance of 'core technology', which means traditional craftsmanship can use advanced knowledge and modern equipment, but the 'core technology' must be kept forever. It reflects surviving wisdom, public emotion, and balanced relationships between nature and humans, material and spirit, utility and decoration. In other words, if 'core technology' changes, the quality of Chinese crafts would be weakened and perhaps even disappear.

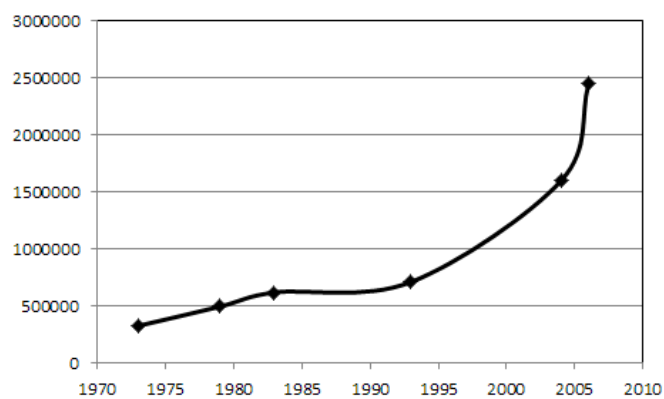
## **2.2. Craftsman**

### **2.2.1. General information**

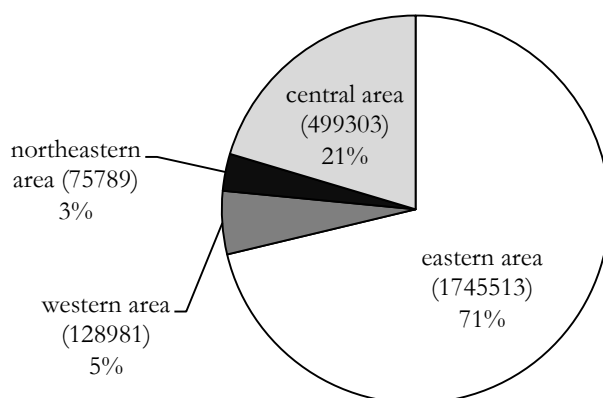
According to *General Census Report about Chinese Crafts 2006*, craftspeople and related employees number almost 2.6 million people, and most are based in the crafts manufacturing enterprises (Figure 4). Such numbers have grown more quickly in the manufacturing sector in recent years (Figure 5), situated heavily in the provinces of Guangdong, Fujian, Shandong, Zhejiang, Jiangxi, Henan, and Jiangsu. These seven provinces have almost 1.7 million people in the crafts manufacture, accounting for 68.6% of the crafts sphere. Most employees are concentrated around the eastern area of China (Figure 6). Crafts enterprises have in total 2,449,586 craftsmen and related employees (Figure 7).



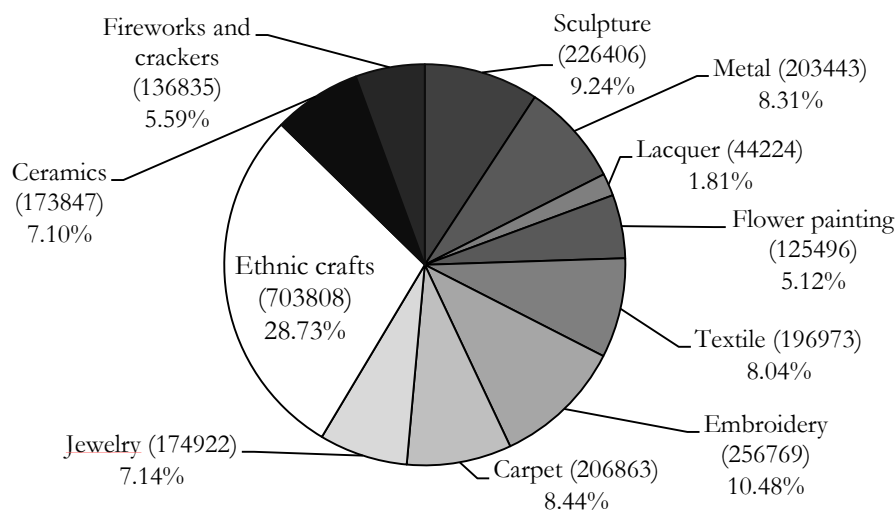
**Figure 4.** Employment in crafts in 2006, reproduced from (China Crafts and Arts Association 2008)



**Figure 5.** The growth of employee in manufacture enterprise in 2006, reproduced from (China Crafts and Arts Association 2008)



**Figure 6.** The distribution of employee of manufacture enterprise (2006). Reproduced from China Crafts and Arts Association 2008.



**Figure 7.** The distribution of employee in manufacture enterprise in 2006. Reproduced from China Crafts and Arts Association 2008.

### 2.2.2. 'Chinese crafts master' title

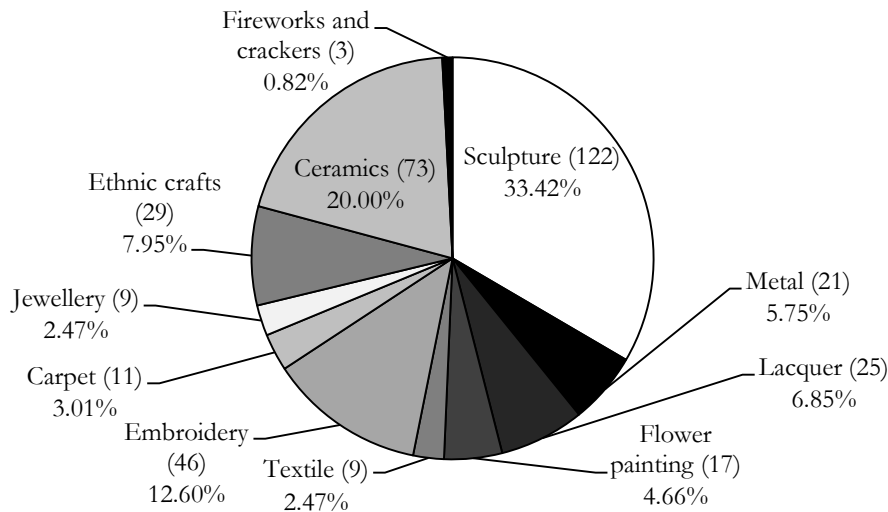
Towards the conservation and development of Chinese 'traditional crafts and arts', the government has since 1954 praised excellent craftspeople in many cities, provinces, and municipalities for strong knowledge, sophisticated skills, and outstanding craftsmanship. In 1996 377 craftsmen were awarded the honorary title of 'Old Craftsman'.

Since then the government has organized different divisions. They established 'Chinese Crafts Master' title, which has different levels: national, provincial, municipal, For a national-level title, according to *Regulations on the Protection of Traditional Crafts* craftsman must meet certain quality characteristics and have long engaged in the crafts profession. 'Chinese Craftsman Master' national-level awards have been granted five (1979, 1988, 1993, 1997, and 2006) (

Table 1 & Figure 8). The sixth selection for 2011 is pending. From an educational standpoint, an academic certificate is not necessary; ability is most important (Figure 9).

|             | Frist Time | Second Time | Third Time | Fourth Time | Fifth Time |
|-------------|------------|-------------|------------|-------------|------------|
| Time        | 1979       | 1988        | 1993       | 1997        | 2006       |
| Master      | 34         | 62          | 64         | 44          | 161        |
| Average age | 61.02      | 58.55       | 57.21      | 55.71       | 57.25      |

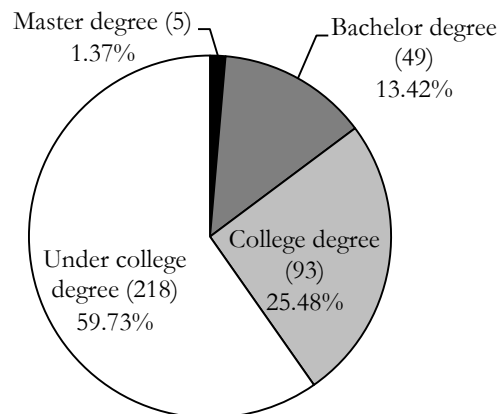
**Table 1.** Overview of national-level 'Chinese Craftsman Master', reproduced from (China Crafts and Arts Association 2008)



**Figure 8.** The distribution of national-level 'Chinese Crafts Masters' in 2006. Reproduced from China Crafts and Arts Association 2008.

Regional distribution shows that Jiangsu has 47 national-level 'Chinese Crafts Masters' (12.88%); Beijing has 46 (12.60%); followed by Zhejiang, Guangdong, Fujian. Most crafts employees and masters are concentrated in eastern area (the financial centers of China), which coincides with the areas' fast economic development.

Provincial-level master craftsmen (1479) and folk craftsmen (41) total 1520 and are honored by provinces of China. High-level craftsmen numbered 3025 in 2006.



**Figure 9.** The educational background of national-level 'Chinese Crafts Master' in 2006. Reproduced from China Crafts and Arts Association 2008.

### 3. Institution Arrangement

#### 3.1. Organizations

##### 3.1.1. General information

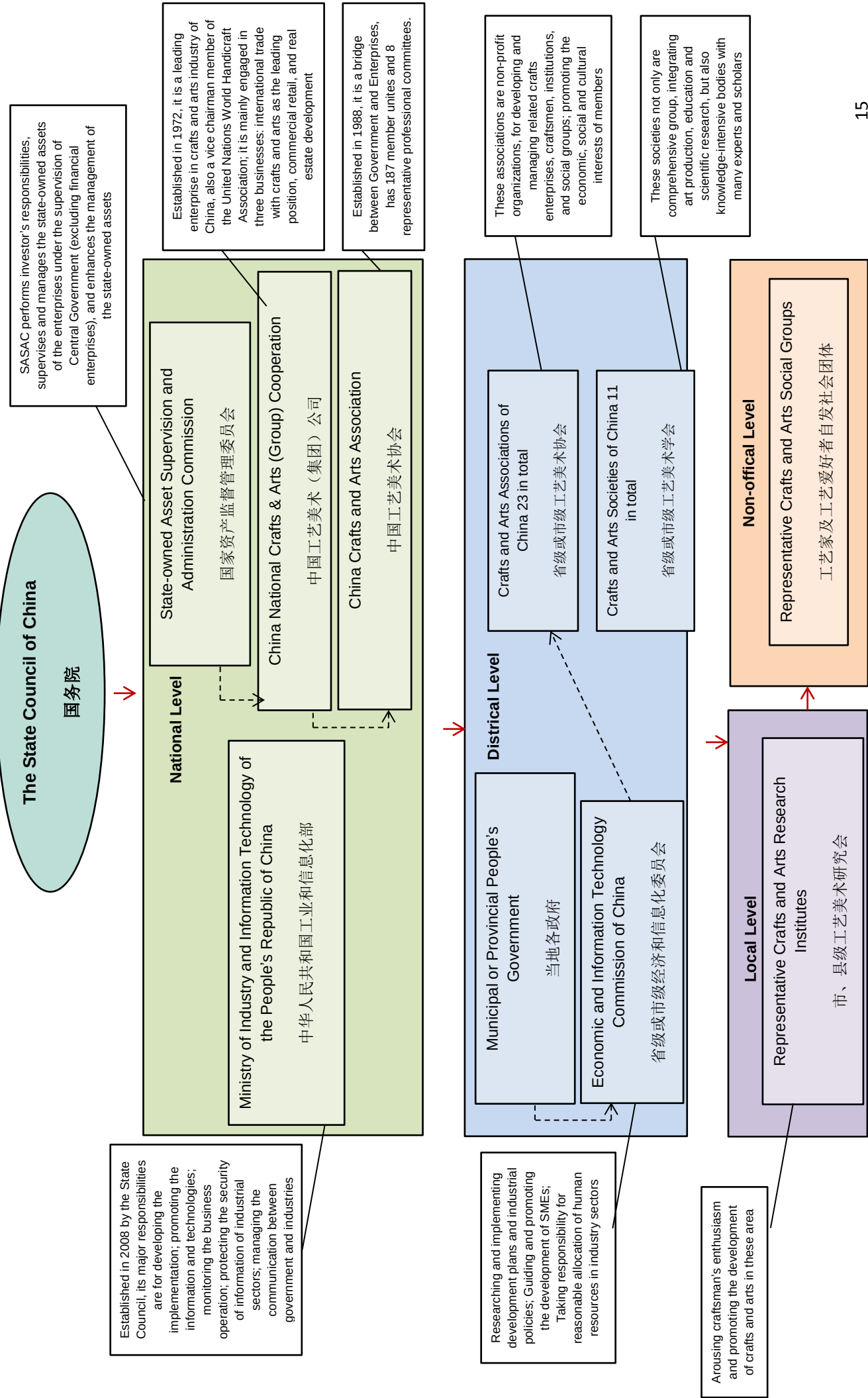
Since 1950, the Chinese government has built related organizations and associations for the development of Chinese crafts, such as *Crafts and Arts Bureau* (established in 1957), which is in

charge of the management of Chinese Craft; *Crafts and Arts Company of Light Industry of Ministry* (1972) is mainly for coordinating with the industry of Chinese crafts but at the end of 1980, its role was transformed from administrative to operative, weakening its management abilities. During that time, it was paralyzed by a lack of resources and enforcement capabilities.

To better conserve and develop Chinese crafts in modern society, the State Council published *Regulations on the Protection of Traditional Crafts and Arts* in 1997, whose concerns were to clearly draw up the responsibilities of organizations and establish effective management in the Chinese crafts sphere. Therefore, the contribution of this regulation was very important and a turning point in the development history of Chinese crafts.

The Chinese 'crafts and arts' organization system has 23 craft associations (**Error! Reference source not found.**). *China Crafts & Arts Association* is national non-profit organization established in 1988 to support the effective protection of Chinese crafts and arts and facilitate the thriving of the crafts industry in China. There are 11 craft societies in China that make up the *China Crafts & Arts Society*, a legal entity ratified by the science and technology of China association and registered in the ministry of civil affairs. Eight are in charge of the science and technology system, two are in charge of the economic system, and one is in charge of the cultural system.

Figure 10 Chinese ‘Crafts and Arts’ organization system



### 3.1.2. Related official data

In the whole Chinese crafts sphere, there totally have 248 crafts corporation groups (Table 2), and 94 crafts research institutes (Table 3).

| Level        | Region       | Number |
|--------------|--------------|--------|
| (National)   |              | 7      |
|              |              |        |
| (Provincial) | Beijing      | 2      |
|              | Tianjin      | 6      |
|              | Hebei        | 6      |
|              | Shanxi       | 27     |
|              | Nei Monggol  | 8      |
|              | Liaoning     | 9      |
|              | Jilin        | 8      |
|              | Heilongjiang | 7      |
|              | Shanghai     | 8      |
|              | Jiangsu      | 12     |
|              | Zhejiang     | 25     |
|              | Anhui        | 7      |
|              | Fujian       | 23     |
|              | Jiangxi      | 3      |
|              | Shandong     | 5      |
|              | Henan        | 7      |
|              | Hubei        | 4      |
|              | Hunan        | 7      |
|              | Guangdong    | 12     |
|              | Guangxi      | 2      |
|              | Hainan       | 3      |
|              | Chongqing    | 3      |
|              | Sichuan      | 4      |
|              | Guizhou      | 3      |
|              | Yunnan       | 13     |
|              | Tibet        | \      |
|              | Shaanxi      | 15     |
|              | Gansu        | 5      |
|              | Qinghai      | 5      |
|              | Ningxia      | 1      |
|              | Xinjiang     | 1      |

**Table 2** the number of crafts corporation groups, reproduced from (China Crafts and Arts Association 2008)

| Level        | Region       | Number |
|--------------|--------------|--------|
| (National)   |              | 1      |
| (Provincial) | Beijing      | \      |
|              | Tianjin      | 1      |
|              | Hebei        | \      |
|              | Shanxi       | 5      |
|              | Nei Monggol  | 5      |
|              | Liaoning     | 2      |
|              | Jilin        | \      |
|              | Heilongjiang | 2      |
|              | Shanghai     | 2      |
|              | Jiangsu      | 5      |
|              | Zhejiang     | 3      |
|              | Anhui        | 6      |
|              | Fujian       | 7      |
|              | Jiangxi      | 4      |
|              | Shandong     | 4      |
|              | Henan        | 5      |
|              | Hubei        | 5      |
|              | Hunan        | 4      |
|              | Guangdong    | 8      |
|              | Guangxi      | 3      |
|              | Hainan       | 2      |
|              | Chongqing    | 2      |
|              | Sichuan      | 5      |
|              | Guizhou      | 2      |
|              | Yunnan       | 2      |
|              | Tibet        | 1      |
|              | Shaanxi      | 5      |
|              | Gansu        | 1      |
|              | Qinghai      | \      |
|              | Ningxia      | \      |
|              | Xinjiang     | 2      |

**Table 3** the number of crafts research institutes in 2006, reproduced from (China Crafts and Arts Association 2008)

### 3.1.3. Advantage and disadvantage

The Chinese government has increasingly paid attention to the organization of Chinese crafts in recent years. It continually establishes different kinds of comprehensive organizations in many provinces in China, and promulgates related policies and regulations to solve problems and stimulate Chinese crafts growth. Moreover, in some provinces and cities, independent organizations and research institutions focus on specific crafts, such as jewelry, ceramics, paper-cutting, and embroidery.

Because Chinese crafts are under two departments of the State Council – the ministries of finance and culture – certain serious problems are bound to arise, such as the difference of

opinions on some matter, the distribution of resources, and the lack of integrated planning. Some craft organizations survive in name only for lack of financial support and their respective craftsmen receive no benefits from them. And just a quarter of provinces of China have crafts official regulations and measurements.

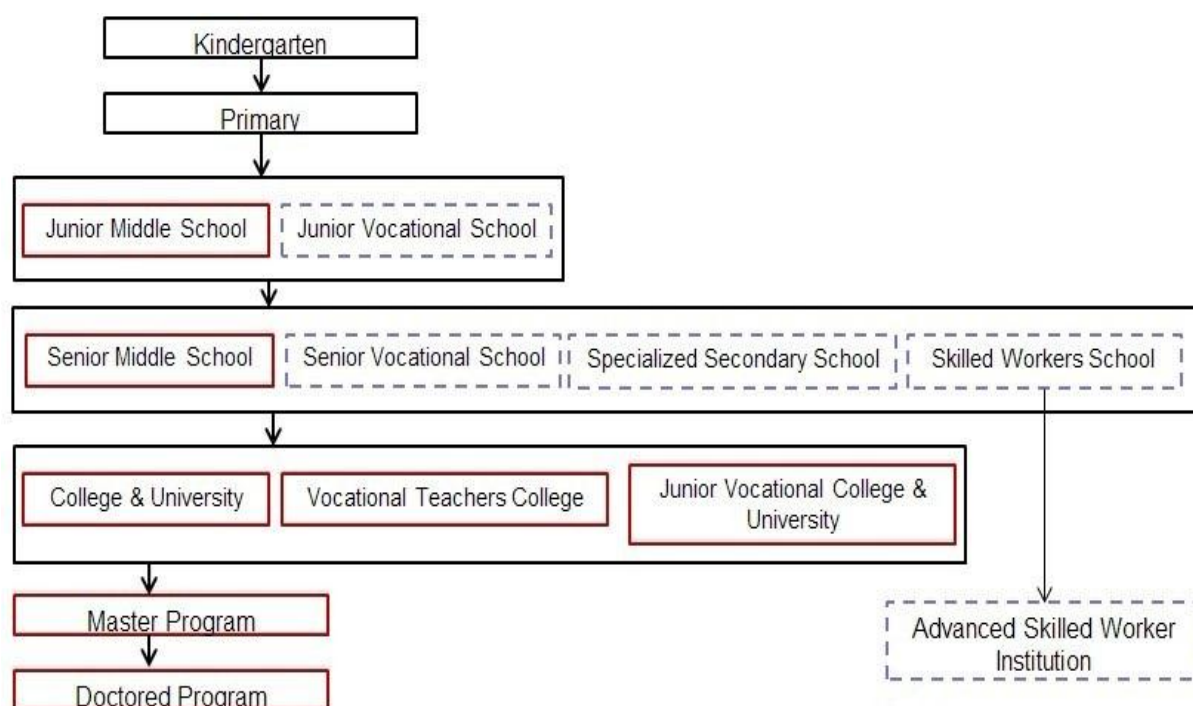
### **3.2. Education**

#### **3.2.1. General situation**

The Chinese government launched technical and vocational education and training (TVET) in 1949. It is divided into two distinct educational systems (Ding, Y \_\_ ):

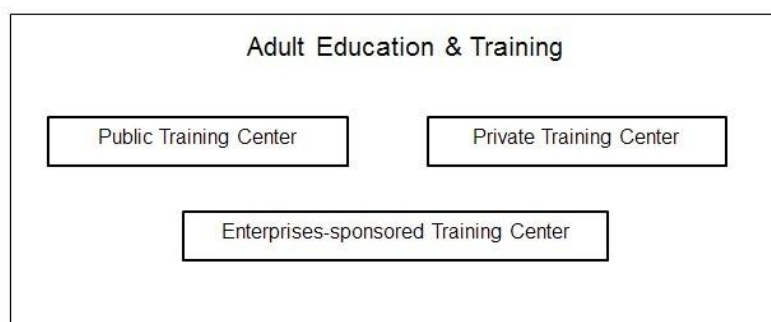
1. *School-based vocational education*: According to *Regulations on Academic Degrees of the People's Republic of China*, this system is to raise the academic level of various branches of learning and promote the development of education and science in China to meet the needs of the socialist modernization. It has different levels of teaching, ranging from fundamental knowledge to intellectual technology (Figure 11).
2. *Pre-employment and on-the-job training* is an informal vocational training that includes employment training centers, enterprise-sponsored training centers, and non-governmental vocation training bodies (Figure 12).

In the crafts sphere, however, the educational setting of Chinese crafts is different from other countries such as India, Germany, and Italy, beginning with its definition and categorization of crafts. For instance, plumbers, diggers, cooks, or cleaners are workers or skilled men (but not craftsmen) in China and their works are not crafts, even though these have utilitarian functions. \ Also different from other countries, the government would like to devote more energy and money to colleges and universities on vocational craft training. Plumbers, diggers, cooks, and cleaners, however, are trained in senior vocational-, specialized secondary-, skilled worker- and junior vocational-schools.



**Figure 11.** School-based vocational education system

At the same time, non-formal vocational training aims to improve employee knowledge and skills. In crafts sphere, this system can augment school-based vocational education and foster technological skills and craftsmanship to better satisfy business and market needs.



**Figure 12.** Pre-employment training and on the job training education system

### 3.2.2. Focus on ‘crafts and arts’ in colleges and universities

#### 3.2.2.1. History

Early on, ‘father-to-son’ and ‘master-to-apprentice’ succession modes were the main teaching methods in the Chinese crafts sphere. For the past 100 years or so the education of crafts has been moving towards colleges or universities. The development of crafts education has been roughly divided into three stages since 1949:

- a. *1949-1980*. The form of related crafts educational system began to take shape and gradually developed. It aimed to train and cultivate professional craftsmen with excellent talent, creativity, ability, and quality. According to the government statistics of 1983, there were at least 4,500 students, 12,000 graduates, 1,300 postgraduates, and 1,200 teachers in the crafts education system in China.
- b. *1980-2000* was the reform and adjustment stage of the crafts education system. In face of a rapidly developing economy, ‘crafts’ seemed to lag behind the requirements of modern society. The education system of crafts inevitably experienced some negative effects. Even though crafts major subjects were springing up all over China, they were inclined to design and high-technology within the industrial production milieu. Moreover, fewer and fewer people wanted learn traditional skills and knowledge of crafts due to unemployment.
- c. *2000-present* has been an innovation and renovation stage for the crafts education system. Government policies and measures for the educational sphere stimulated the initiative of many related colleges or universities and the enthusiasm of students and teachers. According to the government statistics of 2007, there are at least 465 crafts colleges and universities, 310,000 students, 100,000 graduates, 46,703 teachers, 16,935 professors and 900 comprehensive colleges and universities with arts major subjects indirectly related to crafts.

### 3.2.2.2. Related official data

By 2006, there were 465 related crafts colleges and universities. Detailed information is listed in t

Table 4.

| Level            | Region             | Public School |             |               |             |              | Private School |             |               |             |              |
|------------------|--------------------|---------------|-------------|---------------|-------------|--------------|----------------|-------------|---------------|-------------|--------------|
|                  |                    | sch<br>ool    | teac<br>her | profes<br>sor | stud<br>ent | gradu<br>ate | sch<br>ool     | teac<br>her | profes<br>sor | stud<br>ent | gradu<br>ate |
| (Nation<br>al)   |                    | 10            | 405         | 206           | 814         | 5006         | \              | \           | \             | \           | \            |
|                  |                    |               |             |               |             |              |                |             |               |             |              |
| (Provin<br>cial) | Beijing            | 2             | 243         | 113           | 610         | 2759         | \              | \           | \             | \           | \            |
|                  | Tianjin            | 7             | 332         | 14            | 644         | 2926         | \              | \           | \             | \           | \            |
|                  | Hebei              | 34            | 941         | 373           | 450<br>1    | 2078<br>7    | 1              | 147         | 42            | 252         | 1804         |
|                  | Shanxi             | 9             | 374         | 71            | 106<br>5    | 4920         | \              | \           | \             | \           | \            |
|                  | Nei<br>Monggo<br>l | 10            | 98          | 26            | 109         | 1284         | \              | \           | \             | \           | \            |
|                  | Liaonin            | 5             | 126         | 42            | \           | 3524         | 1              | 200         | 2             | \           | 500          |

|  |              |    |       |       |       |       |    |      |      |      |      |
|--|--------------|----|-------|-------|-------|-------|----|------|------|------|------|
|  | g            |    |       |       |       |       |    |      |      |      |      |
|  | Jilin        | 11 | 295   | 79    | 950   | 4191  | 2  | 50   | 17   | 300  | 1500 |
|  | Heilongjiang | 23 | 301   | 81    | 852   | 4415  | 2  | 116  | 36   | 23   | 2226 |
|  | Shanghai     | 73 | 2077  | 542   | 13957 | 33475 | \  | \    | \    | \    | \    |
|  | Jiangsu      | 5  | 255   | 135   | 998   | 4848  | \  | \    | \    | \    | \    |
|  | Zhejiang     | 43 | 25553 | 10609 | 4735  | 18467 | 14 | 4866 | 1586 | 1165 | 6423 |
|  | Anhui        | 16 | 630   | 185   | 2756  | 12624 | \  | \    | \    | \    | \    |
|  | Fujian       | 14 | 719   | 62    | 3168  | 10011 | 2  | 209  | 32   | 1239 | 4533 |
|  | Jiangxi      | 3  | 399   | 95    | 1285  | 4720  | \  | \    | \    | \    | \    |
|  | Shandong     | 22 | 503   | 209   | 2400  | 6535  | 3  | 25   | 8    | 100  | 175  |
|  | Henan        | 16 | 1350  | 320   | 1537  | 38770 | 3  | 125  | 10   | 330  | 5700 |
|  | Hubei        | 16 | 1607  | 448   | 6320  | 21076 | 3  | 212  | 75   | 1970 | 5100 |
|  | Hunan        | 1  | 186   | 15    | 1400  | 4800  | \  | \    | \    | \    | \    |
|  | Guangdong    | 26 | 851   | 200   | 2742  | 16675 | \  | \    | \    | \    | \    |
|  | Guangxi      | 6  | 152   | 31    | 1450  | 3865  | \  | \    | \    | \    | \    |
|  | Hainan       | 3  | 81    | 29    | \     | 1993  | \  | \    | \    | \    | \    |
|  | Chongqing    | 7  | 227   | 86    | 657   | 4705  | \  | \    | \    | \    | \    |
|  | Sichuan      | 29 | 1623  | 601   | 4656  | 35502 | 1  | 30   | 4    | 70   | 300  |
|  | Guizhou      | 3  | 70    | 21    | 8800  | 1550  | \  | \    | \    | \    | \    |
|  | Yunnan       | 7  | 264   | 112   | 1131  | 3505  | 1  | 7    | \    | 54   | 191  |
|  | Tibet        | 1  | 11    | 6     | 154   | 154   | \  | \    | \    | \    | \    |
|  | Shaanxi      | 16 | 670   | 207   | 25441 | 12789 | 2  | 18   | 2    | 382  | 152  |
|  | Gansu        | 2  | 38    | 12    | 35    | 100   | \  | \    | \    | \    | \    |
|  | Qinghai      | 2  | 53    | 16    | 171   | 598   | \  | \    | \    | \    | \    |
|  | Ningxia      | 2  | 73    | 20    | 852   | 1501  | \  | \    | \    | \    | \    |
|  | Xinjiang     | 6  | 109   | 21    | 276   | 482   | \  | \    | \    | \    | \    |

**Table 4.** Current situation of crafts educational system in 2006. Reproduced from China Crafts and Arts Association 2008.

### 3.2.2.3. Three principles

The Chinese government suggests three principles in developing a crafts in educational system:

- a. Train craftsmen through multi-channel and multi-level methods;
- b. Combine academic education and practical creation;
- c. Retain 'creativity' as the core of the development of crafts.

#### **3.2.2.4. Some serious issues**

From a cultural perspective, Chinese crafts have significant artistic meanings and cultural connotations. From an economics perspective, they have enormous economic value and commercial potential. Yet, faced with the contradiction between the cultural and economic industries, arguments and disputes exist in crafts educational system. In 1956, the 'Central Academy of Crafts and Arts' was established in Beijing but early in 1957 there was a dispute about which organization would be in charge of it. Deng Jie thought it should be the Chinese Arts and Handicrafts Administration because 'Chinese crafts' should be considered one economic industry for the development of Chinese economy. Furthermore, the academy's education and training was to increase production and profits. Pang Xunqin, however, insisted that the Ministry of Cultural of the People's Republic of China be in charge because 'Chinese crafts' is one *cultural* industry for the improvement of Chinese cultural daily life. The Chinese government believes that the Ministry of Culture of the People's Republic of China should take over the Academy, but controversy on the 'ownership' of crafts education remains.

More and more related crafts colleges and universities started to rename their major subject from 'crafts and arts' to 'arts and design'. Even if some colleges and universities use their original names, the traditional skills and knowledge of crafts are beginning to dissipate. The development of the crafts educational system is suffering a bottleneck. In many Chinese minds, the social position of artists is higher than craftsman's; a student wanting to become a master would need an innate gift as well as the bulk of her energy and time. Most Chinese parents like to help their children select their dreams, and many children prefer industrial design to traditional craftsmanship in accordance with their parents' advice. Such a phenomenon is bound to set up a vicious circle and raise serious problems, such as a shortage of teachers, facilities, and capital.

I find that students are increasingly too impatient for success in educational system: they enter the market too early, and the desire for fame and wealth controls their hearts. They cannot quiet their minds to really study craftsmanship and enrich their knowledge. When an apprentice told me he needed just one year to learn craftsmanship before selling his works, I was very surprised. People are so eager to pursue commercial benefit in the crafts sphere. Is that good or bad for the development of Chinese crafts? How do we resolve it? This could be an important issue for our project.

### **3.3. Government**

### **3.3.1. Background**

Since 1949, the Chinese government and communist party have always paid great attention to the development of crafts. The Ministry of Finance is mainly responsible for its economic issues, which refer to market scale, operation, employment, economic benefit, trade, and so on. It encourages innovation, creativity and business for realizing maximum profit. The Ministry of Culture, the craft sector's other overseer, focuses on national identity and cultural values, stressing the preservation of the heritage of Chinese crafts. It does not support new ideas and technology in crafts because it would endanger traditional values in their development. Reaching a consensus on an issue for these two departments is difficult.

### **3.3.2. Chinese Governmental Policy and Measures**

1. *1950s*: Policies to protect, develop, and promote the development of Chinese crafts for stimulating export-led growth.
2. *1960s*: More policies to adjust the development strategy in the Chinese crafts sphere, and from them emerged many new kinds of Chinese crafts.
3. *1970s*: Official documents to speed up the development of the industry and increase exports.
4. *1980s*: A series of preferential measures on financial support to propel Chinese crafts towards a new peak.
5. *1990s*: Policies and measures to conserve and develop Chinese crafts within a legal orbit. In 1997, the State Council promulgated *Regulations on the Protection of Traditional Crafts and Arts*, which touched upon the organization of crafts and craftsmen in every aspect.
6. *21st century*: Increased attention to the cultural values of developing Chinese crafts; promotion of Chinese traditional craftsmanship and values, and an impetus toward a cultural creative industry in modern society.

### **3.3.3. General Census Report**

To meet the requirements of the development of economics and culture in new situations, the government wanted to study and learn from all of the advantages and disadvantages in the developmental history of Chinese crafts. In 2006, the China Crafts and Arts Association began to organize a general census report on the Chinese crafts industry: the number of craftsmen and industries, the contribution of crafts for GDP, craft input-output, and so on

According to *General Census Report on Chinese Crafts 2006*, the census has three chapters: (i) information on the general census, (ii) the contributions of Chinese crafts, and (iii) governmental advice and policies. The government spent almost one billion Chinese Yuan and aroused the enthusiasm of local governments to complete the census, which was to deeply understand how to develop values of Chinese crafts in an international setting, and to stimulate

innovation of crafts in different aspects. The report has great importance and meaning in the history of Chinese crafts.

### 3.4. Mode of Production

As mentioned, Chinese ‘crafts and arts’ are divided into three types: traditional, new, and cutting-edge. Although they have different modes of production, they are not in conflict with each other in a modern multicultural society. The mode of production of ‘traditional crafts and arts’ is mainly in accordance with *Mingei Theory*, a term coined by the founder of the Japan Folk Craft Movement, Yanagi Soetsu. ‘Traditional crafts and arts’ are made by common and anonymous craftsmen in quantity, which seems to contradict modern views of creativity and artistic freedom. Sometimes we can see signatures on ancient ‘traditional crafts and arts’; they are actually not the craftspeople’s names but the supervisors’ in charge of the craft quality.

‘New crafts and arts’ has two modes of production. One part has been easily transformed into an assembly line. Craftsmen continually try to extract the ‘core technology’ from the obsolete mode, and then insert it into modern production industry. Because of its mass-production, this type of craft is cheaper than others, and is for foreign and domestic markets. A second part of these crafts is made in workshops. Many craftsmen started to organize their own workshops and employ workers to improve productivity. This mode of production combines hand and machine, labor and technology, conservation and innovation. The crafts are mainly for local markets.

‘Cutting-edge crafts and arts’ craftsmen create works by themselves in their own studios, similar to the creation of fine arts. Since 1990, this kind of craft studio has multiplied. It reflects the individual emotion of craftsmen to satisfy the requirement of consumers. Because the crafts cannot be duplicated, they have great cultural and economic value in people’s minds and thus a high market price.

## 4. Realizing Values in Economic Setting

### 4.1. Analysis of the Market

Crafts and arts industries have been increasingly transformed from public to private since 1992, after which the private sector began to play a dominant role and diverse forms of ownership developed. According to *General Census Report about Chinese Crafts 2006*, there are at least 24,000 legal private entities (Table 5).

| Type                         | The number of legal entities | Percentage (%) |
|------------------------------|------------------------------|----------------|
| State-owned                  | 267                          | 0.76           |
| Collective-owned             | 3417                         | 9.79           |
| Private-owned                | 24040                        | 68.80          |
| Hong Kong, Macao and Taiwan- | 2367                         | 6.78           |

|                          |       |      |
|--------------------------|-------|------|
| invested                 |       |      |
| Foreign-invested         | 2119  | 6.07 |
| Other business ownership | 2726  | 7.81 |
| Total                    | 34936 | 100  |

**Table 5.** Legally registered industry in crafts and arts in 2006. Reproduced from China Crafts and Arts Association 2008.

We cannot ignore small and micro businesses: due to the low wages in crafts colleges and universities, teachers increasingly operate their own studios or stores to sell their works as second incomes, the size of which varies with honorary titles and their location, among other things. A craftsman in Jingdezhen<sup>5</sup> without a ‘national master’ title would sell cheaply but with a title, one work could be sold for at least €1,000 – not because the crafts are higher quality but because many consumers prefer a recognized title to quality. Some apprentices thus like to use their teacher’s name to do business, despite this being a negative market phenomenon.

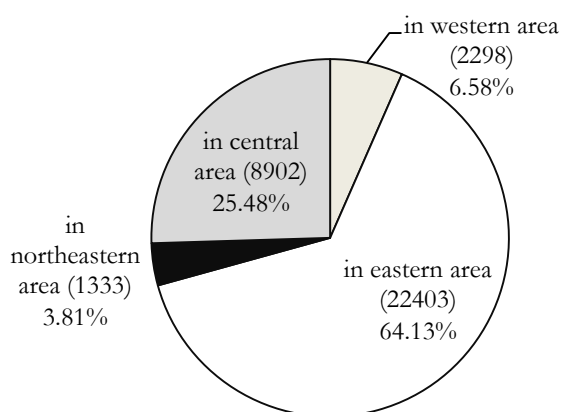
#### 4.2. Economic Contributions

According to the latest census, there are 34,936 legal entities in the crafts and arts sector. The government divides them into 11 categories: sculpture, metal, lacquer, flower painting, textile, embroidery, carpet, jewelry, ethnic crafts, ceramics, and fireworks. ‘Ethnic crafts’ has the majority share (Table 6). Most crafts and arts industries are concentrated around the eastern area of China (Figure 13), which accounts for the major part of China’s output (Table 7).

| Sorts                  | The number of enterprise industries | The number of employees | Original value of fixed assets (RMB) | Gross output (RMB) |
|------------------------|-------------------------------------|-------------------------|--------------------------------------|--------------------|
| Sculpture              | 4475                                | 226406                  | 6,010,320,000                        | 22,433,120,000     |
| Metal                  | 3055                                | 203443                  | 7,291,760,000                        | 26,162,830,000     |
| Lacquer                | 814                                 | 44224                   | 5,397,130,000                        | 8,335,400,000      |
| Flower painting        | 1473                                | 125496                  | 5,200,690,000                        | 13,520,470,000     |
| Textile                | 2448                                | 196973                  | 5,213,300,000                        | 36,628,360,000     |
| Embroidery             | 3812                                | 256769                  | 13,790,450,000                       | 54,783,900,000     |
| Carpet                 | 2466                                | 206863                  | 14,544,960,000                       | 27,698,090,000     |
| Jewelry                | 1677                                | 174922                  | 10,457,160,000                       | 89,706,070,000     |
| Ethnic crafts          | 9421                                | 703808                  | 16,759,300,000                       | 63,805,320,000     |
| Ceramics               | 2389                                | 173847                  | 16,398,130,000                       | 12,040,880,000     |
| Fireworks and crackers | 2906                                | 136835                  | 11,432,820,000                       | 5,410,350,000      |
| Total                  | 34,936                              | 2,449,586               | 112,196,020,000                      | 360,524,790,000    |

**Table 6.** The economic contribution of crafts and arts enterprise industry in 2006. Reproduced from China Crafts and Arts Association 2008.

<sup>5</sup> Jingdezhen is known as the ‘Porcelain Capital’, because it has been producing quality pottery for 1700 years. It is one of China’s historical and cultural cities, and was named an outstanding civilization and health city of Jiangxi Province at the end of 2007.



**Figure 13** the distribution of crafts and arts enterprise industry in China in 2006, reproduced from (China Crafts and Arts Association 2008)

| Region            | Gross output (RMB) | Percentage (%) |
|-------------------|--------------------|----------------|
| eastern area      | 293,301,990,000    | 81.36          |
| central area      | 52,938,620,000     | 14.68          |
| northeastern area | 5,296,110,000      | 1.47           |
| western area      | 8,988,070,000      | 2.49           |

**Table 7.** Gross output of crafts and arts enterprise industry in different areas in 2006. Reproduced from China Crafts and Arts Association, 2008.

#### 4.3. Export Situation

In the *General Census Report about Chinese Crafts 2006*, the government surveyed

Chinese crafts from 2002 to 2006 (in \$10,000s; % variation compared to previous year)

(

Table 8).

| Sorts         | 2002         |        | 2003         |        | 2004         |        | 2005         |        | 2006         |        |
|---------------|--------------|--------|--------------|--------|--------------|--------|--------------|--------|--------------|--------|
|               | Export sales | Var. % | Export sales | Var. % | Export sales | Var. % | Export sales | Var. % | Export sales | Var. % |
| Sculpture     | 131.3        | 19.26  | 22797.8      | 18.2   | 31464.9      | 38.03  | 33527.9      | 6.54   | 36254.9      | 8.14   |
| Jewelry       | 7158.4       | -1.22  | 16868.6      | 8.1    | 21547.6      | 27.74  | 26125.9      | 21.24  | 28183.0      | 7.87   |
| Embroidery    | 12575.1      | 12.31  | 42952.6      | 35.82  | 62932.2      | 46.74  | 13597.7      | 64.55  | 16260.5      | 56.95  |
| Carpet        | 3524.2       | 6.49   | 63998.1      | 14.03  | 77574.3      | 21.24  | 93504.6      | 20.54  | 10728.5      | 14.73  |
| Fireworks and | 8.7          | -72.6  | 31595.2      | 14.31  | 34786.1      | 10.1   | 40229        | 15.65  | 45841        | 13.95  |

|                        |            |                |             |           |             |           |             |           |              |           |
|------------------------|------------|----------------|-------------|-----------|-------------|-----------|-------------|-----------|--------------|-----------|
| crackers               |            | 4              |             |           |             |           |             |           |              |           |
| Metal                  | 232.6      | 10.1<br>3      | 21398<br>.5 | 15.<br>39 | 25518<br>.5 | 19.<br>26 | 33163<br>.5 | 29.<br>96 | 41774<br>.1  | 25.<br>94 |
| Textile                | 717.7      | -<br>42.9<br>6 | 67630<br>.3 | 24.<br>69 | 79388<br>.6 | 17.<br>41 | 86364<br>.3 | 8.8       | 10092<br>9.6 | 16.<br>87 |
| Flower<br>painting     | 952        | -2.2           | 62859<br>.1 | 5.3<br>7  | 72849<br>.9 | 15.<br>89 | 79449<br>.3 | 9.0<br>6  | 86439<br>.2  | 8.8       |
| Decorative<br>ceramics | 83.1       | 36.2<br>3      | \           | \         | 66524<br>.7 | 6.6<br>8  | 72716<br>.8 | 9.3<br>2  | 80033<br>.6  | 10.<br>05 |
| Others<br>crafts       | 7422.<br>7 | 4.02           | 5611        | 18.<br>12 | 59443<br>.5 | 17.<br>47 | 66830<br>.3 | 12.<br>62 | 84943<br>.2  | 27.<br>1  |

**Table 8.** Export sales data of crafts and arts enterprise industry from 2002 to 2006, reproduced from (China Crafts and Arts Association 2008)

Many countries complain that China reproduces their own crafts and exports them back, leading to an invasion of the countries' culture and forcing unemployment. Take, for example, the China-India case (June 17, 2009, India):

Indian people engaged in handicrafts business say that China has invaded the Indian markets with their duplicate machine-made crafts items manufactured on a big volume. According to Exports Promotion Council for Handicrafts (EPCH) data, in 2007-08 India imported Rs. 1,040.03 worth of China-made handicraft items, which stood at Rs. 792.98 in the year 2006-07. Chinese manufacturers also send their machine-made craft items to the global market giving tough competition to Indian suppliers as these machine-made products are low priced compared to that of Indian hand-made crafts. As these China made items are ruining the Indian heritage of handicrafts, the EPCH sought a ban on import of these items. The ongoing global recession has rendered about 50 percent people jobless in this sector that once engaged one-million people, said EPCH.

The Chinese government admits this phenomenon exists and has tried to resolve it with related laws and regulations but it points out that the blame should not be one-sided: the importing countries need to take some responsibility. And, claim Chinese crafts officials, it is a temporary phenomenon due to the country's developmental path. Because crafts can solve employment issues and boost the economy, the problem will resolve naturally.

## 5. Realizing Values in the Social Setting

China has strong social relationships in family, clan, tribe, and club. Blood-relationships played a very important role in the history of Chinese craft before 1949; in earlier days craftsmen preferred to keep their knowledge secret because they were the lowest social class with no

social welfare. They kept secrets to ensure their craftworks a market. Since 1949, however, the government has pushed collectivization and cooperation policies in the crafts sphere to raise the social position of craftspeople and encourage them to share their craftsmanship and knowledge with society, building an 'organizational identity' in their minds. Family management thus began to be impaired by collectively-owned enterprises. Chinese craftspeople became increasingly dependent on public organizations in many aspects – political, economic, and social. The government embedded a collective consciousness into every unit of society; the crafts sphere was no exception. When one kind of ideology can control people's behavior, and their every role and duty is designed by the government, they have to give up any obsolete, conservative, and self-centered working modes. Therefore, in modern society, most Chinese craftspeople are guided by the attitudes and values of government.

We also can see the change in social relationships from an educational standpoint. Most craftsmanship and knowledge is now public, rather than a closed family mode (Table 9).

| <b>Educational mode</b>          | <b>Numbers of Crafts</b> |
|----------------------------------|--------------------------|
| 'Stranger-to Stranger' in school | 607                      |
| 'Master-to-Prentice' in group    | 675                      |
| 'Father-to-Son' in family        | 211                      |
| Mixed types                      | 388                      |
| Total                            | 1881                     |

**Table 9.** Social-relationships in education in 2006. Reproduced from China Crafts and Arts Association 2008.

At the same time, various mutually beneficial relationships exist in the Chinese crafts sphere. 'Guanxi' describes the basic dynamic in personalized networks of influence, which refers to the benefits gained from social connections and usually extends from family, friends, workmates and members of common clubs or organization. This is an intricate and obscure network. Because craftworks can bring considerable income for craftsmen with 'master titles', many unknown craftsmen use 'Guanxi' power to be in the master selection process (we would call it 'corruption'). It raises the level of 'bureaucracy' in the sphere.

Many Chinese consumers like to buy crafts as gifts to build social relationships with others. The phenomenon stimulates the development of Chinese crafts and reflects the social value of crafts. But we should not ignore occasional negative effects such as 'bribery'.

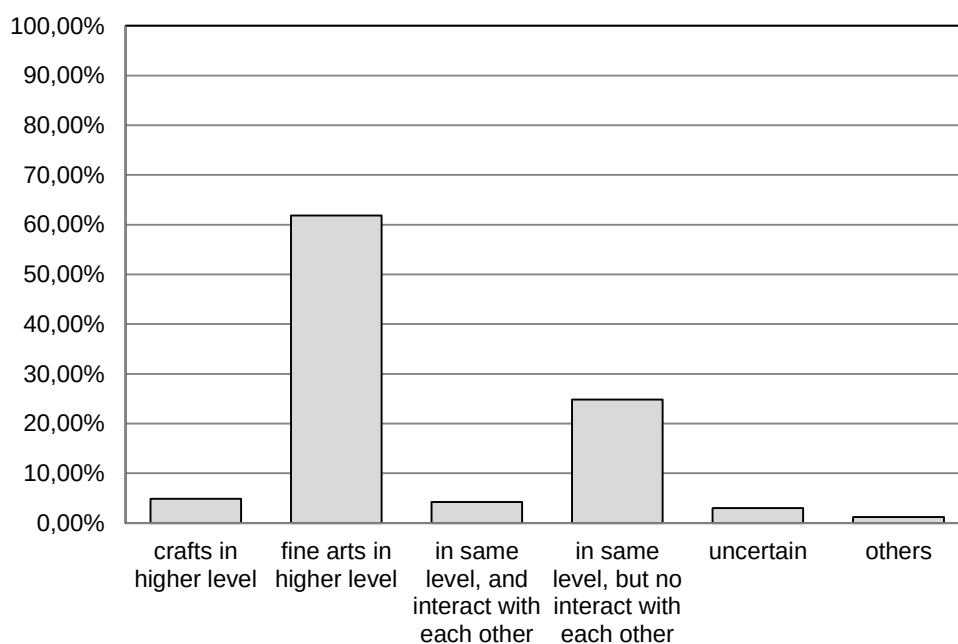
## **6. Analyzing Consumer Behavior**

The government built the *Consumer Association* for protecting the rights and interests of consumers in 1984. It can, in a certain sense, control the quality of crafts, and supervise craftsmen's responsibilities. The *Consumer Association* also advocates establishing consumer

values and rational consumption – not, for example, blindly pursuing high-priced crafts. A negative phenomenon a crafts market ‘bubble’ that leads to fakes and forgeries in the market.

In this sector, I sampled 165 Chinese consumers with a questionnaire concerning their characteristics and aesthetic tendencies. The results are in brief:

1. Many consumers think ‘fine arts’ should have more market value than crafts (Figure 14) because it has potentially more intellectual property, rich symbolic meaning, and creativity, and ‘crafts’ implies mass production, cheapness, and lack of new ideas. A Chinese official believes this is a misunderstanding and hopes the negative attitude can be changed. But how *do* we improve the position of crafts in consumers’ minds? The government has no specific strategy or policy.



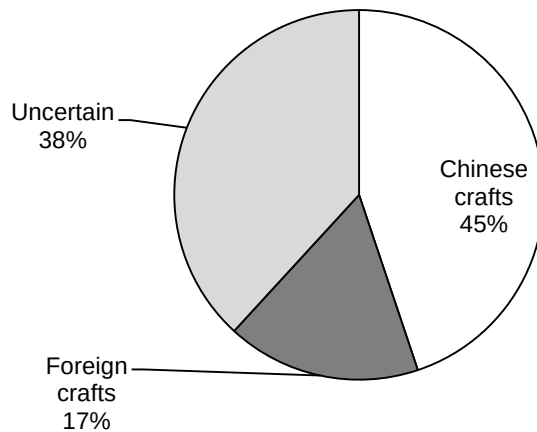
**Figure 14.** The different positions between ‘crafts’ and ‘fine arts’ in consumers’ minds

2. If ‘Chinese crafts’ and ‘foreign crafts’ are similarly priced, most consumers are confident in choosing ‘Chinese crafts’ (Figure 15). Chinese crafts attract them for their traditional culture, exquisite design, good quality, and sustainable utility.

I also conducted random interviews with Chinese crafts shopkeepers in a famous traditional handicrafts market (*‘Hundred Workshops of Chinese Traditional Handicrafts’*) in Beijing. They confirmed that their goods always are sold to Chinese people, because westerners do not understand the value of Chinese crafts. And Chinese consumers increasingly pay attention to the potential economic value of Chinese crafts as an investment. For example, one shopkeeper said the Chinese prefer to focus on ‘consumption’,

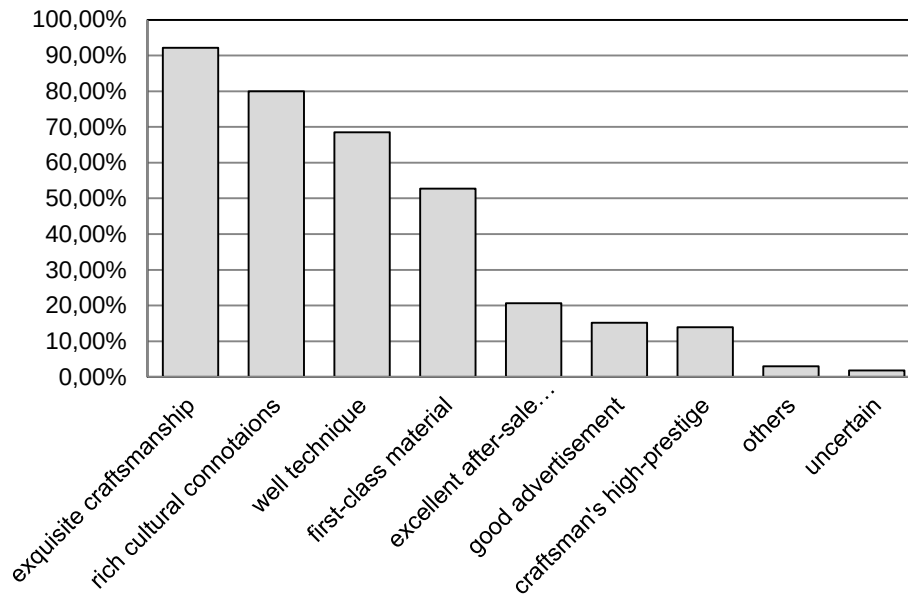
not 'technology and skill'; thus, 'the more money you have, the more Chinese traditional handicrafts you want'. I tried to talk with some consumers who walked around in this same crafts market. They told me they came only to look because they cannot afford the crafts, despite their interest.

Sometimes, for investment, Chinese consumers do not care about quality or cultural connotation; they prefer to consider who the craft, and whether the craftsman has 'master title'. Such an unavoidable 'bubble' is growing in the Chinese crafts market.



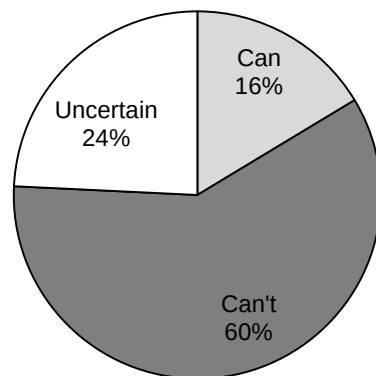
**Figure 15.** The optional preference between 'Chinese crafts' and 'Foreign crafts'

3. Consumers think that excellent 'crafts' should have exquisite craftsmanship, rich cultural connotation, good technique, and first-class material. (Figure 166). I was surprised by this, considering their concern for a 'master title' or prestige. But then, more than 60% of the interviewees were about 30 years old, and 30% about 20 years old. That is, they were mostly college students or unsophisticated employees with a different focus from the wealthy.



**Figure 16.** The attention of consumers in crafts market

4. Most consumers cannot recognize craft quality (Figure 17), which is why they are easily influenced by external factors, such as others' opinions and promotion strategies.



**Figure 17.** Consumer discernibility in the crafts market

## 7. Summary and Conclusion

In China, economic construction and social development has rapidly changed and along with the fast development of science and technology, 'Chinese crafts' entered a new development stage. Even though 'Chinese crafts' had already lost its mainstream position in society, it bears the responsibility of carrying on Chinese traditional connotations and ideology. Faced with

economic globalization and the information age, 'Chinese crafts' should be infused with a new culture and technological system to satisfy the needs of modern people.

Thus, Chinese craftsmen increasingly try to combine 'traditional and modern', 'inheritance and creativity', 'national and international' their crafts. Following diversified social lives and the various human needs in modern times, 'Chinese crafts' should reflect the characteristics of unique historical values and embody the tendencies of modern life styles. That is, 'Chinese crafts' should be not only the spirit of Chinese traditional culture, but also the symbol of Chinese modern civilization.

## References

- Qingcheng Huang. (1893). *'Diary of Traveling around Japan'*, in which he kept a detailed record of his journey and first mentioned the term of 'arts' in his work, actually, Japan also was influenced by the ideology of *Arts and Crafts Movement*, which happened in Britain.
- Yuanpei Cai. (1920). *'The Origin of Arts '*, in *Journal of New Tide*
- Shen Xu. (1900), *'To Explaining Words'*
- China Crafts and Arts Association. (2008), *'General Census Report about Chinese Crafts 2006 '*
- Chunlin Qiu. (2011), *'Change of traditional crafts culture'*
- Ding Yan. [], *'The Current Situation and Issues of Industry Skill Development in China'*, Fudan University, China

# Crafting Culture

*India*

Priyateja Kotipalli

Rotterdam, 23 April 2013

## **The Craft Economy in India**

Decorative and utilitarian crafts constitute the craft economy in India. While there are overlaps in terms of the responsibilities of the government to frame policy for developing craft skills, for the utilitarian crafts the idea of vocational education and the supply of craftspeople falls under the Ministry of Labour and Employment, which runs the flagship Craftsman Training Scheme. Given the demographic makeup of India and projecting for 2020, the ambition is to harness a competitive advantage over other countries by creating a surplus of skilled craftspeople with a skill development mission and redefining the concept of the firm within the crafts sector to allow it to be eligible for a range of governmental support policies.

### **What constitutes the craft economy in India**

The craft economy can be divided into two major groups that together constitute the MSME (Micro, Small and Medium Enterprises) sector:

- Village and small industries
- Utilitarian crafts (vocational and technical labor)

The village and small industries sector comprises two broad sub-sectors: modern small industries and traditional industries. The first covers small scale industries (SSI), power looms, the latter khadi, village industries, handlooms, sericulture, handicrafts, and coir industry. Utilitarian crafts are mostly under the purview of the Ministry of Labor and Employment and help form capacities and skills needed for SSI and medium enterprises, which are mostly service-based.

### **Size and contribution of the sector**

In India, MSEs<sup>1</sup> (village and small enterprises) account for almost 40% of total industrial production, 95% of industrial units (along with medium industries), and 34% of exports. They manufacture over 6000 products ranging from hand loomed sarees, carpets, and soaps to pickles, papads, and machine parts for large industries. It is estimated that an investment of Rs 10 lakh in fixed assets in the small sector produces goods or services worth Rs 46.2 lakh with an approximate value added of 10%. In 2003–04, the contribution of the SSI sector to GDP was 6.71%. In the last

---

<sup>1</sup> MSME is micro, small, and medium enterprises; SME is small and medium; MSE is micro and small.

decade, the growth rate of MSEs has been consistently higher than the overall growth rate of the industrial sector.

The MSEs are, however, more than just GDP contributors; they are instruments of inclusive growth that touch upon the lives of the most vulnerable and marginalized – women, Muslims, SCs, and STs – and the most skilled. Being the largest source of employment after agriculture, the MSE sector in India enables 650 lakh men, women, and children living in urban slums, upcoming towns, remote villages and isolated hamlets to use indigenous knowledge, cultural wisdom, dexterous hands, and entrepreneurial skills for their sustenance.

The MSME sector has been artificially fragmented across various ministries, such as MSME, textiles, and FPI to name a few. As a result, sectors such as hand- and power-loom, handicrafts, khadi, and coir have been more neglected than other manufacturing and service-based MSEs. To correct discrepancies, the Micro, Small and Medium Enterprises Development Act of 16 June 2006 provided the first legal framework recognizing the concept of 'enterprise' (manufacturing and service), defining medium enterprises, and integrating their three tiers (micro, small and medium). Carrying forward the vision behind this Act, the government recognizes the MSE sector as an important component of the industry that needs infrastructure, credit, and policy support. Their endeavor is to recognize the heterogeneity of the MSE sector and at the same time remove artificial distinctions within it to ensure that the unorganized, home-based industries such as hand-loom and food processing can avail the benefits and schemes launched for the industry in general and the MSE in particular.

### **Growth of the sector**

The MSE sector in India has grown significantly since 1960 when there were only 12,376. Providing employment to 10 lakh, of which direct employment was 1.85 lakh; annual production level was Rs 875 crore. About 249 lakh people in the rural and urban areas were employed in 105.21 lakh MSEs. This has increased to 295 lakh people in 128 lakh units now; an average annual growth rate of 4.4% in number and 4.62% in employment. If the units in the khadi industries, village industries, and coir industries are taken into account, employment would be over 332 lakh. And including hand-looms, handicrafts, wool, and sericulture, the total MSE sector employment increases to 650 lakh. The employment intensity of the registered units indicates that an investment of Rs 0.72 lakh is required to create one job in the MSME sector versus Rs 5.56 lakh in the large organized sector.

Along with generating the highest employment per capita, MSEs also stem urban migration by providing villagers and people in isolated areas with a sustainable source of employment. Among MSEs in India, the dispersed food products sector generates maximum employment (13.7% of the MSE sector), followed by non-metallic mineral products (10.9%) and metal products (10.2%). In chemicals and chemical products, machinery parts (except electrical), wood products, basic metal industries, paper products and printing, hosiery and garments, repair services, and rubber and plastic products, the contribution ranges from 5% to 9%. In all other industries the contribution is less than 5%. Per unit employment is highest (20%) in beverages and tobacco production. Next come cotton textile products (17%), non-metallic mineral products (14.1), basic metal industries (13.6%), and electrical machinery and parts (11.2%). Per unit employment is highest (10%) in the metropolitan areas and lowest (5%) in the rural areas. Non-metallic products contribute 22.7% to rural employment, followed by food products (21.1%), wood, chemicals, and chemical products. In urban areas, food and metal products almost equally share 22.8% employment. Machinery parts (except electrical), non-metallic mineral products, chemicals and chemical products account for another 26.2% employment. Metal products, machinery parts, paper products, and printing (total share being 33.6%) are the leading industries in metropolitan areas. The presence of MSEs across States is not uniform. Tamil Nadu (14.5%) contributes most to employment followed by Maharashtra (9.7%), Uttar Pradesh (9.5%), and West Bengal (8.5%). Per unit employment is high: 17, 16, and 14 respectively in Nagaland, Sikkim, and Dadar & Nagar Haveli; Madhya Pradesh is lowest at 2. In all other cases it is about 6.

### **Defining MSEs and the 2006 MSMED Act<sup>2</sup>**

There is no globally accepted definition of MSMEs. Different countries use different criterion; most definitions are based on investment ceiling and number of people employed. In India, the Micro, Small, and Medium Enterprises Development (MSMED) Act of 2006 defined MSMEs, introducing the concept of 'enterprise' as opposed to 'industry'. According to the Act, MSMEs are classified into: (i) enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and Regulation Act 1951) and (ii) enterprises engaged in providing or rendering services.

Within the manufacturing sector MSMED defines an enterprise relative to investment in plant and machinery (original cost excluding land and building and items specified by the then

---

<sup>2</sup> 11<sup>th</sup> Planning commission Report

ministry of SSI, 2006). A microenterprise is not to exceed 25 lakhs, small enterprises Rs 25 lakh and less than Rs 5 crore, and medium enterprises more than Rs 5 crore and less than Rs 10 crore. In the service sector the definition of enterprises is investment in equipment; a microenterprise does not exceed Rs 10 lakh, small enterprises are Rs 10 lakh to Rs 2 crore, and medium enterprises Rs 2 to Rs 5 crore.

The Act also provides for a statutory consultative mechanism at the national level with a balanced representation of all the stakeholders and with a wide range of advisory functions. Some features are establishment of specific funds for promotion, development, and enhancement of the competitiveness of the enterprises; notification of schemes and programs, progressive credit policies and practices, preference for products and services of MSEs in government procurement, more effective mechanisms for mitigating the problems of delayed payments, and a scheme for easing the closure of business by these enterprises.

### **Utilitarian crafts and craftspeople**

While there exists no definition for craftspeople, utilitarian crafts has a program called Craftsmen Training Program under the Ministry of Labour and Employment, which discharges its responsibilities through the Director General of Employment and Training. A general understanding of it can be understood from the objectives of the program:

- To equip people with the appropriate skills required by the various sectors of the economy;
- To make youth productive by providing employable skills for wages and self-employment;
- To produce craftspeople of high quality;
- To ensure a steady flow of skilled workers in industrial production by systematic training of potential workers.

The objectives are governed by the Apprentices Act of 1961 and are carried out by state governments under guidance from the center. To better appreciate craftsmanship involved in utilitarian crafts, however, we should look at a framework to understand the position of plumbers, roofers, pastry chefs, and the like. Their fundamental training equips them with the right set of tools and know-how. It trains them in the pool of solutions along with the method of execution. In the next step the user of this knowledge goes into production, which involves assessment of the given problem set to find a specific solution. The three criteria involved in craftsmanship are:

1. Using intuition and judgment to find the solution to a unique and challenging problem.
2. Executing the solution in line with the craftsperson's initial vision of perfection.

### 3. Doing it faster than and with the same quality as others in the field

These three conditions are of utilitarian crafts and hence the users of them are craftspeople, else we have the idea of tradesmen, people who have the knowhow and access to the common pool of knowledge but cannot fulfill the three criteria.

|                                                                             |
|-----------------------------------------------------------------------------|
| Access to a pool of solutions / method of execution                         |
| Follow a specific method for assessing the problem and finding the solution |
| Has minor tolerance between visions and the execution of the final product  |

*Tradesmen* will be able to do the same job but the quality of the workmanship will vary. *Craftspeople* will fulfill the three criteria of intuition and judgment, execution and perfection, time and quality.

## Education

People acquire their skills in craftsmanship through two basic structural streams: a small formal one and a large informal one. The formal structure includes:

- (i) Higher technical education through professional colleges,
- (ii) Vocational education in schools at the post-secondary stage,
- (iii) Technical training in specialized institutions,
- (iv) Apprenticeship training.

A number of agencies offer vocational education and training at various levels. Higher professional and technical education, primarily in the areas of agriculture, education, engineering, technology, and medicine, is given through various professional institutions. Seventeen ministries and departments of GoI offer vocational training to about 3.1 million persons every year. Most are national level efforts; individually they reach a very small part of the new entrants to the labor force. Even collectively, they provide training to about 20% of the annual addition to the labor force. Each ministry and department in charge of subject sets up training establishments in its field of specialization. The attempt to meet training needs through multiple authorities – labor, handlooms, handicrafts, small industry, education, health, women and child development, social welfare, tourism, and so on – leads to redundancy at some locations. While each training initiative

has a definite area of specialization, coordination among the ministries and departments is currently needed.

The central and state governments share responsibilities for vocational training. At the national level, the Director General of Employment and Training (DGE&T) in the Ministry of Labor is the nodal department for formulating policies, setting standards, and conducting testing and certification in the field of vocational training. The state government departments are responsible for vocational training programs. There are 1244 polytechnics under the aegis of the Ministry of Human Resource Development with a capacity of over 2.95 lakh, offering three-year diploma courses in various branches of engineering with an entry qualification of 10th pass. There are also 415 diploma institutions for pharmacy, 63 for hotel management, and 25 for architecture.

There are about 8687 Industrial Training Institutes (ITIs) whose one-two year courses are open to those who have passed a certain grade level depending on the trade. Six Advanced Training Institutes (ATI) run by the central government provide training for instructors in ATIs for electronics and process instrumentation, offering long and short courses at a technical level in the fields of healthcare, consumer electronics, and process instrumentation.

The Apprentices Act of 1961, amended from time to time, regulates apprentice training to conform to the prescribed syllabi and period of training prescribed by the Central Apprenticeship Council and the use of facilities available in industry for workers. As of 2006, over 20,800 public and private sector establishments were covered under the Act; of the 2.30 lakh seats allocated, 1.72 lakh seats were utilized. Skill building activity was also initiated under a higher level of school education. A scheme of pre-vocational education at lower secondary level was started in 1993 to give training in simple marketable skills and develop vocational interests. There are now about 9,583 schools offering some 150 two-year educational courses with an estimated 1 million students in agriculture, business and commerce, engineering and technology, health and paramedical, home science and science and technology. Under the aegis of the Ministry of Rural Development, banks and non-governmental organizations, 2500 Rural Development and Self-Employment Training Institutes (RUDSETI) have undertaken entrepreneurship and skill building of the rural youth for self-employment in areas with pre-existing markets, with a reported success rate of 70%. The Entrepreneurship Development Initiative (EDI) and other programs of the MSME Ministry train about one lakh persons annually. The primary focus here, however, is the vocational training carried out by Director General of Employment & Training (DGE&T).

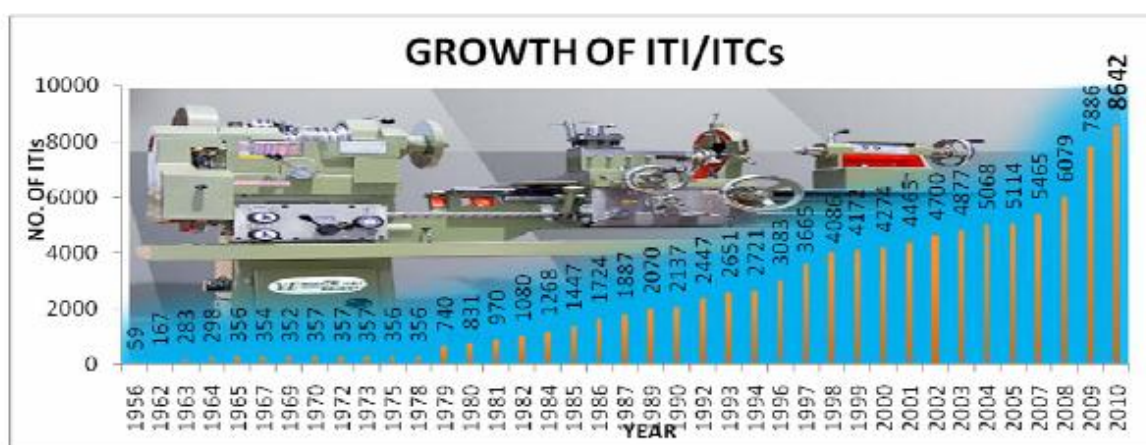
*The smaller, informal structure* constitutes about 93% of the workforce is not supported by any system of acquiring or upgrading skills. By and large, skill formation takes place through informal

channels like family and on-the-job training under master craftspeople with no links to the formal training and certification. Training needs in this sector are highly diverse and involve multiple skills. Many efforts to train through Swarnjayanti Gram Swarojgar Yojana (SGSY), PMRY, KVIC, Krishi Vigyan Kendra (KVK) and Jan Shiksha Sansthan (JSS) are in place but the outcome is not encouraging.

The quantitative dimension of skill development can be estimated by the fact that 80% of new entrants to workforce have no opportunity for skills training. Against 12.8 million new entrants to the workforce yearly, the existing training capacity is 3.1 million. Only 2% of the workforce has skills training versus 96% in Korea, 75% in Germany, 80% in Japan, and 68% in the UK.

### Craftsmen Training Scheme

The DGE&T initiated the Craftsmen Training Scheme (CTS) in 1950 by establishing about 50 Industrial Training Institutes (ITIs) for imparting skills in various vocational trades to meet the skilled manpower requirements for technological and industrial growth of the country. The second major phase of ITIs came with the oil-boom in West-Asia and export of skilled manpower to that region. Several new private ITIs were established in the 1980s in southern states, mostly Kerala, Karnataka and Andhra Pradesh, which placed trained craftspeople mainly in the Gulf countries. From 831 ITIs in 1980, there were 1,887 in 1987. During the 1990s, the growth of ITIs was steep and now there are over 8,687 (2189 governmental, 6498 private) with a capacity of 12.14 lakh. The graph below shows the distribution of ITIs and their growth over the last four decades.



Source Ministry of Labour and employment Annual Report 2010

The development of training schemes at the national level, evolution of policy, training standards and procedures, and conducting trade tests and certification are responsibilities of the central government, whereas the implementation of training schemes largely rests with the state. The central government is advised by the National Council of Vocational Training (NCVT), a tripartite body having representatives from employers, workers and government. Similar councils known as State Councils for Vocational Training (SCVT) are constituted for the same purpose by the respective state governments at state levels.

### **Salient Features of the Scheme**

- Training is given in 63 engineering and 53 non-engineering trades (Annex 1).
- The period of training for various trades varies from one to three years and the entry qualification varies from 8<sup>th</sup> to 12<sup>th</sup> grade, depending on the requirements of the trades.
- About 70% of the training period is allotted to practical training and the rest to subjects relating to theory, workshop calculation and science, engineering drawing, social studies, environmental science, and family welfare.
- Training in government ITIs is generally free. There is a provision to grant stipends and workshop uniforms to all trainees. They are also provided with library, sports, and health facilities. Some state governments levy a nominal fee.
- Seats are reserved for candidates in proportion to the population in their respective states. Guidelines for reserving 3% of the seats for the disabled and 25% for women have been issued to State Governments and could be filled based on the general reservation policy of each state. Seats are also reserved for the wards of defense personnel.
- Broad-based modular training is offered in four Central Model Industrial Training Institutes (MITIs). This pattern of training has the advantage of re-orienting the training modules according to the changing skill requirements of labor and industry.

### **All India skill competition for craftspeople**

A scheme for holding an All India Skills Competition for Craftspeople at the national level was introduced in 1964 to foster healthy competition among ITI and ITC trainees. The competition is held every year in 10 trades: instrument mechanic, electronics mechanic, welder, fitter, turner, machinist, mechanic (MV), foundrymen, electrician, and cutting and tailoring. The best craftspeople

at the All India level are awarded merit certificates and a cash prize of Rs.10,000. The best ITI in each trade is awarded a merit certificate. The 'Best State' – the one whose trainees secure the highest total marks among all trades – is awarded a merit certificate and a running shield.

### **The way ahead**

A recent plan has outlined the issues on skill development under two categories: quantitative and qualitative. The plan reveals that attendance rates at educational institutions have dropped nearly half in the age group of 15-19. At the same time the participation in the labor force has risen sharply after age 15, reaching close to 100 percent in 25-29 year-olds. The plan stated a 38% illiteracy rate of the labor force with 24.9% schooled to primary level and 36% educated to middle and higher levels. It was also found that 80% of the workforce has no identifiable marketable skills.

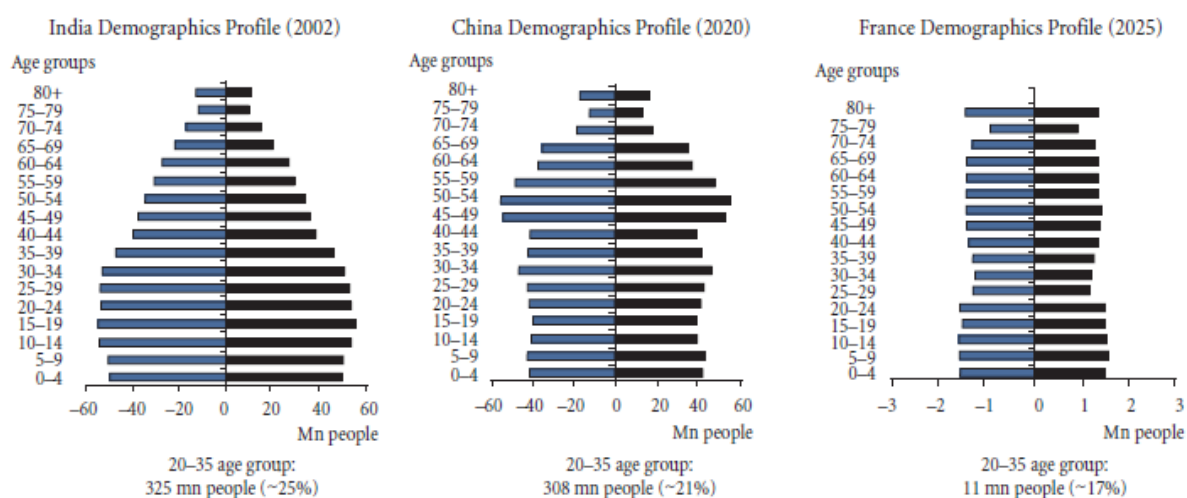
From the qualitative side the key issues identified have to do with the non-responsiveness of the current skill development system to the needs of the labor market, due to demand and supply mismatches in number, skill type, and quality. The reason cited for these deficiencies was a regional disparity in the number of institutions and seats, with the southern states having the greatest concentration. It is also observed that the quality of training in these institutions suffers from a lack of clear definition of deliverables and a lack of system for evaluating outcomes and issuing job placement. It was also felt that greater industry interaction was needed.

An aspiration expressed by the planning commission was to provide for a system of non-monetary incentives in terms of skill and entrepreneurial development and provide for forward and backward linkages for finance, marketing, and human resources management for those seeking post-employment training.

### **Demographic dividend**

Despite the shortages described above there seems to be a great amount of optimism about the future as at this moment, India accounts for 28% of the graduate pool among the world's 28 lowest economies. It is projected that globally there will be a shortage of skilled labor by 2020. Based on the fact that India enjoys a favorable demographic condition owing to declining birth rate, a slow improvement in life expectancy of 63 to 64, and a coming demographic bulge of the age group of 15

to 20. It is projected that if the policies are right India can have a 47 million surplus in skilled labor.



Source: CII Conference 2002 CSFB Report: UN Population Division: BCG.

It was with this preamble that the national skill development mission was instituted with the following objectives.

- Assess skill deficits sector- and region-wise and meet the gaps by planned action in a certain time frame.
- Orchestrate public and private sector initiatives in a framework of a collaborative action.
- Realign and reposition existing public sector infrastructure ITIs, polytechnics and VET to get into public/private partnership mode and to smoothen transition into institutions managed and run by private enterprise or industry associations, giving them autonomy in function and governance.
- Establish a credible accreditation system and a guidance framework for all accrediting agencies set up by various ministries or industry associations, getting them to move away from regulation to performance measurement and ranking of institutions. Institutions should be rated on standardized outcomes, percentage of graduates placed, pre- and post-course wage differentials, dropout rates, and so on.
- Encourage and support industry associations and other specialized bodies and private enterprise to create sector skill development plans in 20 high-growth sectors.
- Establish a 'National Skill Inventory' and a national database for 'Skill Deficiency Mapping' on a national Web portal for exchange of information between employers and employees.
- Establish a 'Trainee Placement and Tracking System' for effective evaluation and future policy planning. Reposition 'Employment Exchanges as Outreach points of the Mission' for

storing and providing information on employment and skill development. Enable employment exchanges to function as career counseling centers.

- Enlarge the 50,000 Skill Development Centres (SDCs) program into a Virtual Skill Development Resource Network for Web-based learning.

These objectives are to be realized through the reorganization and action plans for ITIs, which is to be implemented through the Ministry of Labor and Employment and an action plan for polytechniques for vocational education. Plans for rural training and establishment of a virtual skills development resources network linking 5000 skill development centers involves coordination among hosts of ministries. There is also a great thrust toward public/ private partnerships.

## **Conclusion**

India aspires to train the labor required for maintaining the 7-8% growth in GDP and provide for its growing manufacturing sector. This is seen as providing large scale employment in the future, but the dream requires coordination of various ministries and the participation of the private sector to expand the scope and impact of vocation education to produce craftspeople that fit the skill demands of the sector.

## Annex 1

List of engineering and non-engineering trades under Craftspeople Training Scheme (2010).

### *Engineering Trades*

| Sl.No. | Trade                                  | Duration                     | Entry Qualification                                                                                                                                                                        |
|--------|----------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Architectural Assistant                | 1 year                       | Passed 10th class examination with 40% marks in mathematics or Secondary Standard under 10+2 system of education or its equivalent.                                                        |
| 2      | Attendant Operator<br>(Chemical Plant) | (a) 2 years<br>(b) 06 months | Passed 10th class examination under 10+2 system of education with Physics, Chemistry & Mathematics as one of the subjects or its equivalent.<br><br>Passed B.Sc. with Physics & Chemistry. |
| 3      | Building Maintenance                   | 06 months                    | Passed 10th class examination under 10+2 system of education or its equivalent.                                                                                                            |
| 4      | Carpenter                              | 1 year                       | Passed 8th class examination under 10+2 system of education with science as one of the subjects or its equivalent.                                                                         |
| 5      | Draftsman (Civil)                      | 2 years                      | Passed 10th class examination under 10+2 system of education with Science and Mathematics or its equivalent.                                                                               |
| 6      | Draftsman (Mechanical)                 | 2 years                      | Passed 10th class examination under 10+2 system of education with Science and Mathematics or its equivalent.                                                                               |
| 7      | Electrician                            | 2 years                      | Passed 10th class examination under 10+2 system of education with Science as one of the subject or its equivalent.                                                                         |
| 8      | Electronic Mechanic                    | 2 years                      | Matriculation examination under 10+2 system of education Science and Mathematics or its equivalent.                                                                                        |

|    |                                                         |                              |                                                                                                                                                                                                |
|----|---------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9  | Electroplater                                           | 2 years                      | Passed 10th class examination under 10+2 system of education or its equivalent.                                                                                                                |
| 10 | Fitter                                                  | 2 years                      | Passed 10th class examination under 10+2 system of education or its equivalent.                                                                                                                |
| 11 | Foundry man                                             | 1 year                       | Passed class 8th examination under 10+2 system of education or its equivalent.                                                                                                                 |
| 12 | Information Technology & Electronics System Maintenance | 2 years                      | Passed in 10th class Examination under 10+2 system of education with science<br><br>Desirable- 12th class with Maths and Physics.                                                              |
| 13 | Instrument Mechanic                                     | 2 years                      | Passed 10th class examination under 10+2 system of education with Science as one of the subjects or its equivalent.                                                                            |
| 14 | Instrument Mechanic (Chemical Plant)                    | (a) 2 years<br>(b) 06 months | Passed 10th class examination under 10+2 system of education with Physics, Chemistry & Mathematics as one of the subjects or its equivalent.<br><br>Passed B.Sc. with Physics & Chemistry.     |
| 15 | Decoration and Designing                                | 01 year                      | Passed 10th Class Examination under 10+2 System of Education                                                                                                                                   |
| 16 | Laboratory Assistant (Chemical Plant)                   | (a) 2 years<br>(b) 06 months | Passed 10th class examination under 10+2 system of education with Physics, Chemistry and Mathematics as one of the subjects or its equivalent.<br><br>Passed B.Sc. with Physics and Chemistry. |
| 17 | Lift Mechanic                                           | 2 years                      | Passed 10th class examination under 10+2 system of education with science or its equivalent.                                                                                                   |

|    |                                              |           |                                                                                                                         |
|----|----------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------|
| 18 | Machinist                                    | 2 years   | Passed 10th class examination under 10+2 system of education or its equivalent.                                         |
| 19 | Machinist (Grinder)                          | 2 years   | Passed 10th class examination under 10+2 system of education or its equivalent.                                         |
| 20 | Maintenance Mechanic (Chemical Plant)        | 2 years   | Passed 10th class examination with Physics, Chemistry and Mathematics under 10+2 system of education or its equivalent. |
| 21 | Marine Fitter                                | 2 years   | Passed 10th class examination under 10+2 system of education with 50% marks in Mathematics & Science or its equivalent. |
| 22 | Mason (Building Constructor)                 | 1 year    | Passed 8th class examination under 10+2 system of education or its equivalent.                                          |
| 23 | Mech.Communication Equipment Maintenance     | 1 year    | Passed Class 10th Exam under 10+2 system of Education or its equivalent                                                 |
| 24 | Mech. Repair & Maintenance of Heavy Vehicles | 1 year    | Passed Class 10th Exam under 10+2 system of Education or its equivalent                                                 |
| 25 | Mech. Repair & Maintenance of Light Vehicles | 1 year    | Passed Class 10th Exam under 10+2 system of Education or its equivalent                                                 |
| 26 | Mech. Repair & Maintenance of Two Wheelers   | 06 months | Passed Class 10th Exam under 10+2 system of Education or its equivalent                                                 |
| 27 | Mechanic (Diesel)                            | 1 year    | Passed 10th class examination under 10+2 system or its equivalent.                                                      |
| 28 | Mechanic (Motor Vehicle)                     | 2 years   | Passed 10th class examination under 10+2 system of education with Science as one of the subject or its equivalent.      |
| 29 | Mechanic (Radio & TV)                        | 2 years   | Passed 10th class examination under 10+2 system of education with Science as one of the                                 |

|    |                                              |           |                                                                                                                                                                                                                                                                             |
|----|----------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                              |           | subject or its equivalent.                                                                                                                                                                                                                                                  |
| 30 | Mechanic (Refrigeration and Air-Conditioner) | 2 years   | Passed 10th class examination under 10+2 system of education with Science & Mathematics or its equivalent.                                                                                                                                                                  |
| 31 | Mechanic (Tractor)                           | 1 year    | 1) Essential – should have passed 8th class examination under 10+2 system of education or its equivalent.<br><br>2) Desirable – Passed 10th class examination under 10+2 system of education with science (Physics and Chemistry) as one of the subjects or its equivalent. |
| 32 | Mechanic Agricultural Machinery              | 2 years   | 1) Essential: - Should have passed 8th class examination under 10+2 System of education or its equivalent.<br><br>2) Desirable: - Passed 10th class Examination under 10+2 system of education with Science (Physics and Chemistry) as one of the subjects.                 |
| 33 | Mechanic Auto Electrical and Electronics     | 06 months | Passed 10th class examination under 10+2 system of education with Science and Mathematics or its equivalent.                                                                                                                                                                |
| 34 | Mechanic Computer Hardware                   | 2 years   | Passed 10+2 or Intermediate or Pre-university with Physics as one of the subject.                                                                                                                                                                                           |
| 35 | Mechanic Consumer Electronics                | 2 years   | Passed 10th class examination under 10+2 system of education with Mathematics & Science or its equivalent.                                                                                                                                                                  |
| 36 | Mechanic Industrial Electronics              | 2 years   | Passed 12th Class Examination with Physics, Chemistry & Mathematics.                                                                                                                                                                                                        |
| 37 | Mechanic Lens/Prism                          | 1 year    | Passed Class 10th Exam under 10+2 system of                                                                                                                                                                                                                                 |

|    |                                                        |           |                                                                                                                    |
|----|--------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------|
|    | Grinding                                               |           | Education or its equivalent.                                                                                       |
| 38 | Mechanic Machine Tools Maintenance                     | 3 years   | Matriculation with Science and Mathematics or its equivalent.                                                      |
| 39 | Mechanic Mechatronics                                  | 2 years   | Passed 10+2 Class Examination with Physics, Chemistry & Mathematics.                                               |
| 40 | Mechanic Medical Electronics                           | 2 years   | Passed 10th class examination under 10+2 system of education with Mathematics & Science or its equivalent.         |
| 41 | Mechanic-cum-Operator Electronics Communication System | 2 years   | Passed 10th class examination under 10+2 system of education with Science as one of the subject or its equivalent. |
| 42 | Operator Advanced Machine Tools                        | 2 years   | Passed 12th Class Examination with Physics, Chemistry & Mathematics.                                               |
| 43 | Painter General                                        | 2 years   | Passed 8th class examination or its equivalent.                                                                    |
| 44 | Physiotherapy Technician                               | 1 year    | Passed 12th class Exam. Under 10+2 system of education with Physics, Chemistry & Biology.                          |
| 45 | Plastic Processing Operator                            | 1 year    | Passed 10th class examination under 10+2 system of education or its equivalent.                                    |
| 46 | Plumber                                                | 1 year    | Passed 8th class examination under 10+2 system of education or its equivalent.                                     |
| 47 | Pump Operator-cum-Mechanic                             | 1 year    | Passed 10th class examination under 10+2 system of education with science or its equivalent.                       |
| 48 | Radiology Technician (Radio Diagnosis & Radiotherapy)  | 2 years   | Passed 12th class Exam. Under 10+2 system of education with Physics, Chemistry & Biology.                          |
| 49 | Sanitary Hardware fitter                               | 06 months | Passed 8th class examination under 10+2 system of education or its equivalent.                                     |
| 50 | Sheet Metal Worker                                     | 1 year    | Passed 8th class examination under 10+2 system                                                                     |

|    |                                                 |         |                                                                                                                        |
|----|-------------------------------------------------|---------|------------------------------------------------------------------------------------------------------------------------|
|    |                                                 |         | of education or its equivalent.                                                                                        |
| 51 | Spinning Technician                             | 2 years | Passed 10th Class Examination                                                                                          |
| 52 | Surveyor                                        | 2 years | Passed 10th class examination under 10+2 system of education with Science and Mathematics or its equivalent.           |
| 53 | Textile Mechatronics                            | 2 years | Passed 10th Class Examination                                                                                          |
| 54 | Tool & Die Maker (Dies & Molds)                 | 3 years | Passed 10th class examination under 10+2 system of education with Science or its equivalent.                           |
| 55 | Tool & Die Maker (Press Tools, Jigs & Fixtures) | 3 years | Passed 10th class examination under 10+2 system of education with Science or its equivalent.                           |
| 56 | Turner                                          | 2 years | Passed 10th class examination under 10+2 system of education or its equivalent.                                        |
| 57 | Vessel Navigator                                | 2 years | Passed 10th class examination under 10+2 system of education with 50% marks in Mathematics & Science or its equivalent |
| 58 | Welder (Gas and Electric)                       | 1 year  | Passed 8th class examination under 10+2 system of education or its equivalent.                                         |
| 59 | Weaving Technician                              | 2 years | Passed 10th class examination under 10+2 system of education with Mathematics & Science or its equivalent              |
| 60 | Wireman                                         | 2 years | Passed 8th class examination or its equivalent.                                                                        |
| 61 | Marine Engine Fitter                            | 1 year  | 10th class pass with Math and Science or its equivalent.                                                               |
| 62 | Gold Smith                                      | 1 year  | 8th class pass                                                                                                         |
| 63 | Textile Wet Processing Technician               | 2 year  | Passed 10th class examination under 10+2 system of education with Science and Mathematics or its equivalent.           |



## Non-Engineering Trades

| Sl.No. | Name of the Trade                           | Duration  | Entry Qualification                                                                                                                    |
|--------|---------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Baker & Confectioner                        | 1 year    | Passed 10th class examination under 10 + 2 system of education or its equivalent.                                                      |
| 2      | Cabin/Room Attendant                        | 06 months | i) Passed 10th Class Examination under 10+2 System of Education.<br><br>ii) Working knowledge of English & Hindi.                      |
| 3      | Cane Willow and Bamboo Work                 | 1 Year    | Passed 8th class or its equivalent.                                                                                                    |
| 4      | Computer Aided Embroidery & Needle Work     | 06 months | Passed Class 10th Exam under 10+2 system of Education or its equivalent.                                                               |
| 5      | Computer Operator and Programming Assistant | 1 year    | 12th class pass under 10+2 system or duly recognized Diploma in Engineering from any Polytechnic of 3 years duration after 10th class. |
| 6      | Corporate House Keeping                     | 06 months | Passed 10th Class Examination under 10+2 System of Education.                                                                          |
| 7      | Craftsman Food Production (General)         | 1 year    | Passed 10th Class exam under 10+2 system of education or its equivalent.                                                               |
| 8      | Craftsman Food Production (Vegetarian)      | 1 year    | Passed 10th Class exam under 10+2 system of education or its equivalent.                                                               |
| 9      | Crèche Management                           | 06 months | Passed 10th Class Examination under 10+2 System of Education.                                                                          |
| 10     | Cutting & Sewing                            | 1 Year    | Passed 8th class or its equivalent.                                                                                                    |
| 11     | Dairying                                    | 1 year    | Passed 10th Class Examination under 10+2 System of Education.                                                                          |
| 12     | Data Entry Operator                         | 06 months | a) Essential: (i) 10th Class Passed (ii) Typing                                                                                        |

|    |                                           |           |                                                                                                                                                                 |
|----|-------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                           |           | <p>speed of 30 w.p.m. in English.</p> <p>b) Desirable: Typing speed of 30 w.p.m. in Hindi/ Any Local language.</p>                                              |
| 13 | Dental Laboratory Technician              | 2 years   | Passed 10th Class Examination under 10+2 System of Education.                                                                                                   |
| 14 | Desk Top Publishing Operator              | 1 year    | <p>a) Passed 12th under 10+2 system or its equivalent. b) Typing speed of 30 wpm in English.</p> <p>Desirable: typing speed of 30 wpm in Regional Language.</p> |
| 15 | Digital Photographer                      | 1 year    | Passed 12th Class under 10+2 system of education or equivalent.                                                                                                 |
| 16 | Domestic House Keeping                    | 06 months | Passed 10th Class Examination under 10+2 System of Education.                                                                                                   |
| 17 | Dress Making                              | 1 year    | Passed Matriculation examination or its equivalent or 10th class under 10 + 2 system.                                                                           |
| 18 | Driver Cum Mechanic (Light Motor Vehicle) | 06 months | Passed 10th Class Examination under 10+2 System of Education.                                                                                                   |
| 19 | Embroidery and Needle Work                | 1 Year    | Passed 8th class or its equivalent.                                                                                                                             |
| 20 | Event Management Assistant                | 06 months | Passed 10th Class Examination under 10+2 System of Education or its equivalent. (with English as subject)                                                       |
| 21 | Fashion Technology                        | 1 year    | Passed 12th Class under 10+2 system of education or equivalent.                                                                                                 |
| 22 | Floriculture & Landscaping                | 06 months | Passed 12th Class Examination with Biology as major subject or Vocational Training in Agro-                                                                     |

|    |                               |           |                                                                                                                                                                     |
|----|-------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                               |           | Horticulture.                                                                                                                                                       |
| 23 | Front Office Assistant        | 06 months | Passed 10+2 Class Examination under 10+2 System of Education or its equivalent. (with English as subject)                                                           |
| 24 | Hair and Skin care            | 1 year    | Passed Matriculation examination or equivalent.                                                                                                                     |
| 25 | Health Sanitary Inspector     | 1 year    | Passed 12th Class Examination under 10+2 System of Education with science in X class. Preference given to trainees with Physics, Chemistry & Biology in 12th Class. |
| 26 | Horticulture                  | 1 year    | Passed 12th Class Examination with Biology as major subject or Vocational Training in Agro-Horticulture.                                                            |
| 27 | Hospital House Keeping        | 1 year    | Passed 12th Class Examination under 10+2 System of Education with Physics, Chemistry & Biology.                                                                     |
| 28 | Hospital Waste Management     | 06 months | Passed 12th class Exam. Under 10+2 system of education with Physics, Chemistry & Biology.                                                                           |
| 29 | Institution House Keeping     | 06 months | Passed 10th Class Examination under 10+2 System of Education.                                                                                                       |
| 30 | Insurance Agent               | 06 months | Passed 12th Class under 10+2 system of education or equivalent.                                                                                                     |
| 31 | Leather Goods Maker           | 1 Year    | Passed 8th class examination under 10+2 system of education or two classes below matriculation examination or its equivalent.                                       |
| 32 | Library & Information Science | 06 months | Passed 12th Class under 10+2 system of education or equivalent.                                                                                                     |
| 33 | Litho – Offset Machine Minder | 1 year    | Passed 10th class exam under 10+2 system of education with science as one of the subjects or its equivalent.                                                        |
| 34 | Manufacture of Footwear       | 1 year    | Passed 8th class examination under 10+2 system                                                                                                                      |

|    |                                               |           |                                                                                                                                                    |
|----|-----------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                               |           | of education or its equivalent.                                                                                                                    |
| 35 | Medical Transcription                         | 06 months | Passed 12th Class Examination under 10+2 system of education with Biology/Physiology as major subject. Knowledge of English Language is essential. |
| 36 | Network Technician                            | 06 months | Passed 12th Class under 10+2 system of education or equivalent.                                                                                    |
| 37 | Old Age Care                                  | 06 months | Passed 8th Class under 10+2 system of Education.                                                                                                   |
| 38 | Photographer                                  | 1 year    | Passed 10th class examination with Physics and Chemistry under 10+2 system or its equivalent.                                                      |
| 39 | Plate Maker-compositor                        | 1 year    | Passed 10th class exam under 10+2 system of education with science as one of the subjects or its equivalent.                                       |
| 40 | Pre/Preparatory School Management (Assistant) | 06 months | Passed 10th Class Examination under 10+2 System of Education.                                                                                      |
| 41 | Preservation of fruits and vegetables         | 1 year    | Passed 10th class examination under 10 + 2 system of education with Science or its equivalent.                                                     |
| 42 | Process Cameraman                             | 1 year    | Passed 10th class exam under 10+2 system of Education with science as one of the subjects or its equivalent.                                       |
| 43 | Secretarial Practice                          | 1 year    | 12th class Pass                                                                                                                                    |
| 44 | Stenography (English)                         | 1 year    | 12th class Pass                                                                                                                                    |
| 45 | Stenography (Hindi)                           | 1 year    | 12th class Pass                                                                                                                                    |
| 46 | Steward                                       | 1 year    | Passed 10th Class exam under 10+2 system of education or its equivalent.                                                                           |
| 47 | Tourist Guide                                 | 06 months | Passed 12th Class under 10+2 system of education or equivalent.                                                                                    |

|    |                                        |        |                                     |
|----|----------------------------------------|--------|-------------------------------------|
| 48 | Weaving of Silk and Woolen Fabrics     | 1 year | Passed 8th class or its equivalent. |
| 49 | Weaving of Woolen Fabrics              | 1 year | Passed 8th class or its equivalent. |
| 50 | Travel & Tour Assistant                | 1 year | 12th pass or its equivalent.        |
| 51 | Catering & Hospitality Assistant       | 1 year | 10th class Pass or its equivalent.  |
| 52 | Multimedia, Animation & Special Effect | 1 year | 10th class pass or its equivalent.  |
| 53 | Office Assistant and Computer Operator | 1 year | 12th class pass or its equivalent.  |

### Field Research India

There was a field study undertaken in India from 7<sup>th</sup> July 2011 to 4<sup>th</sup> Aug 2011. The visit included meetings at two cities, Mumbai and New Delhi. Various government offices and ITI's were visited. The Ministry of Labour and Education provided a wealth of information on its flagship programs, the craftsman training scheme and spread of ITIs across India. The Ministry of Human Resources and Development provided fresh insights on government plans for developing the skills of India's utilitarian craftspeople. The planning commission provided documents that showed the evolution and the future direction of the crafts economy in India.

### References

- CII (2005). *Position Paper on Managing ITI's*. Confederation of Indian Industries Position Paper
- FICCI (2002). *Survey of Employers on Education and Skill Needs*. Survey Conducted by the Federation of Indian Chamber of Commerce and Industry.
- ILO (2003). *Industrial Training Institutes in India: The Efficiency Study Report*. ILO Sub regional Office for South Asia, New Delh
- Employment Opportunities per Year over the 10th Plan Period*. May, 2002
- Ministry of Labour and Employment , Government of India (2011) Annual Report
- Planning Commission of India (2002). *Report of the Special Group on Targeting Ten Million Employment Opportunities per Year over the 10th Plan Period*. May, 2002

Planning Commission of India (2002). *Tenth Five Year Plan*.

Planning Commission of India (2008). *Elventh Five Year Plan*

Planning Commission of India (2002). *Economic Survey*